

## 13. COMMENTS AND RESPONSES ON THE DRAFT EIS

### 13.1 INTRODUCTION

The U.S. Department of Energy (DOE) announced the availability of the Draft Environmental Impact Statement (EIS) in a Notice of Availability published in the *Federal Register* on June 1, 2007 (see Appendix G). During the comment period (June 1, 2007 to July 16, 2007), DOE held four public hearings for the FutureGen Project Draft EIS. This report provides a summary of the public hearings, explains the methodology for receiving and coding comment documents (defined in Section 13.3), and responds to comments received. Section 13.2 includes a summary of the public hearings; Section 13.3 presents the methodology for receiving and responding to comments; Section 13.4 provides a brief summary of the types of comments received; and Section 13.5 includes the comment documents and responses.

### 13.2 PUBLIC HEARINGS

DOE held four public hearings for the FutureGen Project Draft EIS in June 2007; the dates and locations of these hearings are shown in Table 1. The hearing locations were selected based on their proximity to the alternative site locations in Texas and Illinois. Three of the four hearings were in the same locations as the scoping meetings. The public hearings were announced in the June 1, 2007, *Federal Register* notice. In addition, DOE published notices in local newspapers during the weeks of June 11, 18, and 25, 2007, as shown in Table 2 (see Appendix H).

**Table 13-1. Public Hearing Locations and Dates**

Location	Date
<b>Odessa (Midland), Texas</b> Center for Energy and Economic Diversification (CEED) Building, Midland, Texas	June 19, 2007
<b>Jewett (Buffalo), Texas</b> Buffalo Civic Center, Buffalo, Texas	June 21, 2007
<b>Mattoon, Illinois</b> Riddle Elementary School, Mattoon, Illinois	June 26, 2007
<b>Tuscola, Illinois</b> Tuscola Community Building, Tuscola, Illinois	June 28, 2007

Comments on the Draft EIS were received during the comment period via telephone, fax, e-mail, and mail. In addition, comment forms were completed and given to DOE during the public hearings. Oral comments were also given and transcribed at each of the public hearings.

Each public hearing began with an informal open house from 4:00 to 7:00 pm (Daylight Saving Time) during which time attendees were given information packages about the project and were able to view project related posters. The agenda for each public hearing is provided in Appendix I. DOE FutureGen Project personnel were available to answer questions. Representatives of the FutureGen Alliance, Inc. and local representatives were also available at displays illustrating various features of the proposed project and proposed sites.

**Table 13-2. Public Hearing Newspaper Advertisements**

<b>Meeting Location/Newspaper</b>	<b>Dates Advertisement Appeared in Newspaper</b>
<b>Odessa (Midland), TX (June 19, 2007)</b>	
Midland Reporter-Telegram	June 14, 17, and 19
Andrews County News	June 14 and 17
The Fort Stockton Pioneer	June 14
Odessa American	June 14, 17, and 19
El Seminario	June 14
<b>Jewett (Buffalo), TX (June 21, 2007)</b>	
The Bryan-College Station Eagle	June 14, 17, 19, and 21
Waco Tribune-Herald	June 14, 17, 19, and 21
Jewett Messenger	June 14 and 21
Fairfield Recorder	June 14 and 21
<b>Mattoon, IL (June 26, 2007)</b>	
Mattoon Journal Gazette	June 20, 22, 24, and 26
Charleston Times Courier	June 20, 22, 24, and 26
Decatur Herald and Review	June 20, 22, 24, and 26
<b>Tuscola, IL (June 28, 2007)</b>	
The Tuscola Review	June 26
The Regional	June 22
The Tuscola Journal	June 19 and 26
Tri-County Journal	June 21 and 28
The News-Gazette	June 21, 23, 26, and 28

The informal open house was followed by a formal DOE presentation and the formal public hearing. Collectively, 554 individuals attended the public hearings; a few individuals attended more than one meeting.

**Table 13-3. Number of People in Attendance at Public Hearings**

Meeting Location	Number of People in Attendance <sup>1</sup>
Odessa (Midland), Texas	76
Jewett (Buffalo), Texas	124
Mattoon, Illinois	151
Tuscola, Illinois	203
<b>Total</b>	<b>554</b>

<sup>1</sup>Based on individuals who signed the attendance sign-in sheets.

All attendees were invited to provide comments, either written or spoken, on the proposed project. Those attendees wishing to speak were given an opportunity to sign up to do so (see Appendix J). Comment sheets were made available for all attendees wishing to provide written comments.

DOE led the presentations and presided over the four formal meetings. A court reporter was present at each meeting to ensure that all oral comments were recorded and legally transcribed (see Appendix K). A total of 58 individuals presented oral comments. In addition, individuals could request to receive the Draft EIS, Final EIS, or Summary (either a hard copy or a hard copy Summary plus a CD containing the entire EIS).

**Table 13-4. Number of People that Provided Oral Comments at the Public Hearings**

Meeting Location	Number of People that Gave Oral Comments <sup>1</sup>
Odessa (Midland), Texas	12
Jewett (Buffalo), Texas	14
Mattoon, Illinois	12
Tuscola, Illinois	20
<b>Total</b>	<b>58</b>

<sup>1</sup>Based on transcripts for each meeting.

Anyone who wished to provide comments in writing was invited to do so by completing a comment card at the public hearing and giving it to a DOE FutureGen Project Team member at the meeting or mailing in a postcard format comment card at a later date. DOE also provided an e-mail address for members of the public who preferred to submit their comments electronically, a postal address for those who preferred to mail their comments, a telephone fax number for those who preferred to fax their comments, and a toll-free telephone number for those who preferred to provide spoken comments.

Most of the comments discussed at the public hearings amongst the FutureGen Team and attendees were comments from individuals who seemingly had not read the entire Draft EIS. Team members would provide responses and point out where in the Draft EIS the information was located. This approach addressed the majority of concerns and comments, however, all attendees were encouraged to provide an oral comment, complete a comment card, or mail a comment postcard. Therefore, the general comments were either addressed one-on-one at the public hearing and, where oral or written comments were provided, were addressed in this

comment and response document. The DOE FutureGen Project Team also conducted a debrief with local representatives following each public hearing to review comments received during discussions with the public hearing attendees.

### 13.3 METHODOLOGY

In preparing the Final EIS, DOE considered all comments. An identification number was assigned to each originator of comments (i.e., per commentor), including those orally expressed at the public hearings. After reviewing the comment documents received, a list of general comments and topics was developed (see Table 5). A list of general terms used for the comment-response process is provided in Table 6. A listing of the commentors names, their affiliation and assigned identification number, issues raised by each commentor, and the location of the corresponding comment document are provided in Table 7. A flow chart illustrating the comment-response process is provided in Appendix L.

**Table 13-5. General Comments from Public Hearings**

<p><b>Aesthetics:</b> Concerns were expressed regarding the design of the plant. Comments were received requesting that the FutureGen Plant be aesthetically pleasing.</p> <p><b>CO<sub>2</sub> Sequestration:</b> Concerns were expressed regarding the sequestration of CO<sub>2</sub>. Specifically:</p> <ul style="list-style-type: none"><li>• Potential for long-term effects of injected CO<sub>2</sub> in the subsurface-mingling of CO<sub>2</sub> with deep subsurface gasses;</li><li>• The manner in which CO<sub>2</sub> stays underground;</li><li>• Potential for well leaks and pipeline leaks;</li><li>• Hazardous properties of CO<sub>2</sub> (in the pipelines and wells);</li><li>• Impacts of CO<sub>2</sub> on coal mining; and</li><li>• Short-term fate, ultimate fate, plume growth and movement and potential for earthquakes to either affect the storage or to be generated by the storage of CO<sub>2</sub>.</li></ul> <p><b>Economy, Employment, and Income:</b> Individuals questioned whether there would be compensation for CO<sub>2</sub> storage under their property. They also expressed concern about property devaluation, crop reduction, and impacts to taxpayers. Individuals asked about potential employment opportunities at the FutureGen plant.</p> <p><b>Farming:</b> Concerns were expressed regarding impacts to farming and whether farmers will be compensated for their losses (e.g., field tiles or fertilizer).</p> <p><b>Groundwater:</b> Concerns were expressed regarding the sources of and impacts to groundwater.</p> <p><b>Noise:</b> Individuals expressed concern about noise from traffic and operations.</p> <p><b>Public Outreach:</b> Individuals requested access to DOE-sponsored animations or model demonstrations of geologic sequestration. Individuals would like further educational outreach on the topic of geologic sequestration.</p> <p><b>Risk Assessment:</b> Individuals living close to the proposed site locations expressed concern about the risks of leakage, the routes of leakage, and health effects. Individuals also questioned why Mattoon has higher risks under the accident and terrorism scenarios.</p> <p><b>Surface Water:</b> Individuals expressed concerns about controlling runoff from the power plant site and how rainfall runoff and downstream flooding will be mitigated.</p> <p><b>Technology:</b> People expressed concern that the technology associated with FutureGen will be outdated by the time the plant is constructed.</p> <p><b>Waste disposal:</b> Individuals expressed concern regarding the handling and disposal of waste such as ash, slag, mercury, arsenic and hazardous wastes.</p>
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**Table 13-6. General Terms on the Comment-Response Process**

The following terms provided in DOE's, *The EIS Comment-Response Process* (October 2004) are used within this comment-response document and are defined as follows:

**Administrative Record** – All materials (paper or electronic) that DOE will use or has used to make a decision as part of the NEPA process, compiled by the NEPA Document Manager during preparation of an EIS and kept as part of Program or Field office records.

**Comment** – a distinct statement or question about a particular topic (issue) such as:

- DOE's purpose and need for action
- The merits of the Proposed Action or any of the alternatives discussed in the Draft EIS
- Any aspect of potential environmental impacts arising from the Proposed Action or alternatives
- DOE's use of facts, methodologies, or analyses in the EIS
- DOE's implementation of the NEPA process
- The broad context for the proposed action, such as environmental quality, technologies, DOE credibility, or government policy
- Matters outside the scope of the EIS.

**Comment Document** – Written version of comments submitted by a commentor (e.g., a letter, postcard, e-mail, or transcript of oral comments at a public hearing or in a telephone message). A comment document can contain any number of comments.

**Comment Category** – The topic (e.g., the NEPA process, the affected environment section of the EIS, air quality impacts) to which a comment is addressed.

**Comment Index** – An alphabetized list of commentors' names (individuals and organizations) or comment topics with information on where to find the comment document and DOE responses to the comments(s) therein.

**Commentor** – Individual or organization making one or more comments.

**Duplicate Comment Document** – A comment document that is exactly the same in wording (or so similar as to be virtually the same) as another comment document. Examples are (1) a postcard or e-mail submitted as part of an organized campaign to encourage people to comment on the Draft EIS, and (2) a petition through which more than one individual indicates agreement with the same comment.

**Theme** – A topic or issue addressed in many comment documents; can be an area of concern, controversy, or misunderstanding. A summary of a theme should reflect the range of ideas and perspective presented in the comments.

In some instances commentors may have submitted comments more than once (e.g., orally at a public hearing and in writing). Therefore, there is a possibility for double-counting. Furthermore, there is no process to verify signatures on a signed petition and there is no restriction on one person sending multiple faxes, e-mail messages, or postcards. To the extent practicable DOE ensured all commentor names are spelled correctly; however, in some instances written names may not have been legible.

Based on the comments received on the Draft EIS, DOE prepared responses and modified the EIS (Summary, Volume I and Volume II), where appropriate. The EIS was also revised based on DOE's internal technical and editorial review of the Draft EIS (i.e., changes made to the EIS that were not in response to a comment received).

Transcripts of each public hearing as well as scanned images of the original comment documents in chronological order as they were received by DOE are included in their entirety in Section 5 of this document. All comment documents on the Draft EIS, as included in this

comment-response document, will be included in the Administrative Record for this EIS. The commentors and their comments are identified and labeled on each comment document image, including the public hearing transcripts. Individual responses and issue code(s) for each comment are provided on the right-side of the same page where the comment originates.

If in response to a comment a change was necessary in the Final EIS, the section number where the change appears in the Final EIS is provided in the comment response. To easily locate changes in the Final EIS (including those resulting from DOE’s internal review), new text is highlighted in bold and italicized and a vertical bar is provided in the left hand margin. Where text has been deleted, a vertical bar appears in the left hand margin; the deleted text is not shown.

### 13.4 DESCRIPTION OF COMMENTS RECEIVED

A total of 175 individuals and organizations provided comments on the Draft EIS. Out of the comments received, a majority (135 commentors) stated support for the project. Table 7 provides a list of the commentors, their affiliation, the assigned identification number, the resource area addressed (e.g., air quality, wetlands, etc.) per commentor, and the unique comment numbers assigned to identify individual comments.

**Table 13-7. Commentors, Comment Numbers and Resource Areas<sup>1,2</sup>**

Commentor #	Name	Affiliation / Organization	Comment #	Resource Area
<b>General</b>				
G1	Adams, T.L	Kentucky Division of Air Quality	G1-1	General
G2	Chezik, Michael T	U.S. Department of the Interior	G2-1	General
			G2-2	Air
			G2-3	Surface Water
			G2-4	Surface Water
			G2-5	Wetlands
			G2-6	Wetlands
			G2-7	Wetlands
			G2-8	Biological
			G2-9	Clarification/Correction
			G2-10	Biological
			G2-11	Biological
			G2-12	Clarification/Correction
			G2-13	Clarification/Correction
			G2-14	Clarification/Correction
G3	Wickey, Kevin	U.S. Department of Agriculture - Natural Resources Conservation Service	G3-1	No Comments
G4	Crookshank, Steven	API	G4-1	Risk Assessment
			G4-2	Risk Assessment
			G4-3	Risk Assessment
			G4-4	Risk Assessment
			G4-5	Risk Assessment
			G4-6	Risk Assessment
			G4-7	Risk Assessment, CO <sub>2</sub> Capture & Storage
			G4-8	Air, Purpose & Need
			G4-9	Risk Assessment, CO <sub>2</sub> Capture & Storage
			G4-10	Risk Assessment
G5	Anderson, A. Scott and Peridas, George	Environmental Defense – Natural Resources Defense Council	G5-1	CO <sub>2</sub> Capture & Storage, Geology & Sequestration Site

**Table 13-7. Commentors, Comment Numbers and Resource Areas<sup>1,2</sup>**

Commentor #	Name	Affiliation / Organization	Comment #	Resource Area
			G5-2	CO <sub>2</sub> Capture & Storage, Geology & Sequestration Site
			G5-3	Technology, Air
			G5-4	CO <sub>2</sub> Capture & Storage
			G5-5	Technology, Air
			G6	Elm, Kevin L.
G7	Scott, John T.	Private Citizen	G7-1	Technology, Purpose & Need, Socioeconomics, CO <sub>2</sub> Capture & Storage
G8	Swager, Ronald – Patrick Engineering	FutureGen Illinois Team	G8-1	Air
			G8-2	CO <sub>2</sub> Capture & Storage
			G8-3	Odors
			G8-4	Floodplains
			G8-5	Risk Assessment
			G8-6	Risk Assessment
			G8-7	Risk Assessment
			G8-8	Monitoring
			G8-9	Odors
			G8-10	CO <sub>2</sub> Capture & Storage, Risk Assessment
			G8-11	Clarification/Correction
			G8-12	Clarification/Correction, Risk Assessment
			G8-13	Risk Assessment
G9	Reed, Michael T.	Illinois EPA	G9-1	Air, Biological
			G9-2	Air, Regulatory Requirements
			G9-3	Air, Regulatory Requirements
			G9-4	Air, Regulatory Requirements
			G9-5	Air, Regulatory Requirements
			G9-6	Air, Regulatory Requirements
			G9-7	Air, Regulatory Requirements
			G9-8	Air, Regulatory Requirements
			G9-9	Air, Regulatory Requirements
			G9-10	Air, Regulatory Requirements
			G9-11	Biological
			G9-12	Biological
			G9-13	Geology & Sequestration Site
			G9-14	Geology & Sequestration Site, Monitoring
			G9-15	Regulatory Requirements
			G9-16	Air
			G9-17	Air
			G9-18	Air
			G9-19	Air, Regulatory Requirements
G9-20	Odor			
G9-21	Air			
G9-22	Air			

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Commentor #	Name	Affiliation / Organization	Comment #	Resource Area
G10	Walden, Steven – Walden Consulting	FutureGen Texas Team	G10-1	Monitoring
			G10-2	Surface Water, Regulatory Requirements
			G10-3	Air, Regulatory Requirements
			G10-4	Air, Regulatory Requirements
			G10-5	Air, Regulatory Requirements
			G10-6	Risk Assessment
G11	Miller, Anne Norton	U.S. Environmental Protection Agency	G11-1	CO <sub>2</sub> Capture & Storage
			G11-2	Surface Water, Groundwater
			G11-3	Groundwater
			G11-4	Wetlands
<b>Mattoon, IL</b>				
M1	Ashworth, Larry	Private Citizen	M1-1	None
M2	Donnell, Tom	Private Citizen	M2-1 <sup>3</sup>	Support, Land Use
M3	Lilly, Larry D.	Mattoon Schools	M3-1 <sup>3</sup>	Support
M4	Daily, Bruce	Private Citizen	M4-1	Noise, Odor, Risk Assessment
			M4-2	Risk Assessment
			M4-3	Air
			M4-4	Air
			M4-5	Air
			M4-6	Air
			M4-7	Odors
			M4-8	Risk Assessment
			M4-9	Noise
			M4-10	Land Use
			M4-11	Risk Assessment
M5	Dwiggins, Mark	Upchurch Group	M5-1	Materials & Waste Handling
M6	Gire, Jim	Private Citizen	M6-1	Risk Assessment, Materials & Waste Handling
M7	Freeland, D.	Private Citizen	M7-1	Liability
M8	Roytek, Phyllis Rita	Private Citizen	M8-1	Support
M9	Strader, Mitch	Mattoon Fire Department	M9-1	Support
M10	Thompson, Kyle	Crossroads Workforce Investment Board	M10-1	Support
M11	Bloomer, Phil	U.S. Representative Timothy Johnson	M11-1 <sup>3</sup>	Support
M12	Lavin, Jack	Illinois Department of Commerce and Economic Opportunity	M12-1 <sup>3</sup>	Support
M13	Rose, Chapin	Illinois State House of Representatives	M13-1 <sup>3</sup>	Support
M14	Short, Ann	City of Sullivan	M14-1 <sup>3</sup>	Support
M15	Griffin, Angela	Coles Together	M15-1 <sup>3</sup>	None
M16	Metzger, Kent	Private Citizen	M16-1 <sup>3</sup>	Meteorology, Support
			M16-2 <sup>3</sup>	Aesthetics
			M16-3 <sup>3</sup>	Noise
			M16-4 <sup>3</sup>	Aesthetics
			M16-5 <sup>3</sup>	Traffic & Transportation
			M16-6 <sup>3</sup>	Risk Assessment
			M16-7 <sup>3</sup>	Materials & Waste Handling
M17	McShane, Jim	Crossroads Workforce Investment Board	M17-1 <sup>3</sup>	Support
M18	Gonet, Phil	Illinois Coal Association	M18-1 <sup>3</sup>	Support

**Table 13-7. Commentors, Comment Numbers and Resource Areas<sup>1,2</sup>**

Commentor #	Name	Affiliation / Organization	Comment #	Resource Area
M19	Taylor, John	International Brotherhood of Electrical Workers Local 146	M19-1 <sup>3</sup>	Support
M20	Bell, Jim	Private Citizen	M20-1 <sup>3</sup>	General, Risk Assessment, Aesthetics
M21	Swager, Ronald – Patrick Engineering	FutureGen Illinois Team	M21-1	Proposed Action
			M21-2	Proposed Action, Surface Water
			M21-3	Wetlands
			M21-4	Wetlands, Clarification/Correction
			M21-5	Biological
			M21-6	Proposed Action
			M21-7	Surface Water
			M21-8	Proposed Action, Surface Water
			M21-9	Air
			M21-10	Risk Assessment
			M21-11	Surface Water
			M21-12	Land Use
			M21-13	Land Use
			M21-14	Land Use
			M21-15	Traffic & Transportation
<b>Tuscola, IL</b>				
T1	Burnes, Kennett	Cabot Corporation	T1-1	Support
T2	Hettinger, Steve L	Tuscola Fire Department	T2-1	Support
T3		GE Service	T3-1	Support
T4	Landeck, Judy	Private Citizen	T4-1	Support
T5	Patterson, William	Private Citizen	T5-1	Air, Noise, Vibration, Traffic & Transportation, Risk Assessment
T6	Patterson, Marilyn Sue	Private Citizen	T6-1	Air, Noise, Vibration, Traffic & Transportation, Surface Water, Groundwater
T7	Robinson, Chris	BRH Properties	T7-1	Support
T8	Hardwick, C. T	Property Management	T8-1	Support
T9	McDaniel, Curt	Private Citizen	T9-1	Support
T10	Edmiston, Catherine	Private Citizen	T10-1	Purpose & Need
			T10-2	Purpose & Need, Air, Risk Assessment
			T10-3	Risk Assessment, Liability
			T10-4	Risk Assessment, Surface Water, Groundwater
			T10-5	Socioeconomics, CO <sub>2</sub> Capture & Storage
			T10-6	CO <sub>2</sub> Capture & Storage, Risk Assessment
T11	Jones, Matthew	U.S. Representative Timothy Johnson	T11-1 <sup>3</sup>	Support
T12	Ribley, Warren	Illinois Department of Commerce and Economic Opportunity	T12-1 <sup>3</sup>	Support
T13	Burgess, Joe	Tuscola School System	T13-1 <sup>3</sup>	Support
T14	Knapp, Vernon	Illinois Department of Natural Resources – Illinois State Water Survey	T14-1 <sup>3</sup>	Support
T15	Cook, David	Carle Foundation Hospital	T15-1 <sup>3</sup>	Support
T16	Sapp, Larry	Arrow Carle Ambulance, Air Life, Air Medical Transport and Carle Regional EMS Systems	T16-1 <sup>3</sup>	Support
T17	Guffey, Anita	Carle Foundation Hospital	T17-1 <sup>3</sup>	Support
T18	Looby, William	Private Citizen	T18-1 <sup>3</sup>	Support, Socioeconomics

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Commentor #	Name	Affiliation / Organization	Comment #	Resource Area
T19	Matchett, Barry	Environmental Law and Policy Center	T19-1 <sup>3</sup>	Support
T20	Shoemaker, Alan	Tuscola Stone Company	T20-1 <sup>3</sup>	Support
T21	Kleiss, Dan	Cabot Corporation	T21-1 <sup>3</sup>	Support
T22	Clinton, Reggie	Private Citizen	T22-1 <sup>3</sup>	Support
T23	Moody, Brian	Tuscola Economic Development, Inc.	T23-1 <sup>3</sup>	Support
T24	Livingston, Tom	CSX Transportation	T24-1 <sup>3</sup>	Support
T25	Wineland, George	Assistant Chief, Tuscola Fire Department	T25-1 <sup>3</sup>	Support
T26	Yoakum, James	Ambitec Engineering	T26-1 <sup>3</sup>	Support
T27	Kennedy, John	Private Citizen	T27-1 <sup>3</sup>	Support
T28	Hanner, Dennis	Private Citizen	T28-1 <sup>3</sup>	Support
T29	Robertson, Ann	Private Citizen	T29-1 <sup>3</sup>	Purpose & Need, Air, Risk Assessment
T30	Rose, Chapin	Illinois State House of Representatives	T30-1 <sup>3</sup>	Support
T31	Schumann, Robert	Private Citizen	T31-1	No Comment
T32	Swager, Ronald – Patrick Engineering	FutureGen Illinois Team	T32-1	Surface Water, Groundwater
			T32-2	Noise
			T32-3	Surface Water
			T32-4	Surface Water, Groundwater
			T32-5	Air
			T32-6	Site Description
			T32-7	Geology & Sequestration Site
			T32-8	Geology & Sequestration Site
			T32-9	Geology & Sequestration Site
			T32-10	Geology & Sequestration Site
			T32-11	Groundwater
			T32-12	CO <sub>2</sub> Capture & Storage
			T32-13	Cultural Resources
<b>Illinois – Both</b>				
IL1	Swager, Ronald – Patrick Engineering	FutureGen Illinois Team	IL1-1	Wetlands
			IL1-2	Aesthetics
			IL1-3	Geology & Sequestration Site
			IL1-4	Geology & Sequestration Site
			IL1-5	Geology & Sequestration Site
			IL1-6	Geology & Sequestration Site, CO <sub>2</sub> Capture & Storage
			IL1-7	Geology & Sequestration Site, CO <sub>2</sub> Capture & Storage
			IL1-8	Groundwater, Risk Assessment
			IL1-9	Wetlands, Clarification/Correction
			IL1-10	Wetlands
IL2	March, Linda	Red Barn Vet Service	IL2-1	Support
IL3	Lange, John J.	City of Effingham	IL3-1	Support
IL4	Tuttle, Albert D.	Private Citizen	IL4-1	Support, Purpose & Need
IL5	Hughes, Polly	Private Citizen	IL5-1	Support
IL6	Nuding, Elaine	Private Citizen	IL6-1	Support

**Table 13-7. Commentors, Comment Numbers and Resource Areas<sup>1,2</sup>**

Commentor #	Name	Affiliation / Organization	Comment #	Resource Area
IL7	French, Tamra	Private Citizen	IL7-1	Support
IL8	Stephenson, Bob	Crossroads Workforce Center	IL8-1	Support
IL9	Hickox, Don	Private Citizen	IL9-1	Support
IL10	Waldhoff, Leonard	Effingham County Board	IL10-1	Support
IL11	Corley, Glenna J.	Private Citizen	IL11-1	Risk Assessment, Noise, Vibration, Traffic & Transportation, Socioeconomics
IL12	Gillespie, Charles E.	Lawerence County Board	IL12-1	Support
IL13	Scott, Barbara Attebery	Private Citizen	IL13-1	Risk Assessment, Surface Water, Groundwater
			IL13-2	Surface Water, Groundwater
			IL13-3	Risk Assessment
			IL13-4	Purpose & Need
<b>Jewett, TX</b>				
J1	Darden, Mary Landon	Private Citizen	J1-1	General, Purpose & Need
J2	Darden, Robert	Private Citizen	J2-1	General, Air
J3	Wilkerson, Tom	Brazos Valley Council of Governments	J3-1 <sup>3</sup>	Support
J4	Allen, Jerry A.	Willis and Allen Construction	J4-1	Support
J5	Wilson, Dennis D	Limestone County Sheriff	J5-1	Support
J6	Williams, Michael	Commissioner, Railroad Commission of Texas	J6-1 <sup>3</sup>	Support
J7	Ryder, Byron	Leon County Judge	J7-1 <sup>3</sup>	Support
J8	Burkeen, Daniel	Private Citizen	J8-1 <sup>3</sup>	Support
J9	Jackson Jr., Ivan	Private Citizen	J9-1 <sup>3</sup>	Support
J10	Benedict, Kevin	Private Citizen	J10-1 <sup>3</sup>	Support
J11	Milberger, Lionel J.	Private Citizen	J11-1 <sup>3</sup>	Air
J12	Mechler, Gary J.	Limestone Power Plant	J12-1 <sup>3</sup>	Support
J13	Hill, Roy	Mayor, City of Fairfield	J13-1 <sup>3</sup>	Support
J14	Kirgan, William P.	Limestone Commissioner	J14-1 <sup>3</sup>	Support
J15	Grant, Linda	Private Citizen	J15-1 <sup>3</sup>	Support
J16	Brenner, Juanita	City of Mexia	J16-1 <sup>3</sup>	Support
J17	Abernathy, Jan	Private Citizen	J17-1 <sup>3</sup>	Support
J18	Ryder, Diane	Brazos Valley Seven County Regional Workforce Development Board	J18-1 <sup>3</sup>	Support
J19	Walden, Steven – Walden Consulting	FutureGen Texas Team	J19-1	Site Description
			J19-2	Site Description
			J19-3	Physiography & Soils
			J19-4	Biological
			J19-5	Reasonably Foreseeable Projects
			J19-6	Surface Water
			J19-7	Geology
			J19-8	Site Description
			J19-9	None
			J19-10	Physiography & Soils
			J19-11	Reasonably Foreseeable Projects
			J19-12	Reasonably Foreseeable Projects
			J19-13	Air
			J19-14	Reasonably Foreseeable Projects
			J19-15	Air
			J19-16	Air
J19-17	Air			
J19-18	Air			
J19-19	Air			

**Table 13-7. Commentors, Comment Numbers and Resource Areas<sup>1,2</sup>**

Commentor #	Name	Affiliation / Organization	Comment #	Resource Area
			J19-20	Air
			J19-21	Clarification/Correction
			J19-22	Clarification/Correction
			J19-23	Geology & Sequestration Site
			J19-24	Site Description
			J19-25	Site Description
			J19-26	Air
			J19-27	Meteorology
			J19-28	Meteorology
			J19-29	Geology & Sequestration Site
			J19-30	CO <sub>2</sub> Capture & Storage
			J19-31	Geology & Sequestration Site
			J19-32	Geology & Sequestration Site
			J19-33	Geology & Sequestration Site, Groundwater
			J19-34	Geology & Sequestration Site
			J19-35	Geology & Sequestration Site
			J19-36	Geology & Sequestration Site
			J19-37	Geology & Sequestration Site
			J19-38	Geology & Sequestration Site
			J19-39	Geology & Sequestration Site
J19-40	Geology & Sequestration Site			
J19-41	Physiography & Soils			
J19-42	Clarification/Correction			
J20	Francis, Denise S.	Office of the Governor – Texas	J20-1	No Comments
J21	Lilley, John M.	Baylor University	J21-1	Support
<b>Odessa, TX</b>				
O1	Brown, Jim	Private Citizen	O1-1	Air, Supprt
			O1-2	Geology, Support
			O1-3	Water Resources
			O1-4	Groundwater
O2	Van Deventer, Gil	Trident Environmental	O2-1	Air
			O2-2 <sup>3</sup>	Support
			O2-3	Support
O3	LaGrone, Scott	Clean Coal Technology Council	O3-1	Support, Socioeconomics
			O3-2	Support, Geology
			O3-3	Support, Socioeconomics
			O3-4	Support, Geology
			O3-5	Support, Socioeconomics
			O3-6	Support, Socioeconomics
			O3-7	Research & Technology
			O3-8	Research & Technology
O3-9 <sup>3</sup>	Support			
O4	Edwards, Kirk	Private Citizen	O4-1	Support
O5	Rankin, Kay	Ward County Teachers Credit Union	O5-1	Support
O6	Watts, David	University of Texas of the Permian Basin	O6-1	Support
O7	Woltz, Jeff	Private Citizen	O7-1	Support
O8	Gore, Jesse W	Private Citizen	O8-1	Support

**Table 13-7. Commentors, Comment Numbers and Resource Areas<sup>1,2</sup>**

Commentor #	Name	Affiliation / Organization	Comment #	Resource Area
O9	Bodiford, Royce	Odessa Council Member, District 3	O9-1	Support
O10	Boswell, John	Private Citizen	O10-1	Support
			O10-2 <sup>3</sup>	Support
			O10-3 <sup>3</sup>	Support
O11	McCulloch, Michael J.	Private Citizen	O11-1	Support, Groundwater, Surface Water
O12	Jones, Carolyn	Complex Community Federal Credit Union	O12-1	Support
O13	Montoya, Grace	Complex Community Federal Credit Union	O13-1	Support
O14	Rook, Tom	Complex Community Federal Credit Union	O14-1	Support
O15	Jimenz, Mayra	Complex Community Federal Credit Union	O15-1	Support
O16	Henry, Beth	Complex Community Federal Credit Union	O16-1	Support
O17	Till, Justin	Private Citizen	O17-1	Support
O18	Till, Jarred	Private Citizen	O18-1	Support
O19	DeFranco, Tino	Best Made Designs	O19-1	Support
O20	Brown, Gene	Best Made Designs	O20-1	Support
O21	Garcia, Connie	Best Made Designs	O21-1	Support
O22	Caulder, KC	Best Made Designs	O22-1	Support
O23	Shropshire, Catherine	Private Citizen	O23-1	Support
O24	Till, Donna	Private Citizen	O24-1	Support
O25	Till, Lynn	Private Citizen	O25-1	Support
O26	Cobos, Cynthia	Private Citizen	O26-1	Support
O27	Oyerbides, Patricia	Ward County	O27-1	Support
O28	Hanna, Larry J.	Ward County Commissioner, Precinct 2	O28-1	Support
O29	Walker, Paula	Monahans Main Street Association	O29-1	Support
O30	Hunt, Todd	First National Bank	O30-1	Support
O31	Almanza, Rosie	First National Bank	O31-1	Support
O32	Fredericks, Jim	First National Bank	O32-1	Support
O33	Johnson, Sheran	West Texas State Bank	O33-1	Support
O34	Wells, Robert	West Texas State Bank	O34-1	Support
O35	Heslin, Frank	West Texas State Bank	O35-1	Support
O36	Richardson, Keith	Monahans-Wickett-Pyote Independent School District	O36-1	Support
O37	Cutbirth, David	Monahans Office of the Mayor	O37-1	Support
O38	Garica, Mary	City of Monahans	O38-1	Support
O39	Wilson, Jeppie S	City of Monahans	O39-1	Support
O40	Benad, Ken	City of Monahans	O40-1	Support
O41	Ward, Ted	City of Monahans	O41-1	Support
O42	Hawkins, Richard	City of Monahans	O42-1	Support
O43	Mills, David	City of Monahans	O43-1	Support
O44	Marquez, Lorena	City of Monahans	O44-1	Support
O45	Haynes, Morse	Monahans Economic Development Corporation	O45-1	Support
			O45-2 <sup>3</sup>	Support
O46	Williams, Michael	Commissioner, Texas Railroad	O46-1	Support
O47	Wright, Ricky	U.S. Representative Mike Conaway	O47-1	Support
O48	Perkins, Denise	Texas State Senator Kel Seliger	O48-1	Support
O49	George, Mike	Odessa Chamber of Commerce	O49-1	Support
O50	Heard, Beatrice	Private Citizen	O50-1	Support
O51	Mayberry, Michelle	Private Citizen	O51-1	Support
O52	Sparkman, Jessica	Private Citizen	O52-1	Support
O53	Walden, Steven – Walden Consulting	FutureGen Texas Team	O53-1	None
			O53-2	Geology & Sequestration Site

**Table 13-7. Commentors, Comment Numbers and Resource Areas<sup>1,2</sup>**

Commentor #	Name	Affiliation / Organization	Comment #	Resource Area
			O53-3	Site Description
			O53-4	Surface Water
			O53-5	Biological
			O53-6	Geology & Sequestration Site
			O53-7	None
			O53-8	Geology & Sequestration Site, Carbon Capture & Storage
			O53-9	Geology & Sequestration Site
			O53-10	Surface Water
			O53-11	Geology & Sequestration Site
			O53-12	Proposed Action, Surface Water
			O53-13	Air
			O53-14	Air
			O53-15	Air
			O53-16	Geology & Sequestration Site
			O53-17	None
			O53-18	Geology & Sequestration Site, Carbon Capture & Storage
			O53-19	Site Description
			O53-20	Air
			O53-21	Meteorology
			O53-22	Meteorology
			O53-23	Geology & Sequestration Site
			O53-24	Geology & Sequestration Site
			O53-25	Carbon Capture & Storage
			O53-26	Wetlands
			O53-27	Meteorology
			O53-28	Site Description
			O53-29	Site Description, Risk Assessment
O54	Swager, Ronald – Patrick Engineering	FutureGen Illinois Team	O54-1	Climatology
O55	Read, Bill	City of Coahoma	O55-1	Support
O56	Sivalls, C. Richard	Sivalls, Inc.	O56-1	Support
O57	McCall, Peggy	Raymond James Financial Services, Inc.	O57-1	Support
O58	Neighbors, Phil	San Angelo Chamber of Commerce	O58-1	Support
O59	Williams, Gregory D.	Odessa College	O59-1	Support
O60	Jones, Margaret T.	Samaritan Counseling Center of West Texas, Inc.	O60-1	Support
			O60-2	Community Services
O61	Burkholder, Mike A.	Pecos Economic Development Corp.	O61-1	Support
O62	Sollis, Wendell	Ector County Independent School District	O62-1	Support
O63	Bradley, Hugh	City of Levelland	O63-1	Support
O64	Rodman, Thomas E.	Meteor Crater Friends, Inc.	O64-1	Support
O65	Spears, Bernadine H.	City of Odessa Housing Authority	O65-1	Support
O66	McMinn, Tom	McMinn's Furniture	O66-1	Support
O67	Leck, Bonnie	Office of the County Judge	O67-1	Support
O68	Solla, Gino	Ector County Health Department	O68-1	Support
O69	Webster, William	Medical Center Hospital	O69-1	Support

**Table 13-7. Commentors, Comment Numbers and Resource Areas<sup>1,2</sup>**

Commentor #	Name	Affiliation / Organization	Comment #	Resource Area
			O69-2	Community Services
<b>Texas - Both</b>				
TX1	Trainor, Eileen	Private Citizen	TX1-1	Air
			TX1-2	Air
			TX1-3	Purpose & Need
TX2	Wilson, Diane	Calhoun County Resource Watch	TX2-1	Air, Purpose & Need, Surface Water
TX3	Sembritzky, David	Private Citizen	TX3-1	Purpose & Need
TX4	Barta Jr., James P.	Texas Department of Transportation	TX4-1	Traffic & Transportation, Regulatory Requirements
TX5	Walden, Steven – Walden Consulting	FutureGen Texas Team	TX5-1	Geology & Sequestration Site, CO <sub>2</sub> Capture & Storage
			TX5-2	Air
			TX5-3	Air
			TX5-4	Proposed Action
			TX5-5	Monitoring
			TX5-6	None
			TX5-7	Air
			TX5-8	Air, Regulatory Requirements
			TX5-9	Surface Water, Regulatory Requirements
			TX5-10	Surface Water, Regulatory Requirements
			TX5-11	Material & Waste Handling, Regulatory Requirements
			TX5-12	Clarification/Correction
			TX5-13	Air
			TX5-14	Meteorology
TX6	Carrigan, Michael T.	Illinois State Federation of Labor and Congress of Industrial Organizations	TX6-1	Support, Socioeconomics
TX7	Swager, Ronald – Patrick Engineering	FutureGen Illinois Team	TX7-1	Monitoring
			TX7-2	Socioeconomics
TX8	Weber, Thomas W.	Texas Commission on Environmental Quality	TX8-1	Air
			TX8-2	Materials, Waste Handling, Surfacewater, Groundwater
			TX8-3	Floodplains

<sup>1</sup> All comment documents submitted to DOE for the Draft EIS (as shown in Section 5 of this volume) will be included in the Administrative Record for this EIS.

<sup>2</sup> Comment documents with more than one comment are given comment numbers (e.g., Commentor G2 comment document contained 14 comments identified as comments G2-1 through G2-14 for this commentor).

<sup>3</sup> Oral comments provided at one of the public hearings held in June 2007 for the Draft EIS.

## 13.5 COMMENT DOCUMENTS AND RESPONSES

Scanned images of the comment documents and DOE’s individual responses to the comments are provided as follows.

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 G3. U.S. Department of Agriculture - Natural Resources Conservation Service  
 (Wickey, Kevin) ..... 13-32  
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 G5. Environmental Defense – Natural Resources Defense Council (Anderson, A. Scott and  
 Peridas, George) ..... 13-42  
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 G9. Illinois EPA (Reed, Michael T.) ..... 13-80  
 G10. FutureGen Texas Team (Walden, Steven – Walden Consulting)..... 13-92  
 G11. U.S. Environmental Protection Agency (Anne Norton Miller) ..... 13-103

Commentor (Alphabetical)	Commentor #
API (Crookshank, Steven)	G4
ConocoPhillips (Elm, Kevin L.)	G6
Environmental Defense – Natural Resources Defense Council (Anderson, A. Scott and Peridas, George)	G5
FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)	G8
FutureGen Texas Team (Walden, Steven – Walden Consulting)	G10
Illinois EPA (Reed, Michael T.)	G9
Kentucky Division of Air Quality (Adams, T.L.)	G1
Scott, John T.	G7
U.S. Department of Agriculture - Natural Resources Conservation Service (Wickey, Kevin)	G3
U.S. Department of the Interior (Chezik, Michael T.)	G2
U.S. Environmental Protection Agency (Anne Norton Miller)	G11

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**G1. Kentucky Division of Air Quality (Adams, T.L.)**

**From:** Adams, Tom (EPPC DEP DAQ) [Tom.Adams@ky.gov]  
**Sent:** Friday, May 25, 2007 2:18 PM  
**To:** FutureGen.EIS@neill.doe.gov  
**Subject:** PSD permitting for an IGCC

The commonwealth of Kentucky has had recent experience on permitting an IGCC unit. During our investigation, several minor concerns were noticed that might not be included in your draft EIS. If possible, we could certainly pass on our observations on an informal basis.

#1

T.L. Adams  
Ky Div of Air Quality.

**G1. Kentucky Division of Air Quality (Adams, T.L.)**

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**Response to Comment #1:**

DOE contacted the Commentor to discuss recent experience of the commonwealth of Kentucky with regards to permitting an IGCC unit. It was determined that DOE would coordinate with the Kentucky Division of Air Quality during the site characterization and permitting phase.

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G2. U.S. Department of the Interior (Chezik, Michael T.)



United States Department of the Interior

OFFICE OF THE SECRETARY  
Office of Environmental Policy and Compliance  
Custom House, Room 244  
200 Chestnut Street  
Philadelphia, Pennsylvania 19106-2904



IN REPLY REFER TO:

July 11, 2007

ER 07/465

Mr. Mark L. McKoy,  
NEPA Document Manager  
U.S. Department of Energy  
National Energy Technology Laboratory  
P.O. Box 880,  
Morgantown, West Virginia 26507-0880

Attn: FutureGen Project EIS (DOE/EIS-0394D)

Dear Mr. McKoy:

The Department of the Interior (Department) has reviewed the May 2007 Draft Environmental Impact Statement (DEIS) for the FutureGen Project. The EIS provides information about the potential environmental impacts of the U.S. Department of Energy's (DOE's) proposal to provide federal funding to the FutureGen Alliance, Inc. (Alliance) for the FutureGen Project. The project would include the planning, design, construction, and operation by the Alliance of a coal-fueled electric power and hydrogen gas production plant integrated with carbon dioxide (CO2) capture and geologic sequestration of the captured gas. Four sites have been identified as reasonable alternatives and are considered in the EIS: (1) Mattoon, Illinois; (2) Tuscola, Illinois; (3) Jewett, Texas; and (4) Odessa, Texas. The Department offers the following comments and recommendations for your consideration.

**GENERAL COMMENTS**

#1

The DEIS is well written and provides a detailed evaluation of the four alternative sites and the environmental consequences of the proposed action. While we do not specifically recommend the selection of any particular site, we do recommend that full consideration be given to the site that would result in the least environmental damage. Where appropriate, DOE should require implementation of the possible mitigation measures discussed in the DEIS to avoid, minimize, and offset environmental harm.

Air Quality

*Mattoon and Tuscola, Illinois, Sites*

#2

According to information in the DEIS, the air emissions from the FutureGen power plant will be extremely minimal during normal operations compared to the existing background concentrations of various pollutants. The power plant's emissions will be well below screening

**G2. U.S. Department of the Interior (Chezik, Michael T.)**

Mr. Mark L. McKoy

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#2

concentrations developed by the U.S. Environmental Protection Agency (USEPA) for vegetation. While screening concentration data were not provided for animal species, the DEIS indicates that the maximum air emissions when added to the ambient background concentrations are below USEPA's secondary National Ambient Air Quality Standards which are developed to protect against harm to animals. Based on this information, it is unlikely that the air emissions from the proposed facility as a result of both construction and operation will have any significant, adverse impacts to fish and wildlife resources in the project vicinity. The proposed project will require obtaining various air quality permits from the Illinois EPA and/or the USEPA. The U.S. Fish and Wildlife Service (FWS) will provide further technical assistance to those agencies during their review process when requested.

Surface Water

*Mattoon, Illinois, Site*

#3

The DEIS indicates that no surface water resources occur on the power plant and sequestration site. However, surface water from the site drains primarily into the Kaskaskia River and Lake Shelbyville, and to a minor degree into the Little Wabash River. Additionally, utility construction will cross several tributary creeks that eventually flow into the Embarras River. These river systems are important to fish and wildlife resources in the region and within the state. Additionally, Lake Shelbyville is known to be an important stopover for migrating waterfowl and shorebirds. To minimize impacts to these and other surface waters, we recommend the DOE require stringent stormwater control measures and best management practices to ensure surface water resources, and the species that depend upon them, are protected from harm. Additionally, we recommend that all utility corridor construction utilize directional drilling for stream crossings in order to minimize impacts to water quality. Finally, hydrostatic test water should only be obtained from bodies of water with sufficient volume and flow to supply the required volumes without significantly affecting downstream flow.

*Tuscola, Illinois, Site*

#4

The DEIS indicates that no surface water resources occur on either the power plant or sequestration sites. Surface water from the power plant site and most of the utility corridors ultimately drain into the Embarras River. Surface water from the sequestration site, the proposed process water line corridor, and the proposed injection line corridor drains into the Kaskaskia River. As noted above, these river systems are important to fish and wildlife resources in the region and within the state. The recommended mitigation measures identified above for the Mattoon Site are also applicable to this location.

Wetlands and Floodplains

*Mattoon, Illinois, Site*

**G2. U.S. Department of the Interior (Chezik, Michael T.)**

Mr. Mark L. McKoy

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#5

According to information in the DEIS, up to 29.25 acres of wetlands could be impacted as a result of the proposed project at this site, primarily as a result of utilities construction. These wetlands are primarily identified as forested wetlands. A large forested wetland is located near the sequestration site but not within the Region of Influence for the project; therefore, this area is not anticipated to be impacted. Wetlands serve valuable functions, including providing habitat to numerous species of migratory birds. We recommend impacts to wetland resources be avoided and minimized to the greatest extent practical. A mitigation plan should be developed to fully compensate for any unavoidable wetland impacts. The FWS will provide technical assistance to the U.S. Army Corps of Engineers and the project proponent in development of a plan to fully offset project impacts to wetlands should wetland impacts be unavoidable.

*Tuscola, Illinois, Site*

#6

The DEIS does not fully identify the maximum amount of wetlands that may be impacted by construction at the Tuscola site. This is because the acreage depends upon future corridor construction. However, the DEIS does indicate that approximately 4.3 acres of wetlands could be impacted, including 2.0 acres of forested wetland. As stated above, wetlands serve valuable functions, including providing habitat to numerous species of migratory birds. Impacts to these resources should be avoided and minimized and a mitigation plan developed to fully offset any unavoidable adverse impacts.

*All Sites*

#7

Section C.2 of Appendix C of the EIS provides brief descriptions of the Executive Orders with which the FutureGen project must comply, including Executive Order 11990, "Protection of Wetlands." This EO is also mentioned in sections 4.8, 5.8, 6.8, and 7.8, which discuss wetlands and floodplains that may be affected by the construction and operation of the proposed power plant and sequestration site and related corridors for the Mattoon, Tuscola, Jewett, and Odessa sites, respectively. The EO requires federal agencies to avoid short and long term impacts to wetlands if a practical alternative exists. The EO applies to all wetlands, not just those considered jurisdictional under Federal or state statutes. However, the discussions of wetland impacts provided in sections 4.8, 5.8, 6.8, and 7.8 appear to deal almost exclusively with jurisdictional wetlands. We recommend that these sections in the Final EIS be revised to clearly indicate that the EO applies to all wetlands. Each section should also be revised to include discussion of any non-jurisdictional wetlands that could potentially be impacted and whether there are practicable alternatives to avoid such impacts.

Biological Resources*Mattoon and Tuscola, Illinois, Sites*

#8

The FWS was initially involved in pre-screening of the sites proposed for consideration in

**G2. U.S. Department of the Interior (Chezik, Michael T.)**

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proposed for the plant site. This pre-screening did not consider the potential impacts associated with utility construction as that information was not provided at that time. Additionally, the information provided in 2006 did not identify that the sequestration site in the Tuscola area would be located some distance from the proposed plant site.

However, as identified in FWS letters dated April 14, 2006, the endangered Indiana bat (*Myotis sodalis*) is the only federally listed species which potentially could occur in the vicinity of either project site (see Appendix A of EIS). While construction at either plant site is not likely to affect this species, the utility construction proposed is likely to impacted forested habitat that may be utilized by this species. The DEIS (page 4.9-6) identifies that construction outside the Indiana bat breeding season would not likely affect the Indiana bat. The breeding season identified in the DEIS is April 1 to September 15. The breeding season (e.g., maternity season) in Illinois is considered to occur from April 1 to September 30. In general, the FWS would concur that tree clearing activities occurring outside of this timeframe are not likely to impact the Indiana bat. Should it be necessary to clear trees during this timeframe, a mist net survey may be required. We recommend contacting the FWS's Marion, Illinois, Ecological Services Office for additional information and guidance prior to initiating any survey activities.

#8 The discussion of Biological Resources did not include any discussion of migratory birds within the project area or Region of Influence for either the Mattoon or Tuscola Sites. While habitat for migratory birds is sparse within the plant sequestration sites, various types of habitats for these species occur within the proposed locations of the utilities (e.g., wetlands, forest, riparian corridors). As such, nesting migratory birds may be impacted as a result of land clearing activities. The Migratory Bird Treaty Act prohibits take of any migratory bird without authorization from the FWS. Birds protected under the Act include all birds with the exception of non-migratory upland game birds (e.g., quail, grouse, pheasant, turkey, etc.) and non-native birds (e.g., European starlings, pigeons, English house sparrows, etc.).

Further, Executive Order (EO) 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds," defines the responsibility of federal agencies to protect migratory birds and their habitats. The intent of the EO is to strengthen migratory bird conservation by identifying and implementing strategies that promote conservation and minimize the take of migratory birds through consideration in land use decisions and collaboration with the FWS. The EO requires federal agencies to ensure that the environmental analyses of their actions evaluate the effects of such actions and agency plans on migratory birds, with emphasis on species of concern.

The Final EIS should include discussion of migratory birds utilizing the area and various measures to be implemented to minimize impacts. We recommend land clearing activities be avoided during the peak nesting season in order to ensure migratory birds are not killed. In the project area, the nesting season would be generally from April 1 to July 31. Some raptor species are known to nest earlier in the year. Surveys for raptor nests are recommended, and this information should be utilized to help determine the construction corridor for utilities.

**G2. U.S. Department of the Interior (Chezik, Michael T.)**

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#8 | Some species of migratory birds are further protected by the Bald and Golden Eagle Protection Act and the Endangered Species Act of 1973, as amended. However, bird species protected by these regulations are not known to occur within these two project sites or the Region of Influence associated with the project.

**SPECIFIC COMMENTS**

**Chapter 3: Summary of Environmental Consequences, Section 3.1.9, pages 3-12 and 3-13**

#9 | 1st paragraph: The DEIS states that "Federal and state agencies were contacted to determine the potential for threatened and endangered species to occur within the proposed construction areas at all four sites." It may be worthwhile to include a sentence at the end of this paragraph in the Final EIS informing the reader that copies of the agency letters providing information on threatened and endangered species are included in Appendix A of the EIS.

#10 | 4th paragraph: The DEIS incorrectly refers to the eastern sand darter as a federally listed species. This species is a state-listed threatened species in Illinois but it is not a Federal endangered, threatened, or candidate species.

2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> paragraphs: The Final EIS should provide references and further discussion to support the following statements in these paragraphs:

"There are no unique or rare aquatic or terrestrial habitats present at any of the alternative sites or corridors. Therefore, no direct impacts to these resources are expected." (2nd paragraph)

#11 | "...the potential for resident wildlife populations at these sites is low. Therefore, impacts related to the displacement of wildlife communities for these sites would be minimal. The Jewett and Odessa sites provide a greater opportunity for wildlife to be present due to the lack of current intrusive human activities. As a result, resident wildlife populations within the areas to be used by the FutureGen Project would be lost or permanently displaced. Displaced wildlife would likely relocate to similar adjacent habitats that are prevalent in the respective regions of the Jewett and Odessa sites." (3rd paragraph)

"Aquatic habitats and species may be lost through construction; however, this impact would be minimal as none of these features is known to contain any habitat or species that are not plentiful in this area of Texas." (4th paragraph)

"Although considered unlikely, if listed species were to occur within construction areas, they could be directly impacted through temporary loss of habitat or through casualties." (5th paragraph)

**Chapter 4- section 4.21 References- 4.4 Geology, page 4.21-3**

**G2. U.S. Department of the Interior (Chezik, Michael T.)**

Mr. Mark L. McKoy

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Bookmarks for the following references have changed and need to be updated in the report:

#12

Illinois State Geological Survey (ISGS), 1995a, Earthquake Occurrence in Illinois. Accessed October 5, 2006 at <http://www.isgs.uiuc.edu/earthquakes/Articles/qk-fct-occur.pdf> (last updated November 30, 1999).

ISGS, 1995b, Damaging Earthquakes in Illinois. Accessed October 5, 2006 at <http://www.isgs.uiuc.edu/earthquakes/Articles/qk-fct-damag.pdf> (last updated November 30, 1999).

**Chapter 5-section 5.21 References- 5.4 Geology, page 5.21-3**

Bookmarks for the following references have changed and need to be updated in the report:

#13

Illinois State Geological Survey (ISGS), 1968, Geology and Oil Production in the Tuscola Area, Illinois. Illinois State Geological Survey Circular 424. Accessed October 5, 2006 at [http://www.isgs.uiuc.edu/oilgas/Circulars/Cir424\\_Geology\\_and\\_Oil\\_Production\\_in\\_the\\_Tuscola\\_Area\\_Illinois.pdf](http://www.isgs.uiuc.edu/oilgas/Circulars/Cir424_Geology_and_Oil_Production_in_the_Tuscola_Area_Illinois.pdf) (last updated January 13, 2005).

ISGS, 1995a, Earthquake Occurrence in Illinois. Accessed October 5, 2006 at <http://www.isgs.uiuc.edu/earthquakes/Articles/qk-fct-occur.pdf> (last updated November 30, 1999).

ISGS, 1995b, Damaging Earthquakes in Illinois. Accessed October 5, 2006 at <http://www.isgs.uiuc.edu/earthquakes/Articles/qk-fct-damag.pdf> (last updated November 30, 1999).

**Chapter 6-section 6.21 References-6.4 Geology, page 6.21-3**

The bookmark for the following reference has changed and needs to be updated in the report:

#14

Illinois State Geological Survey (ISGS), 1995, Damaging Earthquakes in Illinois. Accessed October 5, 2006 at <http://www.isgs.uiuc.edu/earthquakes/Articles/qk-fct-damag.pdf> (last updated November 30, 1999).

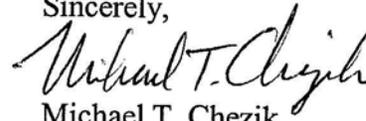
The Department has a continuing interest in working with DOE to ensure that project impacts to resources of concern to the Department are adequately addressed. For matters related to fish and wildlife resources and federally listed threatened and endangered species, please continue to coordinate with the appropriate FWS field office.

**G2. U.S. Department of the Interior (Chezik, Michael T.)**

Mr. Mark L. McKoy

7

Sincerely,



Michael T. Chezik  
Regional Environmental Officer

cc:

L. MacLean, FWS, Fort Snelling, MN

J. Devine, GS, Reston, VA

---

**G2. U.S. Department of the Interior (Chezik, Michael T.)**

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**Response to Comment #1:** DOE will consider whether the proposed project at each of the proposed sites would present such potential environmental impacts or such risks of harm that DOE would not want to fund the project at that particular site. Assuming the FutureGen Alliance selects a host site from among more than one site approved by DOE, it is expected that the Alliance will apply a full range of business considerations, including environmental considerations raised in this EIS, in the site selection process. The Alliance is expected to review this EIS and to use the contents of this EIS, including comments submitted, in their planning and design efforts. DOE will consider whether to impose specific requirements, such as a mitigation plan (in the Record of Decision) for the project.

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**Response to Comment #2:** Comment noted and will be included in the Administrative Record of the EIS.

---

**Response to Comment #3:** The FutureGen Project would implement best management practices to reduce potential impacts, as expressed in these comments. Also, in the Record of Decision, DOE may require the Alliance to make commitments to complete specific actions (such as mitigation for specific impacts) as a condition to receive government funding.

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**Response to Comment #4:** The FutureGen Project will implement best management practices to reduce potential impacts, as expressed in these comments. Also, in the Record of Decision, DOE may require the Alliance to make commitments to complete specific actions (such as mitigation for specific impacts) as a condition to receive government funding.

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**Response to Comment #5:** The FutureGen Project will implement best management practices to reduce potential impacts, as expressed in these comments. Also, in the Record of Decision, DOE may require the Alliance to make commitments to complete specific actions (such as mitigation for specific impacts) as a condition to receive government funding.

---

**Response to Comment #6:** The FutureGen Project will implement best management practices to reduce potential impacts, as expressed in these comments. Also, in the Record of Decision, DOE may require the Alliance to make commitments to complete specific actions (such as mitigation for specific impacts) as a condition to receive government funding.

---

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**G2. U.S. Department of the Interior (Chezik, Michael T.)**

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**Response to Comment #7:**

Text has been added in Sections 4.8.2.1; 5.8.2.1; 6.8.2.1; and 7.8.2.1 to address Executive Order 11990, which requires federal agencies to avoid short and long term impacts to wetlands (including isolated wetlands) if no practicable alternative exists. Regarding site specific discussions of non-jurisdictional wetlands, the Illinois sites do consider non-jurisdictional wetlands as indicated by the following statements in Sections 4.8.2.1 and 5.8.2.1: "IDNR has the authority to regulate wetlands under the Interagency Wetland Policy Act of 1989 (IWPA) for projects that receive funding or technical assistance from the state. The IWPA defines federal money that passes through a state agency as state funding. Isolated, farmed and U.S. Army Corps of Engineers (USACE) jurisdictional wetlands are state jurisdictional wetlands under the IWPA." The wetland delineations conducted for the Illinois sites included non-jurisdictional wetlands as indicated by the following text in Section 4.8.2.1: "Based on the IDNR site survey and a review of available resources, several wetland areas subject to Section 404 and IWPA jurisdiction exist..."

Regarding the Texas sites, a formal wetland delineation has not been conducted to determine 404 jurisdiction; therefore, the text in Sections 6.8.2.1, and 7.8.2.1 has been revised to eliminate emphasis on jurisdictional wetlands as no official 404 determination has been made. Regarding practicable alternatives to avoid wetland impacts, the reader is referred to the Mitigation and Best Management Practices Section where these measures are discussed. Text has been added in Sections 4.8.3.1; 5.8.3.1; 6.8.3.1; and 7.8.3.1 under Construction Impacts, "Tables 3-13 and 3-14 in Section 3.4 provide potential mitigation measures and best management practices to avoid, minimize, and offset impacts to wetlands."

Additionally, after site selection, non-jurisdictional wetlands will be identified and mapped in Texas if one of the Texas sites is selected. Wetlands in Illinois have already been delineated and mapped as discussed in Sections 4.8.2.1 and 5.8.2.1. Appropriate mitigation and alternatives to avoid such wetlands can be addressed at that time. Development of the EIS has not revealed quantities of non-jurisdictional wetlands that would materially affect the selection of a site for the FutureGen Project or the DOE decision(s) that might be published in a Record of Decision.

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**G2. U.S. Department of the Interior (Chezik, Michael T.)**

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**Response to Comment #8:**

The text has been revised in Section 4.9.3.1 to accurately reflect April 1 to September 30 breeding season for the endangered Indiana Bat.

Text regarding migratory birds has been added to Sections 4.9.2.4; 5.9.2.4; 6.9.2.4; and 7.9.2.4 under "Other Protected Species." For example, for Mattoon the following text has been added, "Coordination with the USFWS and IDNR did not identify any migratory bird populations that could be affected by the project. However, habitat (i.e., wetlands, forests, riparian corridors) for these populations is present. Therefore, a likelihood exists that migratory birds could use habitat within the areas as stopovers during migration".

Discussion of impacts to these populations was also added to Sections 4.9.3.1; 5.9.3.1; 6.9.3.1; and 7.9.3.1. For example, for Mattoon the following text has been added under Utility Corridors, "Construction of the utility corridors could result in temporary impacts to aquatic habitat utilized by migratory birds. Clearing of forests to accommodate utilities would result in a permanent loss of forested terrestrial habitat utilized by migratory birds. This permanent loss of forested habitat would have a minimal effect on migratory bird species as comparable habitat is available in the overall region. If land clearing were to occur during the nesting season, individual bird species could be lost." Regarding timing of land clearing activities, the following has been added to Table 3-14, "Land clearing activities would be avoided during the peak nesting season (April 1 to July 31) in order to avoid impacts to migratory birds. Additionally, surveys for raptors would be conducted if determined necessary."

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**Response to Comment #9:**

Text was revised as follows: "Federal and state agencies were contacted to determine the potential for threatened and endangered species to occur within the proposed construction areas at all four sites (correspondence is provided in Appendix A)."

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**Response to Comment #10:**

Text was revised to read, "...the state listed Eastern sand darter...."

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**Response to Comment #11:**

These statements highlight conclusions made during the analysis of each specific site in Chapters 4 to 7. The following sentences have been clarified and refer the reader to the appropriate section in the document for further reference: "There are no known unique or rare aquatic terrestrial habitats present at any of the alternative sites or corridors. Therefore, no direct impacts to these resources are expected (see Sections 4.9, 5.9, 6.9, 7.9 and Appendix A)." "...the potential for resident wildlife populations at these sites is low (see Sections 4.9 and 5.9)." "The Jewett and Odessa sites provide a greater opportunity for wildlife to be present due to the lack of current intrusive human activities (see Sections 6.9 and 7.9)." "Aquatic habitats and species may be lost through construction....none of these features is known to contain any habitat or species that are not plentiful in this area of Texas (see Section 6.9)." "If listed species were discovered to occur within construction areas...."

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**Response to Comment #12:**

Text was revised for the bookmark for Earthquake Occurrence in Illinois to -- <http://www.isgs.uiuc.edu/research/earthquake-hazards/pdf-files/qk-fct-occur.pdf>. Text was revised for the bookmark for Damaging Earthquakes in Illinois to -- <http://crystal.isgs.uiuc.edu/research/earthquake-hazards/pdf-files/qk-fct-damag.pdf> (Both accessed July 18, 2007).

**G2. U.S. Department of the Interior (Chezik, Michael T.)**

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**Response to Comment #13:**

Text was revised for the bookmark for Geology and Oil Production in the Tuscola Area to -- [http://www.isgs.uiuc.edu/sections/oil-gas/Circulars/Cir424\\_Geology\\_and\\_Oil\\_Production\\_in\\_the\\_Tuscola\\_Area\\_Illinois.pdf](http://www.isgs.uiuc.edu/sections/oil-gas/Circulars/Cir424_Geology_and_Oil_Production_in_the_Tuscola_Area_Illinois.pdf). Text was revised for the bookmark for Earthquake Occurrence in Illinois to -- <http://www.isgs.uiuc.edu/research/earthquake-hazards/pdf-files/qk-fct-occur.pdf> Text was revised for bookmark for Damaging Earthquakes in Illinois to -- <http://crystal.isgs.uiuc.edu/research/earthquake-hazards/pdf-files/qk-fct-damag.pdf> (All accessed July 18, 2007).

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**Response to Comment #14:**

Text was revised for the bookmark for Damaging Earthquakes in Illinois to -- <http://crystal.isgs.uiuc.edu/research/earthquake-hazards/pdf-files/qk-fct-damag.pdf> (Accessed July 18, 2007).

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**G3. U.S. Department of Agriculture - Natural Resources Conservation Service (Wickey, Kevin)**

**United States Department of Agriculture**



Natural Resources Conservation Service  
75 High Street, Room 301  
Morgantown, WV 26505  
(304) 284-7540 (Phone)  
(304) 284-4839 (Fax)

---

July 10, 2007

Mark L. McKoy  
National Energy Technology Laboratory  
P. O. Box 880, MS N03  
Morgantown, WV 26507-0880

SUBJECT: ECS – Review of Draft Environmental Impact Statement.  
NRCS Environmental Document Number 3329.

Dear Mr. McKoy:

The Draft Environmental Impact Statement prepared by the U. S. Department of Energy for the proposed FutureGen Project has been received.

The Natural Resources Conservation Service has no comments at this time. Thank you for the opportunity to review this document.

Sincerely,

A handwritten signature in black ink that reads "Kevin Wickey".

KEVIN WICKEY  
State Conservationist

cc: Diane E. Gelburd, Director, Ecological Sciences Division, NRCS, Washington, DC  
Ron Wigal, Acting Environmental Specialist, NRCS, Morgantown, WV

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**G3. U.S. Department of Agriculture - Natural Resources Conservation Service (Wickey, Kevin)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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#### G4. API (Crookshank, Steven)



**Steven Crookshank**  
Senior Economist  
Policy Analysts

1220 L Street, NW  
Washington, DC 20005-4070  
USA  
Telephone 202-682-8542  
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Email crookshanks@api.org  
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July 16, 2007

Mark McKoy, Document Manager  
U.S. Department of Energy  
National Energy Technology Laboratory  
3610 Collins Ferry Road  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: "EIS No. 20070213, Draft EIS, DOE, 00, FutureGen Project, *Federal Register* Vol. 72, No. 105, Friday, June 1, 2007.

To Whom It May Concern:

The American Petroleum Institute (API) appreciates the opportunity to comment on the Department of Energy's (DOE) FutureGen draft Environmental Impact Statement. API is a nationwide, not-for-profit trade association representing nearly 400 member companies engaged in all aspects of the oil and gas industry, including exploration and production, transportation, refining, distribution and marketing. API's member companies are interested in - and in some cases actively pursuing or participating in - carbon capture and storage projects. Given that the final EIS could set precedents for reviews of future projects, API and its members have a strong interest in the DEIS. We offer the following comments on the Draft Environmental Impact Statement (DEIS).

#### OVERALL COMMENTS

#1

The methodology used in and conclusions resulting from the risk assessment are sound. The methodology described in the Risk Assessment Report effectively and appropriately builds upon the best existing information and state-of-knowledge, uses the best available results from ongoing and recent research, and was subjected to review by a diverse group of qualified experts. The report offers a balanced representation of both the nature of the risks posed and the magnitude of impacts should leaks or other upsets occur, demonstrating that in the "grand scheme," the risks corresponding to CO<sub>2</sub> capture and storage associated with the FutureGen project are small and quite manageable.

However, many aspects of the risk assessment were based on uncertain information or data that are not yet readily available. Because of this, a conservative, cautious approach was taken in the assumptions feeding into the assessment, inevitably leading to estimates of greater impacts/risks than will most likely be the case. Data gathered over the course of the FutureGen project will serve to reduce this uncertainty. Consequently, it will likely be prudent to re-assess some of the risks and impacts as these data become available.

#2

Moreover, since the EIS process under the National Environmental Policy Act (NEPA) requires that all potential impacts and risks be examined, it is somewhat difficult to prioritize risks and impacts in the

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**G4. API (Crookshank, Steven)**

#2 Risk Assessment Report and the EIS. In addition, it can be difficult to evaluate these risks and impacts in an appropriate context. We recommend that greater efforts be deployed to communicate more clearly the most significant risks to be posed by the FutureGen project, along with the characterization of the uncertainties and the continuing need for data as the Project proceeds to reduce these uncertainties. In addition, we recommend that future risk assessments more comprehensively discuss actions to be taken to minimize and mitigate these risks and impacts, and to put these risks and impacts into proper context relative to other fossil fuel-derived energy sources, and, in particular, the risks posed by potential global climate change.

**SPECIFIC COMMENTS**

#3 Our specific comments focus more on context and perspective, rather than the methodology and/or conclusions of the risk assessment and EIS. Our specific comments address actions and revisions that would further clarify and put into context the various risks associated with the FutureGen project. As such, we recommend including in the report, at a minimum, a qualitative discussion of how the various risks associated with CO<sub>2</sub> capture and storage compare with each other, and how these risks compare with those from alternative methods for power generation. Moreover, and importantly, the risks associated with the FutureGen project need to be compared to the risks and impacts of global climate change -- the larger risk that the FutureGen project is intended to address.

#4 Moreover, this context must include a clear characterization of the actions to be taken to minimize risks, and to mitigate impacts if necessary. This context will be critical in providing the public with accurate, transparent, and understandable information associated with the risks associated with the FutureGen project and the technologies and processes to be considered as part of the project.

Our comments are summarized in the paragraphs below.

#5 **Most significant conclusion: The largest risks are associated with upsets and/or malfunctions of surface equipment, not leakage of sequestered CO<sub>2</sub> from subsurface formations** By far the largest risks identified in the EIS and the Risk Assessment Report are those associated with accidental releases resulting from pipeline ruptures or punctures and injection wellhead leaks, not slow leaks from the subsurface of sequestered gases through wells, faults, or caprock. In other words, the largest risks are related to surface facility operations prior to injection. These are characteristic of risks common to normal industrial operations, such as gas processing plants, that are routinely monitored, managed, minimized, and mitigated. Moreover, it is important to note that the likelihood of a pipeline rupture happening was characterized, depending on location, as either "unlikely" (one occurrence in 100 to 10,000 years) or "extremely unlikely" (one occurrence in 10,000 to 1 million years). Similarly, the likelihood of a puncture happening was characterized, again depending on location, as either "likely" ( $\geq 1$  occurrence in 100 years) or "extremely unlikely" (one or more occurrences in 10,000 to 1 million years).

In addition, an important set of analog data presented in the Risk Assessment Report (Section 5.2) shows that the CO<sub>2</sub> flux from natural accumulation and industrial operations (CO<sub>2</sub> EOR) are all: (1) within the range of natural soil respiration of CO<sub>2</sub> from plant decay and other near-surface phenomena; and, (2) up to three orders of magnitude lower than CO<sub>2</sub> releases from natural volcanic, hydrothermal and metamorphic settings.

#6 **Another significant conclusion: The largest risks are associated with exposure to H<sub>2</sub>S, not CO<sub>2</sub>** Another important conclusion of the Risk Assessment Report is that the largest risks to human health are associated with exposure to H<sub>2</sub>S, not CO<sub>2</sub>. Again, these risks relate to releases from pipeline ruptures or punctures, from wellhead failure, or from catastrophic accidents primarily related to terrorism or sabotage (which cannot be predicted). (See Table S-12 in the Summary of the EIS.) None of the sites had irreversible or life-threatening effects associated with CO<sub>2</sub>.

**G4. API (Crookshank, Steven)**

- Moreover, it is useful to note that the post-injection, subsurface impact of CO<sub>2</sub>/H<sub>2</sub>S leakage would diminish once the injected gas is in the reservoir, due to H<sub>2</sub>S, mineral, and solubility interactions.
- Also, it is important to note that these risks were based on the maximum allowable H<sub>2</sub>S concentration (100 ppm), not necessarily what will actually be the concentration in the gas stream to be sequestered. This 100 ppm limit is normally defined as the maximum concentration allowed in CO<sub>2</sub> gas streams input into CO<sub>2</sub> pipelines.
- Finally, although potential health effects noted due to H<sub>2</sub>S exposure are noted, they are generally minimal (except for catastrophic accidents, primarily related to terrorism or sabotage), relating to mild, transient health effects. Life threatening effects of H<sub>2</sub>S exposure are generally associated with exposures over long periods of time, which were not the impacts of concern here. Finally, exposure to H<sub>2</sub>S can be easily detected, and thus managed and avoided.
- Based on the fact that the largest risks are associated with H<sub>2</sub>S exposure resulting from releases from surface facilities, on p. S-58 of the Summary of the EIS it is noted that:
- "Given the results of these screening level assessments, the Alliance would undertake design modifications and employ engineering controls to reduce potential risk and associated consequences..."
- Based on this conclusion, it may be useful to reassess these risks and update their characterization after the implementation of such design modifications and engineering controls, and make these results public as they become available.
- One result of the FutureGen project is reduction of uncertainties associated with such CO<sub>2</sub> capture and storage.** Under the National Environmental Policy Act (NEPA), federal agencies must disclose, as part of preparing an EIS, incomplete, unavailable, or uncertain information used in the EIS preparation process. Therefore, in this EIS, much attention was appropriately given to the uncertainties associated with this "first-of-a-kind" project. These uncertainties were characterized in Section 6.3 in the Risk Assessment Report, and in Section S.8.1 in the Summary of the EIS. Given these uncertainties, in many cases, ranges of possible impacts were determined, with particular emphasis on the consideration of upper bounds for estimating potential impacts. This will inevitably lead to estimates of greater impacts/risks than will most likely be the case.
- Therefore, it is important to note that the FutureGen project itself, at least in part, is intended to acquire and disseminate information to reduce many of these uncertainties. This point should be emphasized more in the EIS. Moreover, over the course of the more detailed site characterizations and project design stages, we recommend that certain impacts be reassessed, and presented to the public, based on the more up-to-date information acquired during the course of the project.
- Risks of the FutureGen project should be compared to risks from global climate change and to other energy supply alternatives.** While, as documented in the Risk Assessment Report and the EIS, the FutureGen project poses some, albeit small, risks, the purpose of the project is, in fact, to address the problem of global climate change, a significantly larger environmental risk. Moreover, the technologies to be demonstrated as part of the FutureGen project will, collectively, result in environmental impacts that are substantially less than most other fossil fuel alternatives. This context should not be lost, and appropriately be noted, in the overall EIS. Although such comparison will necessarily be qualitative because the FutureGen project is one project in the context of global climate change, this context is important to illustrate the benefits of such technologies in the longer term to reduce CO<sub>2</sub> emissions to the atmosphere.
- More attention should be given to the various actions likely to be pursued to ensure risks are minimized or mitigated.** The Risk Assessment Report and the EIS concludes that the inherent risks associated with storing CO<sub>2</sub> in rigorously selected geological formations will be minimal, and that the greatest risks are associated with surface equipment operations where risks can be minimized with

**G4. API (Crookshank, Steven)**

appropriate engineering designs, attentive operations, and where impacts can be mitigated if leakage does occur.

A series of actions are central to preventing and correcting sustained leakage of CO<sub>2</sub> from geological formations, namely - - rigorous site selection, assured well integrity, long-term modeling of the CO<sub>2</sub> plume, monitoring of the injected CO<sub>2</sub> (including early identification of leakage), and prompt remediation actions should significant CO<sub>2</sub> leakage occur. These actions, appropriately pursued, can substantially reduce the risks associated with CO<sub>2</sub> capture and storage projects. Moreover, and perhaps most importantly, the largest impacts identified in the EIS can, in most cases, be easily and quickly mitigated.

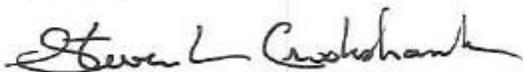
This point needs to be made as part of the EIS, and, importantly, in communicating the results to various stakeholders and the general public.

#10

**The methodology used in the Risk Assessment Report should be better documented.** Increased emphasis should be given to documenting the methodology (protocol) used for conducting the risk assessment. The Risk Assessment Report notes that the methodology followed is similar to the approach used by Australia's CO<sub>2</sub>CRC. API's understands that Australia's CO<sub>2</sub>CRC employed the URS RISQUE approach, which was developed for civil engineering projects (particularly for assessing the risks of dams). It would be valuable to document how the risk assessment methodology has been modified for the FutureGen assessment.

We appreciate the opportunity to comment on this draft Environmental Impact Statement. If you have any questions or need additional information, please contact me at 202-682-8542.

Sincerely,



Steven L. Crookshank

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#### **G4. API (Crookshank, Steven)**

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##### **Response to Comment #1:**

DOE expects the data and lessons-learned from the sequestration part of the project, especially from the monitoring of the sequestration, will be subjected to extensive review and analysis, with reports being made available to the public. As a research and development project, risks and potential impacts are expected to be reviewed and reassessed, if appropriate, as the project progresses.

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##### **Response to Comment #2:**

DOE believes that this EIS does communicate clearly the most significant risks that could be posed by the FutureGen Project, as well as the assumptions and uncertainties involved in the assessment of risks. Furthermore, DOE has made available the Risk Assessment Report upon which the risks presented in the EIS are based. DOE believes that this EIS and the Risk Assessment Report provide the facts to enable the reader to understand the risks and potential impacts in context. DOE has evaluated the most reasonable risk scenarios associated with the Project and has presented these results both in the body of the EIS and also in a more distilled manner within the EIS Summary, Section S.9 (Environmental Consequences), which highlights potential risk areas. DOE believes that the presentation of risks and potential impacts allows both the public and decision-makers to understand the hazards of the project. DOE decision-makers may further consider in the Record of Decision and at subsequent decision points the methods by which risks and impacts could be reduced or mitigated.

The purpose and need for this project is to establish the technical and economic feasibility of co-producing electricity and H<sub>2</sub> from coal, while capturing and sequestering the CO<sub>2</sub> and greatly reducing the emissions of pollutants generated in the process. This purpose and need is entirely consistent with the President's Hydrogen Fuel Initiative and National Climate Change Technology Initiative, and the National Energy Policy (see Section 1.3). Therefore, comparison of FutureGen Project risks with those from alternate methods of power generation (e.g., wind turbines, solar panel arrays, wave power, tidal flow power, etc.) is outside the scope of this EIS. As a research and development platform, FutureGen aims to foster technology improvements at future coal-fueled power plants over the next decade that would reduce pollutants and GHG emissions over the longer term.

DOE recognizes the importance of climate change and intends that FutureGen will demonstrate capture and sequester the greenhouse gas CO<sub>2</sub> as stated in this EIS (see page 1-1). Furthermore, DOE recognizes that, as recently set forth in the report of the Intergovernmental Panel on Climate Change (IPCC, 2007), the issue of climate change is large and complex. There is no need for this EIS to restate the IPCC's analyses or restate their conclusions and recommendations. DOE does believe that the risks associated with the capture and geologic sequestration of CO<sub>2</sub> are less than the risks associated with unabated, ever increasing emissions of greenhouse gases and the consequent impacts. For more information on the risks posed by potential global climate change, please see the reports of the IPCC listed in the Reference section of the Final EIS. FutureGen's contributions to emissions of CO<sub>2</sub>, in the context of global climate change, are discussed in newly added text in Section 3.3.1.2.

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#### **G4. API (Crookshank, Steven)**

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**Response to Comment #3:**

DOE believes that this EIS comprehensively presents the risks associated with possible release scenarios for both pre-injection and post-injection operations, based on conceptual plant design. A qualitative discussion of how risks associated with CO<sub>2</sub> capture and storage compare with each other is presented in the Summary, Section S.9 (Environmental Consequences), which highlights the potential impacts and risks. Comparison of these risks with those from alternative methods of power generation is beyond the scope of this EIS. Furthermore, it is beyond the scope of this EIS to compare the risks associated with the FutureGen Project with the risks and potential impacts of global climate change for the reasons stated in the Response to Comment #2. In general, given the preliminary and somewhat unsettled nature of the predictions regarding global climate change, DOE is not prepared to compare, in a programmatic sense, the potential risks and impacts (both good and bad) associated with CO<sub>2</sub> capture and geologic sequestration versus global climate change. DOE does believe that the risks associated with geologic sequestration of CO<sub>2</sub> are less than the risks associated with unabated, ever increasing, emissions of greenhouse gases from the combustion of fossil fuels, both in the U.S. and world-wide. DOE further believes that widespread and intense public interest in these subjects will drive such assessments and comparisons when data become available from projects like FutureGen.

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**Response to Comment #4:**

DOE expects the project as a whole to help establish the nature of the risks, effective monitoring and mitigation strategies, and cost effective engineering approaches to CO<sub>2</sub> capture from power plants and to geologic sequestration. Furthermore, DOE expects that the site selection effort, planning, engineering, construction practices, operational practices, and monitoring efforts would minimize health and safety risks to the public. Mitigation action plans for various contingencies would be developed based on the detailed site characterization data and the site-specific design work.

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**Response to Comment #5:**

DOE agrees with the comment which reflects a major conclusion in the EIS.

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**Response to Comment #6:**

The findings of the risk assessment for the project are that H<sub>2</sub>S and SO<sub>2</sub> gases that could be released from various types of events and accidents would likely create greater risks of harm than releases of CO<sub>2</sub>. Following site selection, the Alliance would complete a detailed site characterization and preliminary designs for all the facilities. DOE would then reassess, as needed, the risks and potential impacts of the proposed project to determine whether they (as perceived at that point in time) would fall within the ranges of impacts expressed in this EIS. The resulting Supplement Analysis would be made available to the public, along with a determination of whether a Supplemental EIS would be required.

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#### **G4. API (Crookshank, Steven)**

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##### **Response to Comment #7:**

DOE agrees with the idea that the Project would help to reduce uncertainties with CO<sub>2</sub> capture and geologic sequestration by providing an opportunity to gather data and to distribute it to the public. DOE further agrees that the current approach of providing upper bounds for estimating impacts does result in greater impacts/risks than would most likely be the case but has done so in an effort to be conservative and account for design and data uncertainties (discussed in Section 3.2). As stated in previous responses, DOE would reassess potential impacts as more information becomes available during the next phase of the project, and the results would be made available to the public. .

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##### **Response to Comment #8:**

See response to comment G4-2 and G4-3. Along with considering technical feasibility and compliance with the Project's purpose and need, DOE did consider and compare the potential environmental impacts of potential alternative technologies for electric power generation and for CO<sub>2</sub> sequestration, as briefly reported in Section 2.4.7 for alternative technologies dismissed from further consideration.

FutureGen, as a single project, would not emit sufficient CO<sub>2</sub>, nor sequester sufficient CO<sub>2</sub>, to significantly affect global climate change. FutureGen's relevance to global climate change rests in its significance as a widely deployable prototype of an integrated system of electric power and hydrogen gas generation from fossil fuels with CO<sub>2</sub> capture and permanent CO<sub>2</sub> sequestration. It would provide the design basis, cost basis, and risk information that would enable the electric power industry to begin substantial reductions (more than 85 percent for new power plants) in CO<sub>2</sub> emissions per unit of electricity or hydrogen gas produced. Qualitative discussion of the desire for widespread deployment of this technology, leading to substantial reductions in CO<sub>2</sub> emissions from fossil-fueled power plants, has been added under Cumulative Impacts in Sections 3.3.1.2 and 3.3.1.3. See also the Purpose and Need for Agency Action and the description of the Project provided in Sections 1.3 and 1.4 for brief statements of the intended benefits of the Project. A substantive analysis of the potential reductions in CO<sub>2</sub> emissions from coal-fueled power plants would require a number of speculative fundamental assumptions, some of which may or may not occur in the future, especially regarding the timing assumed for events. Rather than engage in unfounded conjecture, DOE believes that it is sufficient to say that deployment of FutureGen-related technologies could reduce CO<sub>2</sub> emissions by at least 85 percent (potentially by more than 90 percent) at new fossil-fueled power plants.

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##### **Response to Comment #9:**

For the Project as a whole, mitigation measures are discussed in Section S.11, Table S-16; and Section 3.4, Table 3-13; and best management practices in Table 3-14. Additionally, during development and drafting of the Record of Decision, DOE would again consider various actions that either must or should be pursued to help ensure risks are minimized or mitigated. DOE would decide whether a mitigation action plan would be required for this project.

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**G4. API (Crookshank, Steven)**

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**Response to Comment #10:**

DOE believes that the Risk Assessment methodology is explained in sufficient detail in the Risk Assessment Report, which was provided on a CD with the EIS and Appendix D, Risk Assessment Methodology of this EIS. In addition to the discussion of both the pre- and post-sequestration approaches in Sections 4 and 5 of the Risk Assessment Report, the report has a series of detailed appendices that describe the methods used in the modeling analyses of pipeline and wellhead releases and the analog database. The part of the FutureGen Risk Assessment that was similar to the Australian sites was the estimation of leakage rates from wells based on industry experience and natural analogs. The actual rates used in the Australian risk assessment for leaks from the CO<sub>2</sub> reservoir at Latrobe Valley were based on reservoir modeling and experience of a panel of experts (Hooper et al, 2005). The Latrobe Valley CO<sub>2</sub> Storage Assessment Report said on Page 76 that the URS RISQUE approach would be used for the other key performance indicators, but not for risk events that relate to CO<sub>2</sub> containment. The application of the RISQUE approach to the four conceptual GEODISCTM storage sites was described in Bowden and Rigg, 2004. The Risk Assessment Report will not be revised in response to this comment.

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**G5. Environmental Defense – Natural Resources Defense Council  
(Anderson, A. Scott and Peridas, George)**



Mark McKoy, Document Manager  
U.S. Department of Energy  
National Energy Technology Laboratory  
3610 Collins Ferry Road  
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July 16<sup>th</sup>, 2007

***Comments on FutureGen Project Draft Environmental Impact Statement (DOE/EIS-0394D)***

Dear Mr. McKoy:

Thank you for the opportunity to comment on the FutureGen Project Draft Environmental Impact Statement (DEIS). FutureGen is a highly visible project that will continue to attract public and scientific attention. With this in mind, we submit the following comments in order to encourage the Department to clarify issues that we consider crucial.

***Modeling of CO<sub>2</sub> plume***

Throughout the DEIS, estimates for the CO<sub>2</sub> plume radius are provided for all four sites. It is assumed that the plume will be symmetrical: any heterogeneity in the injection formations has been ignored. While this may be a reasonable approximation for some sites, heterogeneity is extremely common and could give rise to a significantly different plume shape and dimensions. Although significant refinement of the plume models is not possible without extensive site characterization, we are aware that more detailed simulations that take into account heterogeneity to the extent possible have already been performed as part of the sites' bids.

**We request that the assumptions and results of these simulations be included in a Supplemental Environmental Impact Statement in order to enable a more accurate projection of the extent of the CO<sub>2</sub> plumes at the four sites.**

#1

**G5. Environmental Defense – Natural Resources Defense Council  
(Anderson, A. Scott and Peridas, George)**

*Site characterization and selection process*

The DEIS explains that detailed site characterization will be carried out once an injection site is chosen, which might include the drilling of test wells and conducting seismic surveys. As such, detailed information on the candidate reservoirs is missing from the DEIS. We recognize that it might not be feasible under a limited budget, or the proposed timetable, to perform site characterization at a detailed level for all four sites. However, we stress that one of the key elements of the FutureGen project is further to confirm the feasibility of injecting large amounts of CO<sub>2</sub> into deep saline geologic formations at a sustained rate for several consecutive years. The most important step in that respect is to choose an excellent site, with suitable capacity, injectivity and effectiveness of seal. We are fully aware that the generic geologic characteristics of all four sites currently under consideration make it likely that any of them are conducive to a sound injection project, but also recognize more information is needed in order to rule out the possibility that site-specific features might render one or more sites clearly inferior or even inadequate.

#2

**We therefore request that a Supplemental Environmental Impact Statement describe in detail:**

- **The scope and specifications of the site characterization work that will be undertaken, including the methods to be used;**
- **The complete list of criteria that will be used to select a qualified party to carry out the site characterization work;**
- **The benchmarks, thresholds, methodology and other relevant quantities/methods that will be used to assess whether the results of the site characterization work support or deter the injection of the CO<sub>2</sub> from the FutureGen project; and**
- **The exact procedure (decision tree) according to which the Alliance and/or the Department of Energy (DOE) might revisit the selection of an injection site should the results of the site characterization work indicate that it might not be suitable.**

We urge DOE and the Alliance to clarify that that the FutureGen site selection is only being made on a tentative basis until adequate site characterization has been completed and confirmed the suitability of the site.

*NOx Emissions and Selective Catalytic Reduction (SCR) technology*

FutureGen is being touted as a “near-zero” emissions facility and the “cleanest” coal-based power generation plant ever built.

#3

The DEIS discusses a NO<sub>x</sub> target of 0.05 pounds per mmbtu. We do not believe this is appropriate, as it seems to imply that SCR will not be used. Given the degree of sulfur removal planned for the FutureGen project, it should be feasible to deploy SCR. According to the literature, SCR is technically and economically feasible when syngas has a sulfur concentration

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of no more than 5 to 12 ppmv<sup>1</sup>. The literature further suggests that IGCC using SCR can meet NO<sub>x</sub> emission targets of between 0.01 and 0.02 pounds per mmbtu. In fact, five IGCC plants (some of which have been cancelled for unrelated reasons) have been proposed in the U.S. to date that would deploy SCR and meet an annual NO<sub>x</sub> emissions standard of 0.02 pounds per mmbtu or less.

#3 **We request that a Supplemental EIS discuss a set of NO<sub>x</sub> targets also based on the assumption that SCR will be used in the project. Both annual and 30-day targets should be developed.**

We recognize that it might be necessary for targets to be higher in the early years of operation than in the later years due to changes in the number of annual restarts. We also recognize that allowances need to be made to reflect the fact that this is a research project rather than a normal commercial operation. Nonetheless, the targets can and should be substantially below 0.05 pounds per mmbtu. We strongly suggest that DOE and the Alliance commit to the use of SCR technology and revise the project's NO<sub>x</sub> emissions targets accordingly.

*CO<sub>2</sub> Capture Rate*

#4 The Draft EIS states that by 2016 FutureGen will be capturing 90% or more of the CO<sub>2</sub> that would otherwise be emitted from the plant. We believe this is a worthy target. The Draft EIS is not as clear, however, regarding what the capture rate will be in the early years of operation. Would 1.1 million tons per year (the quantity quoted as the minimum capture amount) constitute a 90% capture rate as well, or will the project capture at a lower rate initially and ramp up over time? We encourage DOE to discuss this in a Supplemental EIS and to express annual CO<sub>2</sub> capture targets in terms of:

- Pounds per MWh;
- The percentage of CO<sub>2</sub> captured; and
- The total number of tons to be captured.

*Mercury Emissions*

#5 The Draft EIS indicates that mercury emissions will be no more than 0.011 tons per year in the first year and 0.0036 tons per year by 2016. We are unsure how these figures relate to FutureGen's stated mercury removal target of "greater than 90%." What is the actual removal rate implied by these quantities? We request that the Supplemental EIS discuss this question and examine whether or not the project's target for percentage removal should be higher than 90%. The discussion should include the option of 99% removal, which the literature suggests is feasible for IGCC using dual carbon beds<sup>2</sup>.

#3 <sup>1</sup> "Technical Issues with SCR in IGCC Applications". Dave Heaven and Brian DeSousa, Fluor, , IChemE European Gasification Conference, May 12, 2004.

#5 <sup>2</sup> "The Cost of Mercury Removal in an IGCC Plant". Parsons Infrastructure and Technology Group Inc., September 2002.

**G5. Environmental Defense – Natural Resources Defense Council  
(Anderson, A. Scott and Peridas, George)**

We appreciate your consideration of these comments and look forward to your response.

Respectfully submitted,

A. Scott Anderson  
Senior Policy Advisor, Climate and Air Program  
Environmental Defense  
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George Peridas, Ph.D.  
Science Fellow, Climate Center  
Natural Resources Defense Council  
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Washington, DC 20005

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**G5. Environmental Defense – Natural Resources Defense Council  
(Anderson, A. Scott and Peridas, George)**

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**Response to Comment #1:**

DOE and the Alliance are not aware of other publicly available and materially different detailed simulations that take into account reservoir heterogeneity based on real data. Modeling to predict the size of the projected CO<sub>2</sub> plumes at each site was conducted by the Alliance; this modeling considered vertical heterogeneity through appropriate stratigraphic assignment of physical and chemical properties in the geological model for each site. Results of the modeling are included in the EIS in Table S-1; Table S-2; Table S-3; Table S-4; Section S 7.2.1; Table 2-1; Table 2-2; Table 2-3; Table 2-4; Section 2.5.2.1; Table 4.1-1; Section 4.4.3.2; Section 4.4.3.3; Section 4.6.3.2; Table 5.1-1; Section 5.4.3.2; Section 5.4.3.3; Section 5.6.3.2; 3; Table 6.1-1; Section 6.4.3.2; Section 6.4.3.3; Table 7.1-1; 7.4-10; Section 7.4.3.2; and Section 7.4.3.3. DOE is aware of the importance of considering horizontal heterogeneity and anisotropy in the reservoir. Following site selection, the Alliance will perform reservoir simulations that include or account for lateral heterogeneity and/or anisotropy. These simulations will use information from additional site-specific geologic characterization (including the drilling of one or more exploratory wells, performing well tests, and conducting additional seismic surveys) completed during the detailed site characterization phase.

On September 20, 2007, DOE sought from the authors of the comment letter their knowledge about more detailed reservoir simulations that had been prepared as part of the site offeror's bids. The conclusion of both the comment's authors and the DOE was that, although some simulations had apparently been performed by the site offerors in Texas, the results of these simulations had not been made available to the public and had not been given to either the commentors, the Alliance, or DOE. DOE will review and consider the results of such simulations when this information becomes available.

CEQ regulations implementing the procedural provisions of NEPA state that an agency must prepare a supplement to a Draft or Final EIS if (1) the agency makes substantial changes in the Proposed Action that are relevant to environmental concerns, or (2) there are significant new circumstances or information relevant to environmental concerns and that have bearing on the Proposed Action or its impacts. DOE has not made any substantial changes to the Proposed Action and no new significant information has become available since the issuance of the Draft EIS. Thus, there is no reason to prepare a Supplemental Draft EIS at this time. However, following site selection and additional site-specific characterization, DOE has committed to preparing a Supplement Analysis to determine if the Final EIS should be supplemented (see 10 CFR 1021.314). If as a result of the Supplement Analysis, DOE determines that there are substantial changes or significant new circumstances or information that are relevant to the Proposed Action and impacts, then DOE would prepare a Supplemental EIS.

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**Response to Comment #2:**

Discussions of future NEPA activities are in the EIS in Sections S.1.3; 1.6.3; and 2.6.1.3. The four reasonable alternative sites were selected after a thorough screening process by the Alliance and DOE, including a review by a panel of experts in geologic sequestration. The sites are considered good candidates for sequestration based on their suitable geology (including the presence of seals or confining layers), which is well understood and documented for each site on a regional basis. However, a detailed characterization (that includes exploratory drilling) of all four alternative sequestration sites would be exorbitantly expensive and time consuming and would not necessarily provide information

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(Anderson, A. Scott and Peridas, George)**

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“essential to a reasoned choice among alternatives” for the purposes of this EIS (40 CFR 1502.22a). A “reasoned” choice does not have to be based on ideal availability of information. The current information is sufficient to support the decisions that should be made in the Record of Decision. And, given the possibility of the Alliance changing their selection if their first choice proved inadequate, it is not “essential” at this point in the process for either DOE or the Alliance to pursue detailed site characterization at all four sites. For example, if a significant leakage pathway could be uncovered now at one of the alternative sites while exploring all four sites, it would also be uncovered later during the detailed site characterization phase, if that site is selected – and the cost of the selection process would have been much less.

Therefore, after selection of the host site, the Alliance would conduct additional site-specific characterization work on the chosen site and would develop a site-specific plant design for the FutureGen Project. Both the additional site information and the site-specific design work would be reviewed by DOE and would support the completion of a Supplement Analysis. Based on the results of the Supplement Analysis, DOE would determine if there were substantial changes in the Proposed Action or significant new circumstances or information relevant to environmental concerns, as discussed in 40 CFR 1502.9(c). If the results of the characterization studies reveal that the chosen site is not acceptable, the Alliance (and, if necessary, DOE) would revisit the list of approved sites and select the next best site for a restart of the characterization phase. Both DOE and the Alliance are aware of this possibility.

A brief discussion of the additional detailed site characterization activities that would be conducted at the selected site is provided in Sections S.8.1.2 and 2.6.1.2. More detailed planning, including items such as those recommended by the Commentor would need to be completed before a Supplement Analysis and a Supplemental EIS would start, so these items would be more appropriate for inclusion in a planning document or in statements of work for the detailed characterization phase. Generally, planning documents (e.g., including any decision tree(s) produced) held by DOE can be provided to the public. Additionally, statements of work that include or incorporate plans could be released to the public (excluding sensitive information, such as patentable matter, financial information, etc.) as part of the solicitation process. The recommendations in these comments will be reviewed and considered when plans are completed for the detailed site characterization phase.

Since the publication of the FutureGen Project Draft EIS, there have been no substantial changes to the Proposed Action and there are no significant new circumstances or information available at this time that would require the production of a supplement to the Draft EIS.

DOE believes that if the electric power generation industry is to adopt carbon capture and geologic sequestration as a means to reduce greenhouse gas emissions, the industry must be able to identify sequestration reservoirs at reasonable costs and within reasonable time periods. The FutureGen Project’s approach of evaluating several candidate sites using readily available data and then selecting a site for more detailed investigation is a process that would most likely be employed by the energy sector in the future for similar projects. DOE agrees that if the detailed investigations uncover a problem with the primary and secondary storage reservoirs at a site, then the next best site could be selected and the same investigations would be conducted at that site. The process would continue until an acceptable site (or reservoir) is found. At least

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(Anderson, A. Scott and Peridas, George)**

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one exploratory well would be drilled and tested to confirm the storage potential of each selected host site.

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**Response to Comment #3:**

A research and development target of the FutureGen Project is to demonstrate the ability to achieve emissions of less than 0.05 lb/MMBtu nitrogen oxides (NO<sub>x</sub>), as stated in the report to Congress: FutureGen: Integrated Hydrogen Electric Power Production and Carbon Research Initiative (DOE, 2004). For the purpose of the EIS, the emissions envelope was developed based on achieving the stated goal, emitting NO<sub>x</sub> at a rate slightly below 0.05 lb/MMBtu, equivalent to approximately 15 parts per million volumetric, dry basis (ppmvd) @ 15 percent O<sub>2</sub> dilution. Achieving NO<sub>x</sub> emissions rates substantially below 0.05 lb/MMBtu would result in a marked decrease in NO<sub>x</sub> emissions and would result in lower potential impacts. Therefore, evaluating emissions at the upper end of the expected envelope results in a conservative (high) estimate of impact to ambient air quality for purposes of NEPA analysis. FutureGen would employ a utility size combustion turbine firing hydrogen as its primary fuel. Because nearly all fuel-bound nitrogen is removed in the gas cleaning and conditioning units upstream of the turbine, any NO<sub>x</sub> formation would be a result of thermal NO<sub>x</sub> formation resulting from oxidation of nitrogen in compressed air delivered to the combustion chamber of the turbine.

Combustion of hydrogen results in appreciably greater firing temperatures than would result from the combustion of syngas consisting of primarily H<sub>2</sub> and CO. There are no commercially available hydrogen-fired turbines of a size suitable for FutureGen. While there is a considerable knowledge base of the NO<sub>x</sub> formation and control for natural gas and syngas-fired turbines, there is not sufficient knowledge to fully understand the same for hydrogen-fired turbines. DOE currently has a significant turbine development program focused on achieving low NO<sub>x</sub> emissions from hydrogen-fired turbines. Two goals of the program directly linked to FutureGen are (1) by 2010 – reduce NO<sub>x</sub> emissions to 2 ppm in the turbine exhaust at 15 percent oxygen when firing syngas and (2) by 2012 – develop emissions control technology capable of reducing NO<sub>x</sub> emissions to near-zero for hydrogen-fired turbines. Selective Catalytic Reduction (SCR) is a well proven technology for reducing NO<sub>x</sub> emissions from combustion turbines fired using natural gas. There is limited performance data for SCR from combustion turbines fired using coal-derived syngas.

Many IGCC projects recently proposed have considered SCR, and it is expected that there will be a reasonable amount of data available for syngas-fired turbines when FutureGen goes online in 2012. The conceptual design of FutureGen, as presented in the Initial Conceptual Design Report (ICDR), does in fact consider the application of SCR to achieve NO<sub>x</sub> emission levels of approximately 0.02 lb/MMBtu, and at present the design indicates that such levels are likely achievable with satisfactory cost and performance. Design activities are currently underway to evaluate the application of SCR at FutureGen.

- Table S-16 mentions SCR as a possible mitigation measure for NO<sub>x</sub> emissions.
  - Footnote 3 of Table 2-9 was revised to provide the expected NO<sub>x</sub> emissions if SCR is used.
  - Sections S.7.5.3 and 2.5.6.4 provide an estimate of the amount of aqueous ammonia that the SCR would use.
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**G5. Environmental Defense – Natural Resources Defense Council  
(Anderson, A. Scott and Peridas, George)**

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Because FutureGen would be designed to gasify a wide variety of coal types (including some high sulfur coals), the plant would not be optimized to fuel type for either efficiency in energy conversion or pollutant minimization, so the optimal minimization of NO<sub>x</sub> emissions may not be achieved. Furthermore, because the plant would be designed to accommodate a variety of R&D applications that may be proposed in the future, the plant components would be integrated loosely such that the power plant as a whole may not perform optimally.

As stated in Response to Comments #s 1 and 2, after site selection and the results of the site-specific characterization, DOE will prepare a Supplement Analysis to determine if (1) there are any substantial changes in the Proposed Action that are relevant to environmental concerns, or (2) there are significant new circumstances or information relevant to environmental concerns that have bearing on the Proposed Action or its impacts. If as a result of the Supplement Analysis, DOE determines that there are substantial changes or significant new circumstances or information that are relevant to the Proposed Action and impacts, then DOE would prepare a Supplemental EIS.

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**Response to Comment #4:**

The FutureGen ICDR considered a number of technologies and conceptual technology integration configurations that could meet the FutureGen performance goals. The emissions envelope developed for the EIS does not represent any single technology configuration, and to build conservative estimates the envelope represents the poorest performance of each configuration. Therefore, the CO<sub>2</sub> emissions and capture rates presented in the EIS are expected to be worse than the performance of the as-built facility.

The 1.1 million tons per year of CO<sub>2</sub> captured is really a goal for the sequestration of CO<sub>2</sub>, as stated in the report to Congress (2004). The value is simply a minimum number by which to judge success of geologic sequestration. DOE acknowledges that the FutureGen power plant will likely have very significant non-operating time during the first year, and this will result in less CO<sub>2</sub> captured and sequestered compared to that which could be captured and sequestered if the plant ran full time. DOE also acknowledges that the initial capture rate could be as low as 85 percent, although the engineering design must be for at least 90 percent capture. It is expected that the annual tonnage captured would be higher than 1.1 million tons per year.

The emissions envelope was developed based on the worst case scenarios for coals. As described above, in the first year of operation, it is assumed that the CO<sub>2</sub> capture rate would be 85 percent, so that 15 percent of the CO<sub>2</sub> generated would be emitted into the atmosphere. This equals 114.21 lbs/MWhr to 243.14 lbs/MWhr of CO<sub>2</sub> emitted and 647.2 lbs/MWhr to 1,377.77 lbs/MWhr of CO<sub>2</sub> captured, depending on plant availability (the quantity captured (or emitted) each year (tons per year) would be a function of the amount of time the plant is running each year). For 2016, when the R&D of the project ends, it is assumed 90 percent of the CO<sub>2</sub> would be captured and 10 percent would be emitted into the atmosphere; therefore, from 76.14 lbs/MWhr to 162.09 lbs/MWhr of CO<sub>2</sub> would be emitted depending on plant availability. At a level of 90 percent capture, this results in 685.3 lbs/MWhr to 1,458.9 lb/MWhr captured.

The Alliance may sell excess CO<sub>2</sub> (that CO<sub>2</sub> captured above the 1.1 million tons per year would be sequestered in a saline aquifer) for enhanced oil recovery

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**G5. Environmental Defense – Natural Resources Defense Council  
(Anderson, A. Scott and Peridas, George)**

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purposes which would ultimately result in the permanent sequestration of a significant amount of the excess CO<sub>2</sub>.

For additional information, see Section 3.3.1.2 on Project Emissions.

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**Response to Comment #5:**

A goal of the FutureGen Project is to demonstrate the ability to achieve greater than 90 percent removal of mercury (Hg) from syngas. For the purpose of the EIS, the emissions envelope for Hg emissions was based on a minimum design Hg capture of 90 percent of the Hg in the feed coal. Specifically, steady-state emissions were calculated using an average coal Hg content and a heat input rate of 1,754 MMBtu/hr at 70°F. Based on technologies considered for the conceptual design, Hg emissions are expected to meet design specifications during steady-state operations. As with other emissions of interest, upset Hg emissions were based on best engineering judgment and are included in the annual totals for each year of operation.

Achieving Hg removal substantially greater than 90 percent would result in a marked decrease in Hg emissions and would result in lower potential impacts. Therefore, evaluating emissions at the upper end of the expected envelope results in a conservative (high) estimate of impacts due to Hg emissions for purposes of NEPA analysis. Current technologies to remove Hg from syngas are reasonably well understood in industrial applications. For example, Eastman Chemical Company has employed carbon beds for Hg removal from syngas. Information suggests that properly designed carbon beds can remove 90 – 95 percent of the Hg in coal-derived syngas. Commercial experience in removing Hg from natural gas using carbon beds has indicated that removal levels greater than 99.99 percent have been achieved. However, similar levels have not been demonstrated at coal-based IGCC plants.

The goal to achieve greater than 90 percent Hg removal is to demonstrate an attainable level that would facilitate the deployment of high-efficiency Hg control technologies in IGCC power plants. Higher levels of removal, such as 99 percent, present technical challenges such as an undesirable pressure drop caused by the use of multiple carbon beds in series. Furthermore, emerging technologies to capture Hg at higher temperatures provide significant opportunities to increase overall system efficiencies but are currently not as effective as those that operate at lower temperatures such as carbon beds. These technologies would be integral to achieving near-zero emissions power plants and are likely to be tested at FutureGen. FutureGen would be designed to cost-effectively remove Hg with high capture efficiency and could provide a design basis and test platform for Hg control technologies for the next-generation of FutureGen plants.

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**G6. ConocoPhillips (Elm, Kevin L.)**

**From:** Elm, Kevin [mailto:Kevin.Elm@conocophillips.com]  
**Sent:** Wednesday, July 18, 2007 3:24 PM  
**To:** FutureGen.EIS@netl.doe.gov  
**Subject:** FutureGen EIS

#1 | Mr. McKoy - did DOE open an electronic public docket for the FutureGen projects? I have read the EIS, but I am more interested in any public comments, transcripts of meetings, letters of support, etc. that might be in a docket.

| Could you please direct me to the appropriate docket? Thanks very much.

Kevin L. Elm, P.E. [kevin.elm@conocophillips.com](mailto:kevin.elm@conocophillips.com)  
Global Gas - LNG; ConocoPhillips  
600 N Dairy Ashford; Houston, TX 77079  
281-293-3217; fax: 281-293-4830

**G6. ConocoPhillips (Elm, Kevin L.)**

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**Response to Comment #1:**

DOE did not create an electronic public docket. Public comments have been reproduced in this Final EIS, and posted on the DOE website (<http://www.netl.doe.gov/technologies/coalpower/futuregen/EIS>), and otherwise made available to the public.

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G7. Scott, John T.

7-15-2007

Mr. Mark L McKoy  
Environmental Manager, U.S. Department of Energy  
National Energy Technology Laboratory  
P. O. Box 880,  
Morantown, WV26507-0880

Re: Future Gen

This is nothing but a boondoggle of the taxpayer's money. The process to change coal into liquid fuels is the same unimproved technology developed by German scientists under the Nazis 75 years ago. It uses too much water, too much coal, and supposedly deposits CO2 in the ground – so far an undeveloped technology. The only place CO2 is found underground is in volcanoes where it always eventually spews forth.

#1 A few coal company owners, like Drummond who is accused of assassinating union organizers in Columbia, are getting rich with tax payer subsidies, while ruining our environment. They are destroying our farmland with long wall mining so we can no longer grow corn to turn into ethanol or meat for the hungry.

Autos that use only electricity can operate on 1/3rd the cost of gasoline. The money would be better spent on windmills to generate electricity and leave the environment intact or nuclear power which also does little harm to the environment This is what France has done and even Japan to a large degree. We developed nuclear power, but haven't had the good sense to use it. How do you explain that?

Some scientists figured out a way to harness the tides for generation of electricity – like in the bay of Funday – over 50 years ago. What happened to that project?

Sincerely,



John T. Scott, PhD, MAI

**G7. Scott, John T.**

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**Response to Comment #1:**

FutureGen would neither use the Fischer-Tropsch process as implied by the Commentor nor produce liquid fuels. It will test and demonstrate the sequestration of CO<sub>2</sub> deep underground (more than 2,400 feet deep) in natural reservoirs. This concept of sequestration of CO<sub>2</sub> appears to offer a useful means of reducing emissions of CO<sub>2</sub> from power plants. The fact that this concept is "undeveloped" is justification for the expenditure of public funds to test and demonstrate it. Carbon dioxide is found in some concentration almost everywhere there is pore space and fracture space underground, even dissolved into underground liquids (both water and oil). Most of it has been there for millions of years, proving that it can stay underground and that it does not cause, except in very rare case, serious impacts to the environment at the land surface.

By funding FutureGen, DOE is not subsidizing the coal industry. Nor is DOE subsidizing the electric-power industry, which could continue building power plants that do not capture and sequester the CO<sub>2</sub> they generate. The FutureGen Project is an example of industry and the U.S. government joining together in a partnership to undertake a project that neither would likely undertake *nor* succeed alone. All resources that can be used to produce electricity also create environmental impacts; therefore, DOE advocates a balanced and judicious usage of all resources along with conservation of resources and improved efficiency on both the production and consumption sides.

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**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Pages S-69 to S-70, Table S-12) and (Pages 3-40 to 3-41, Table 3-3)**

**IL1-1**

Wetlands

Each wetland listed for Mattoon and Tuscola in These tables as well as any other references in the text should have the following reference. \*Field verified by wetland delineations conducted August 2006.

**(Page S-7, Table 2-1.) and (Page 2-5, Table 2-1.) and (Page 4.1-4, Table 4.1-1) and (Page 4.7-6)**

Description of reservoir in process water section.

**M21-1**

“If a larger reservoir were constructed (approximately 40 acres [16.2 hectares] in size) with a capacity of 200 million gallons (757 million liters), the Mattoon WWTP effluent would be sufficient by itself to supply the proposed plant’s process water.”

This calculation was based on a minimum process water supply requirement of 3.6MGD. With the increased process water requirement of 4.3MGD, this calculation was redone and resulted in a reservoir size of 310 million gallons and approximately 44 acres. If Charleston WWTP effluent is added, the reservoir may be reduced to 25.5 Acres and 114 million gallons.

**(page S-50, Section S.6.5.2)**

Air Emissions

**#1**

“Associated with such unplanned restarts are short-term increases to facility emissions due to the need to flare process gases for a short period, as well as to restart the facility.”

Flare releases are not modeled the same as traditional "smokestack" releases. Since "unplanned restarts" result in significant SO2 emissions from the flare, what would be the likely change in modeling results (NAAQS and PSD increment) if flare emissions were truly modeled as a flare following USEPA modeling guidance rather than as the hypothetical HRSG stack emissions?

**(Page S-50, Section S.6.5.3)**

Toxic and Hazardous Materials

**G9-1**

“The FutureGen Project would use a variety of process chemicals, primarily for the treatment of process water and maintenance of the cooling towers.”

Have the antiscalants, biocides and other chemicals that will be used in the process water, cooling tower water, etc. been evaluated for their potential impact to local biota from cooling water drift air emissions, or any other potential air emission sources?

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Page S-63, Table S-12) and (Page 3-5, Section 3.1.3) and (Page 3-34, Table 3-3)**

Tornado frequency

**O54-1**

“The Odessa region has the lowest historical tornado activity, with one tornado greater than F1 intensity occurring every 200 years.”

Section 7.3.2.2 of the EIS reports 7 tornadoes of intensity F1 or greater in Ector county in the last 56 years. That is certainly a higher rate than one every 200 years. Was the same methodology used for all four sites to obtain a predicted tornado frequency?

**(Page S-68, Table S-12) and (Page 3-39, Table 3-3)**

Surface water impacts

**M21-2**

Cassell and Kickapoo creek flows reduced by process water withdrawals (3,000 gallons per minute [gpm] [11,356 liters per minute (lpm)]) from Mattoon and possibly Charleston wastewater treatment plants.

This statement may imply that process water is being withdrawn from these streams. Reword as follows to avoid this misconception: "Cassell and Kickapoo creek flows reduced by diversion of effluent discharge water from Mattoon and possibly Charleston wastewater treatment plants to provide process water (3000 gallons per minute [gpm][11,356 liters per minute (lpm)]).

**(Page S-100, Section S.9.3.1) and ( Pages 5.6-2 and 5.6-3, Section 5.6.2.1) and (Section 5.7.2.2) and (Page 5.7-12, Section 5.7.3.2) and (Page 5.9-10, Section 5.9.3.2) and (Section 5.15.22)**

Groundwater impacts.

“At Tuscola, under low-flow periods, the Kaskaskia River water that would serve as the plant’s process water could be augmented with water drawn from the Mahomet Aquifer.”

**T32-1**

“Lyondell-Equistar Chemicals currently draws its raw water supply from an existing intake structure along the Kaskaskia River, and supplements its water supply during low-flow conditions by pumping water from wells near Bondville, Illinois, which are screened in the Mahomet aquifer. This supplemental water is conveyed to the intake structure at Lyondell-Equistar Chemicals via the Kaskaskia River.”

It should be noted that an error was recently discovered in the Kaskaskia River stream gauge at Tuscola. New measurements indicate that water flows in the Kaskaskia River have been significantly larger than previously reported – as much as 2.5 times larger. The Illinois State Water Survey is conducting further measurements to complete a new calibration curve for the stream gauge. As a result, it is anticipated that augmenting the river’s flow with water drawn from the Mahomet Aquifer will be required even less frequently than predicted. Ron Expand to show the predicted use and estimated flows.

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Page 2-53 and page 2-55 in Section 2.5.22)**

Length of project's active injection period.

#2

"In terms of DOE's research program, the total monitoring timeline is 6 years, including the 1-year of baseline data collection, 3 years of active injection, and 2 years of post-injection monitoring."

"Fluid sampling from various monitoring wells would occur twice each year during the 4-year active injection period (research and development phase of the project)."

Is the active injection period 3 years or 4 years?

**(Pages 3-1, 3-4, Section 3.1.2)**

Air Quality

"Impacts related to visibility, regional haze, and nitrogen and sulfur deposition in Class I areas were also considered. DOE also reviewed the applicability of air regulations and regional air quality plans and the potential for impacts from vapor plumes and odors."

#3

"Because of the size of each proposed site, odors of hydrogen sulfide (H<sub>2</sub>S) and ammonia are expected to be limited to within the facility boundary. There is the potential for solar loss, fogging, icing, or salt deposition because of the vapor plume from the cooling tower and gas turbine exhaust stack(s). However, because of the size of the proposed properties, impacts related to vapor plumes would be limited to within the facility boundary and would not interfere with quality of life in the area of any of the four sites."

The EIS provides virtually nothing in the way of quantitative estimates of odor impacts (for any averaging time). If odor modeling was performed based upon all sources (flare, fugitives, and stack releases) - rather than a hypothetical single source (HRSG stack) as used for the criteria pollutant modeling - and upon instantaneous impacts (3-5 seconds, the length of time to take a breath of air), would the modeling results support the claim that "odors of hydrogen sulfide (H<sub>2</sub>S) and ammonia are expected to be limited to within the facility boundary (p. 3-4)?"

**(Page 3-11, Section 3.8.1)**

Construction in floodplains.

#4

"The proposed utility corridors for all four proposed sites would involve construction within the 100 year floodplain."

Floodplains at Illinois sites would be impacted only if optional 345KV transmission corridors and optional water supply pipeline were chosen.

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Page 3-11, Section 3.8.1)**

Impacted Wetlands

**M21-3**

“Up to 29.2 acres (11.8 hectares) of wetlands could be impacted along the transmission line and process water corridors.”

Since the number of impacted wetlands at Mattoon varies significantly with the choice of transmission corridors and water supply options, we suggest appending, “,depending on the options chosen.” to this statement.

**(Page 3-11, Section 3.8.1)**

Wetlands

“The appropriate type and ratio of wetland mitigation would be determined through the Section 404 permitting process.”

**M21-4**

The following paragraph from Volume II, Page 4.8-1:

“IDNR has the authority to regulate wetlands under the Interagency Wetland Policy Act of 1989 (IWPA) for projects that receive funding or technical assistance from the state. The IWPA defines federal money that passes through a state agency as state funding. Isolated, farmed, and U.S. Army Corps of Engineers (USACE) jurisdictional wetlands are state jurisdictional wetlands under the IWPA. IDNR accepts the procedures outlined in the 1987 USACE Wetland Delineation Manual for delineating wetlands. The IWPA requires mitigation for all adverse impacts regardless of the size of the impacted area or the wetland quality.”

Should be also be inserted after the first full paragraph on Page 3-11 in Volume 1.

**(Page 3-13, Section 3.1.9)**

Biological Resources

**M21-5**

“The proposed Mattoon Power Plant and Sequestration Site has potential habitat for the federally-listed Eastern sand darter and the Indiana bat. Habitats for the state-listed Kirtland’s snake and the federally-listed Eastern sand darter have been found in the vicinity of the process water supply line corridor.

The list reference for the Eastern Sand Darter is incorrect. It is state-listed not federally-listed. Please correct as follows: "The proposed Mattoon Power Plant and Sequestration Site has potential habitat for the state-listed Eastern Sand Darter and the federally-listed Indiana Bat. Habitats for the state-listed Kirtland's Snake and Eastern Sand Darter have been found in the vicinity of the process water supply line corridor."

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Page 3-16, Section 3.11) and (Page 3-24, Section 3.1-15)**

Mattoon process water pipeline length

**M21-6**

“The Mattoon process water pipelines would traverse up to 14.3 miles (23 kilometers).”

The pipeline from the Mattoon WWTP would traverse only 7.5 miles. Adding the optional pipeline to deliver water from the Charleston WWTP would increase this to 14.3 miles. We suggest changing this statement to read, “The Mattoon process water pipelines would traverse 7.5 miles (12 kilometers) or 14.3 miles (23 kilometers) depending on the option chosen.”

**(Page 3-17, Section 3.1.12), Pages 3-98 and 3-99 (Table 3-13), (Page 4-12.6, section 4.12.3.2) and (Page 5.12-5, Section 5.12.3.2)**

Unobstructed views of the powerplant.

“Two residential properties directly adjacent to the proposed power plant site, two residences within 0.25 mile (0.4 kilometer), and approximately 20 residences within a 1-mile (1.6-kilometer) radius of the site would have unobstructed views of the facility.”

**IL1-2**

“Three residences directly adjacent to the site and seven residences within 0.5 mile (0.8 kilometer) of the site would have unobstructed views of the power plant.”

The Illinois sites are capable of generating ample available soil (due to reservoir construction) to construct earthen berms, and earthen berms are logical additions to various perimeter locations to screen otherwise unobstructed views of the power plant. Tree planting is also capable of significantly screening the views. For example, for the Mattoon site, depending on the location of the plant, a 16-foot high berm has the potential to screen most of the structures of the power plant from the adjacent residences, and trees will further enhance the screen.

Table 3-14, possible BMPs, does not mention berms as a method to mitigate potential impacts to aesthetics and noise. Berms and vegetation are effective mitigation tools that should be listed in the table.

**(Page 3-21, Section 3.1.14)**

Noise from train operations.

**T32-2**

Noise levels for the Tuscola Site during coal unloading would increase by less than 3 dBA at the three closest residential receptors and by up to 12 dBA at 12 other residential receptors within approximately 1 mile (1.6 kilometers) of the site boundary.

The numbers in this statement are reversed. The larger 12dBA increase would be at the closest receptors and the <3dBA increase at the others. Also here and in Sections 4.14 and 5.14, it should be noted that noise impacts at the closest receptors can be mitigated by 5-10 dBA if earthen berms are constructed along the site perimeter. Planting of trees also mitigate noise levels somewhat.

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Page 3-29, Section 3.1.17)**

Hazards from SO<sub>2</sub>/H<sub>2</sub>S releases

#5

“If sulfuric acid can be produced and sold, the need to produce elemental sulfur and, and therefore, the need for the Claus unit and the risks associated with it would be eliminated.”

The option of a sulfuric acid plant vs a Claus unit is not discussed elsewhere. The relative risks of producing acid and producing elemental sulfur were not compared in the Risk Assessment Study. Would there be a significantly reduced risk from accidental releases with a sulfuric acid plant since both systems burn H<sub>2</sub>S to SO<sub>2</sub> in their processes? Wouldn't the additional processing steps required to produce sulfuric acid increase risks?

**(Page 3-9, Section 3.1.7)**

Description of surface water crossings by utility corridors

M21-7

“Construction of the proposed water supply pipeline at the Mattoon Site would cross five surface waters,”

Only two streams or drainage ditches will be crossed by the Mattoon-only water supply line and 138 kV connection options for the Mattoon project. An additional three crossings would be encountered if the Charleston supplemental water supply pipeline was utilized. We suggest changing this statement to read, “Construction of the proposed water supply pipeline at the Mattoon Site would cross two to five surface waters depending on the options chosen.”

**(Page 3-9, Section 3.1.7)**

Description of surface water crossings by utility corridors.:

T32-3

“the proposed CO<sub>2</sub> pipeline at the Tuscola Site would cross seven surface waters,”

Section 5.7.3.1 of the draft EIS, page 5.17-11, says, “The proposed CO<sub>2</sub> pipeline would cross four surface water bodies: one unnamed tributary to the Tuscola No. 4 drainage ditch, and three unnamed tributaries to the Kaskaskia River.” Also, the study of wetland areas associated with the Tuscola site conducted by Hey and Associates found that the CO<sub>2</sub> pipeline would cross only one wetland as stated in Section 5.8.3.1 on page 5.8-8. These statements are contradictory. We believe one surface water is the correct number.

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Page 3-38, Table 3.3)**

Tuscola groundwater impacts

**Operations:**

Process water source; treated wastewater primary source, ultimate source is the Kaskaskia River. Shortterm impacts from supplemental use of groundwater. Aquifer: Mahomet (supplemental only), Aquifer capacity: 16 to 17 million gallons per day (61 to 64 million liters per day)

**T32-4**

The primary source is an industrial reservoir filled with water from the Kaskaskia River. While the river flow may include quantities of treated waste water and some treated waste water may be returned to the reservoir, the river is the main water source.

Also, the aquifer capacity, stated for the Tuscola site as 16 to 17 million gallons per day (MGD), is too low to be the yield for the entire Mahomet aquifer. The potential yield from the Mahomet and overlying aquifers was estimated to be 445 MGD (Visocky and Schicht, 1969). The 16 to 17 MGD figure may be the total pumping capacity of the wellfield used by the Tuscola chemical company that pumps groundwater from the Mahomet aquifer and discharges to the Kaskaskia River. A well capacity of 12,000 gallons/min converts to 16+ MGD.

**(Page 3-39, Table 3.3)**

Mattoon surface water impacts

**Operations:**

Streams affected: Cassell and Kickapoo creek flows reduced by process water withdrawals (3,000 gallons per minute [gpm] [11,356 liters per minute (lpm)]) from Mattoon and possibly Charleston wastewater treatment plants.

**M21-8**

For the Mattoon site, the proposed FutureGen plant will use wastewater that Mattoon discharges to Kickapoo Creek and that Charleston discharges to Cassell Creek. Cassell Creek flows into the Kickapoo Creek, which flows into the Embarras River downstream of Lake Charleston. The FutureGen plant requires 3,000 gpm of wastewater, which represents 62% of the average effluent discharged from both wastewater treatment plants. This water will be impounded in a reservoir to be built at the Mattoon site. This reservoir should provide flexibility to mitigate any problems associated with low flows in Cassell and Kickapoo Creeks. In addition, the IDNR has provided its opinion that diverting these effluents would positively impact these streams, allowing them to return to a more natural state.

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Page 3-59, Table 3-3) and (Risk Assessment Study, Pages 5-24, 6-17 and 6-18)**

Upward migration through wells.

Proposed Action – Human Health, Safety, and Accidents (continued)

#6

Mattoon	Tuscola	Jewett	Odessa
Number of individuals potentially impacted by slow upward leakage of H2S from other existing wells (risk rated as extremely unlikely): Adverse effect: 1	Number of individuals potentially impacted by slow upward leakage of H2S from other existing wells (risk rated as extremely unlikely): Adverse effect: 6	Number of individuals potentially impacted by slow upward leakage of H2S from other existing wells (risk rated as extremely unlikely): Adverse effect: 0.4-26	Number of individuals potentially impacted by slow upward leakage of H2S from other existing wells (risk rated as extremely unlikely): Adverse effect: 0.3

If, as stated in the Risk Assessment, the leakage risk is proportional to the # of wells, how are the adverse effects greater at Mattoon and Tuscola? Jewett and Odessa have up to 57 and 16 wells respectively penetrating the caprock, while the Illinois sites have none. Pages 6-17 and 6-18 show a probability of failure for the Illinois sites as zero which would imply a zero adverse effect.

**(Page 3-66, Section 3.2.3.3)**

Description of Mt. Simon Formation

“The thickness of the Mt. Simon formation is considerably uncertain because the formation was deposited on an eroded, high-relief surface, and thicknesses have been observed to vary by hundreds of feet over small distances.”

IL1-3

This is an incorrect statement about the thickness of the Mt. Simon. While this statement may be true for the western part of the basin, it is not correct for the central part where the two proposed FutureGen sites are located. The Mt. Simon is thin on top of eroded, high-relief surfaces also known as Precambrian highs, because it was never deposited on these features. However, regional mapping suggests that the Mattoon and Tuscola sites are not in areas with Precambrian highs since these high areas usually occur on the western and southern part of the Illinois Basin. It is highly probable that the Mt. Simon should be at least 1300 feet thick at both sites. In addition, recent seismic reflection data across the two injection sites does not show any Precambrian highs.

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Page 3-66, Section 3.2.3.3)**

Description of Eau Clair seal.

“While the Eau Claire seal is well documented as a good seal for natural gas storage at other locations, if it has more siltstone than shale at the Mattoon or Tuscola sites, the seal is not likely to be as effective as if it is predominantly shale.”

**IL1-4**

This is a misleading implication. It is highly unlikely that the Eau Claire is siltier at Mattoon and/or Tuscola given the depositional nature of sediments which get finer as they move distally from their source. Given what we know of the Eau Claire at Manlove Gas Storage field and the direction of the sediment source from that location, Tuscola and Mattoon, which are down dip from Manlove, should be more shaley, not potentially silty. The available well control in the Illinois Basin suggests that the Eau Claire has higher siltstone content to the north of the two proposed sites; therefore, it is extremely probable that the Eau Claire will have thicker and higher clay content at the prospective site than wells to the north. All of the geologic data suggests that the Eau Claire seal at Mattoon and Tuscola will be as good as or better than the same interval at the natural gas storage projects at other locations.

**(Page 3-100, Table 3-13)**

Pipeline safety

**#7**

“The pipeline would be buried to minimize accidental damage. Deeper burial of the pipeline (deeper than 3 feet [0.9 meters]) in areas with higher population densities could reduce the risk of damage caused by digging and trenching.”

It is not apparent in the risk assessment whether pipeline depths were taken into account. If an offeror proposes, or the Alliance decides upon, a deeper pipeline depth, such as 4 or 5 feet below surface, how would this impact the results of the risk analysis? Is the depth of the existing pipeline at Odessa the same as the depth used in the risk analysis?

**(Page 3-105, Table 3-14)**

Best Management Practices

**#8**

“Monitoring, cleanout, and inspection procedures for the CO<sub>2</sub> pipelines need to be developed and followed. These plans should include use of safety valves to isolate sections of the pipeline, bleed valves, and continuous pipeline monitoring with computer models to rapidly interpret changes in fluid densities, pressures, etc.”

A software-based, mass balance pipe monitoring system may not be as effective at identifying small leaks of CO<sub>2</sub> and H<sub>2</sub>S (due to the high pressure and high flows of the supercritical fluid) as installing actual capture and sensing devices. At 3800 pounds per minute flow through the pipe (minimum based on 1 million tons per year), if the equipment’s sensitivity is 2%, then a leak of nearly 80 pounds per minute may be indistinguishable. It seems that a state of the art system for detecting and monitoring gas leaks is called for. It is proposed that DOE include a pipe monitoring system to be a part of the state of the art system monitoring to ensure leaks are identified and located quickly.

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Page 4.2-3, Section 4.2.2.1)**

Existing Air Quality

**M21-9**

“The nearest non-attainment and maintenance areas are located in Indianapolis, Indiana (146 miles [235.0 kilometers] away) and Vigo County, Indiana (46 miles [74.0 kilometers] away).”

Information originally provided by IEPA for Section 4.2 indicates that the closest NAA to Mattoon, IL is St. Louis, MO-IL which is approximately 72.3 miles from the proposed site. The closest maintenance area (MA) and distance indicated in the EIS is correct for Vigo County, IN.

**(Pages 4.2-5, 4.2-10, 4.11-5, 4.11-10, 4.12-2, 4.19-5, 4.19-8, 4.19-5)**

Nearby residences

**M21-10**

“There are two residences located adjacent to, two residences located within 0.25 mile (0.5 kilometer) of, and 20 additional residences located within 1 mile.”

The local economic development authority, Coles Together, has options on several of the residential properties that are closest to the power plant site and is negotiating others. If FutureGen is located in Mattoon these properties will be purchased and vacated thus reducing the population with the greatest impacts and/or exposure risks.

**(Pages 4.2-14, 5.2-14, 6.2-14, 7.2-15)**

Odors

**#9**

“Operation of the FutureGen Project may cause noticeable odors. The chemical components that could cause noticeable odors are hydrogen sulfide (H<sub>2</sub>S) and ammonia (NH<sub>3</sub>).”

There should be discussion of the potential for odor issues, at minimum in the uncertainty section, and possibly in a separate section, using the Level of Distinct Odor Awareness of 0.01 ppm developed by the Acute Exposure Guideline Levels Committee as the basis for a quantitative assessment.

**(Page 4.4-8, Section 4.4.2.3) and (Page 5.4-9, Section 5.4.2.3)**

Relation of primary seal to active or transmissive faults

**IL1-5**

“The Illinois Department of Natural Resources (IDNR) has mapped no significant faults within approximately 50 miles (81 kilometers) of Mattoon (ISGS, 1997).”

“As previously discussed, significant faulting and fracturing is likely to be present along and near the steep western flank of the Tuscola Anticline located about 3 to 4 miles (4.8 to 6.4 kilometers) east of the Tuscola Sequestration Site.”

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)****IL1-5**

While the first statement is correct, the Tuscola Anticline would be within 50 miles of the Mattoon site as well. A fairer, more accurate statement for both locations might be:

“The Tuscola Anticline is located about 3 to 4 miles (4.8 to 6.4 kilometers) east of the Tuscola Sequestration Site {approximately 24 miles north-northeast of the Mattoon Sequestration site}. This setting of a steep flank of an anticline may contain some faults and fractures, but to date none have been found or mapped in the area of review by the Illinois Department of Natural Resources (IDNR).

(Page 4.4-11, Section 4.4.3.2) and (Page 5.4-12, Section 5.4.3.2)

**Modeling of Fault Leakage Scenarios**

“The results of the numerical modeling of the fault leakage scenario for the proposed Mattoon Site indicate that, for permeabilities of 1 md and higher, the amount of CO<sub>2</sub> leakage through the fault would be relatively small, as measured by the CO<sub>2</sub> flux rates, extent of the plume, and CO<sub>2</sub> gas pressure at the base of the overlying Maquoketa formation. If the fault were 321 feet (97.8 meters) long and had a permeability of 50 md, the steady-state flux rate would be about 173 tons (157 metric tons) of CO<sub>2</sub> per year, or 0.006 percent of the 2.8 million tons (2.5 MMT) per year injection rate. The maximum plume extent occurred for the higher permeability faults and was 1.4 miles (2.3 kilometers) at year 60. The plume extent for the 1 and 0.01 md cases was essentially zero. Significant permeation of the Eau Claire shales is unlikely to occur at fault permeabilities less than 1 md (FG Alliance, 2006a).”

**IL1-6**

“The results of the numerical modeling of the fault leakage scenario for the Tuscola Site indicate that, for permeabilities of 1 md and higher, the amount of CO<sub>2</sub> leakage through the fault is at least 2 percent of the total amount injected, as measured by the CO<sub>2</sub> flux rates, extent of the plume, and CO<sub>2</sub> gas pressure at the base of the overlying Maquoketa formation. If the fault was 321 feet (97.8 meters) long and had a permeability of 50 md, the steady-state flux rate for the first 60 years would be about 1.1 million tons (1 MMT) of CO<sub>2</sub> or 2 percent of the 55 million ton (50 MMT) per year injection rate. The maximum plume extent occurred for the higher permeability faults and was 2.5 miles (4 kilometers) at year 100 and was still expanding. The plume extent for the 1 and 0.01 md cases was essentially zero. Significant permeation of the Eau Claire shales is unlikely to occur at fault permeabilities less than 1 md (FG Alliance, 2006b).”

The major difference is that the Mattoon site says that results of numeric modeling suggest leakage would be “relatively small (p. 4.4-11).” For Tuscola, the conclusion is that “at least 2 percent of the total amount of injected” CO<sub>2</sub> could leak.

For the Mattoon and Tuscola sites the EIS leakage models have similar thicknesses of porous intervals, similar permeabilities, and place a 321 foot long fault with a 50 md permeability through the cap. **BUT:**

With both sites nearly the same and the same theoretical modeled fault, how can there be 1.1 million tons of leakage out of 55 million tons injected for the Tuscola site but only 173 tons of leakage out of 2.8 millions tons injected per year at the Mattoon site? - 2 percent versus 0.006 percent?

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**IL1-6**

**Mattoon** – The EIS has a steady-state flux rate of 173 tons of CO<sub>2</sub> per year for the 2.8 million tons injected per year.

**Tuscola** – The EIS has a steady-state flux rate for the first 60 years of 1.1 million tons or 2 percent of the 55 million ton per year injection rate.

Is the steady-state flux rate of 173 tons per year for the Mattoon site also for the first 60 years?? Is the Tuscola leakage 1.1 million tons over 60 years? If so then the leakage is 0.65 percent per year.

They also look at different lengths of times for the maximum plume extent:

**Mattoon** – for the higher permeability faults 1.4 miles at year 60

**Tuscola** – for the higher permeability faults 2.5 miles at year 100 and was still expanding.

Why are the maximum plume extents not compared for the same time periods?

**IL1-7**

The comparison of sites can only be reasonably accomplished if the information from the models is shown with steady-state flux rates for the same time periods and the same injection rates. Since both sites have similar thicknesses of porous intervals and permeabilities, it seems the differences in the modeled results can only result from errors in the assumptions

The assumptions used to model the fault leakage scenarios for the two sites are very different. Both sites are supposed to have a maximum of 2.8 million tons injected PER YEAR – not 55 million ton(s) per year at Tuscola and 2.8 millions tons injected per year at Mattoon. The 55 million ton figure is the total amount injected over the plant lifetime, not an annual rate, and is an obvious error.

Does the modeled leakage result from faults with the same permeabilities since 4 different permeabilities were used in the modeling? Is the extent of the plumes based on the same permeability faults?

The Tuscola modeling needs to be redone with the same assumptions as for Mattoon.

**(Page 4.6-3, Section 4.6.2.1) and (Page 5.6-3, Section 5.6.2.1)**

**IL1-8**

Aquifer designations

“The aquifers that lay beneath the injection site would not fit EPA’s definition (EPA, 2006) of an Underground Source of Drinking Water (USDW), which includes any aquifer or part of an aquifer that:

- Supplies any public water system, or contains a sufficient quantity of groundwater to supply a public water system and currently supplies drinking water for human consumption or contains fewer than 10,000 milligrams per liter of total dissolved solids (TDS); and
- Is not an exempted aquifer.

Following EPA’s definition above, the shallow aquifers near the sequestration site cannot be classified as USDW because they do not supply any public water system or have the quantity of water to do so.”

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

The statement that the aquifers beneath the injection sites would not fit EPA’s definition of an underground source of drinking water (USDW) may not be correct. An aquifer only needs to contain a sufficient quantity of groundwater to supply a PWS and currently supplies a PWS, or contains less than 10,000 mg/l TDS.

**IL1-8**

A PWS, as defined by EPA, must serve 15 connections or 25 people for at least 60 days per year. Figuring 25 people at 75 gal/person/day = 1875 gal/day divided by 1440 minutes/ day = 1.3 gallons/minute. Therefore, an aquifer only needs to supply 1.3 gal/minute for 60 days a year to have "sufficient quantity". This equates to 112,500 gallons per year.

Without a demonstration that the aquifer(s) in question can not supply this amount or contains greater than 10,000 mg/l TDS we would consider them to be USDWs. Generally, throughout Illinois the 10,000 mg/l TDS is the controlling factor for what is and what isn't a USDW for purposes of the UIC Program.

Since this project will be designed and built following the Class I construction standards and will clearly be injecting well below the lowest USDW this shouldn't be a major issue.

**(Page 4.7-4, Section 4.7.2)**

**M21-11**

Stream quality

“Cassell Creek is not listed as impaired (IEPA, 2006).”

This is wrong. While Cassell Creek is not included on the 303(d) list, it is listed as not supporting its Aquatic Life Use due to a recent fish kill.

**(Page 4.8-2, Section 4.8.2.1) and (Page 5.8-2, Section 5.8.2.1)**

**IL1-9**

Wetland mitigation

“IDNR has the authority to regulate jurisdictional wetlands through Section 404 and the IWPA.”

Remove the above sentence. It restates the last paragraph of the previous page and its reference to Section 404 could be confusing. Replace with: "Impacts to any of the wetlands identified in the wetland delineation will require mitigation under the IWPA.

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Page 4.8-8, Section 4.8.3.1) and (Page 5.8-7, Section 5.8.3.1)**

Wetland Mitigation

**IL1-10**

“The amount of mitigation required for the proposed power plant site and other project components (e.g., utility corridors) is not known at this time. Ratios have been established by the USACE regarding mitigation. For example, a 2:1 ratio would require 2.0 acres (0.8 hectares) of wetland creation for every acre (0.4 hectare) of wetland loss. Typical mitigation ratios for unavoidable impacts to wetlands would be 1:1 for open water and emergent wetlands, 1.5:1 for shrub wetlands, and up to 2:1 for forested wetlands. The appropriate type and ratio of mitigation would be determined through the Section 404 permitting process.”

This paragraph should include a sentence about IWPA requirements such as: “Mitigation required by IWPA could be as high as a 5.5:1 ratio, but is unlikely to be any higher than a 4.0:1 ratio.”

**(Page 4.11-2, Section 4.11.2.2)**

Zoning

**M21-12**

“Because the proposed Mattoon Power Plant Site lies 1 mile (1.6 kilometers) west of the Mattoon city limits, it lies within the extra-territorial area where the City of Mattoon Zoning Ordinance may be applied, but the area is currently not zoned.”

Please replace the above sentence with the following:

“On May 15, 2007 the City rezoned the portion of FutureGen proposed site that lies within the 1.5 mile extra-territorial area from the existing rural-suburban use to industrial use.”

**(Page 4.11-7, Paragraph 3)**

Right-of-ways

**M21-13**

“North of the Mattoon city limits, the corridor lies on private property for 2 miles (3.2 kilometers). Three property owners own the 2 miles (3.2 kilometers) of ROW, which would require new easements in an area that appears to be primarily farm land. Option contracts have been secured to purchase the three necessary easements. For the last 3.5 miles (5.6 kilometers) of the corridor, the pipeline would be placed on the public ROW of CR 900N. The road ROW is 60 feet (18 meters) wide, with the roadway surface averaging 20 feet (6 meters) wide.”

Please replace the above sentences with the following:

“North and west of the Mattoon city limits, the corridor lies on private property for 5.5 (8.9 kilometers) miles. Three property owners own the first 2 miles (3.2 kilometers) of ROW, which would require new easements in an area that appears to be primarily farm land. For the last 3.5 miles (5.6 kilometers) of the corridor, the pipeline would be placed on the ROW of CR 900N. The ROW is proscribed rather than dedicated, and therefore new easements will be required from the current land owner. Option contracts have been secured to purchase two of the three necessary easements from the property owners in the first two miles. Negotiations continue for the remaining easements.”

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

(Page 4.11-7, Section 4.11.3.2)

Transportation Corridors

**M21-14** “Assuming the existing road ROWs are of sufficient size to accommodate any new construction, there would be no change to the land use of the transportation corridors.”

Please replace the above sentence with the following:

“The only change to the existing road ROW would be at County Highway 13 and the intersection of State Route 121. The intersection would be rebuilt so that CH13 would approach SR 121 at right angles. A turn lane would be constructed on SR 121.”

(Page 4.19-4, Section 4.10.2.2)

Sales Tax Collections

“Coles County collected \$45 million in property taxes in 2003 and \$9.2 million in sales taxes in 2004 (FG Alliance, 2006a). The counties located within the ROI each collected an average of \$38.9 million in sales taxes (FG Alliance, 2006a).”

The figure for average sales tax collections is incorrect - \$38.9M is far too high. Our analysis of sales tax data for this region gives approximately \$3.6M. See the spreadsheet below:

Sales Tax Liability for Calendar year 2004- collected 02/04 through 01/05

(source- Illinois Department of Revenue report to Tuscola City government)

**M21-15**

	State Sales Tax	Municipal Tax	Home Rule Tax	Non-Home Rule Tax	County Tax	Countywide sales tax	County ROT for Subic Safety	Total Sales Tax	Sales tax less State portion
	(5% of State's 6.25 sales tax rate)	(1% of State's 6.25 sales tax rate)	(locally imposed tax rate)	(locally imposed tax rate)	(1% of State's 6.25 sales tax rate)	(.25% of State's 6.25 sales tax rate)	(locally imposed tax rate)		
Douglas	\$9,058,419	\$1,787,760	\$224,558	\$87,125	\$283,216	\$454,763		\$11,895,841	\$2,837,422
Coles	\$25,174,371	\$5,772,686	\$0	\$1,875,570	\$272,997	\$1,258,449		\$34,354,073	\$9,179,702
Cumberland	\$1,595,858	\$350,739	\$0	\$0	\$23,998	\$79,745		\$2,050,340	\$454,482
Moultrie	\$4,523,272	\$782,826	\$0	\$0	\$286,699	\$226,040		\$5,818,837	\$1,295,565
Champaign	\$90,256,640	\$20,837,964	\$12,330,091	\$0	\$946,226	\$4,511,204	\$3,879,529	\$132,761,654	\$42,505,014
Edgar	\$5,778,968	\$1,326,920	\$0	\$352,006	\$135,823	\$288,927		\$7,882,644	\$2,103,676
Macon	\$55,307,269	\$13,017,177	\$9,635,081	\$937,188	\$303,655	\$2,764,646	\$2,231,963	\$84,196,979	\$28,889,710
Piatt	\$3,987,042	\$847,603	\$0	\$0	\$76,096	\$199,185		\$5,109,926	\$1,122,884
Clark	\$4,677,610	\$959,397	\$0	\$0	\$153,890	\$233,705	\$693,614	\$6,718,216	\$2,040,606
Effingham	\$28,798,083	\$6,352,176	\$0	\$0	\$297,389	\$1,439,581		\$36,887,229	\$8,089,146
Shelby	\$4,658,393	\$953,803	\$0	\$0	\$156,812	\$232,897		\$6,001,905	\$1,343,512

Tuscola ROI	\$195,681,839	\$44,723,675	\$22,189,730	\$3,251,889	\$2,328,710	\$9,782,959	\$6,111,492	\$284,070,294	<b>\$88,388,455</b>
Mattoon ROI	\$78,486,006	\$16,959,387	\$224,558	\$1,962,695	\$1,475,001	\$3,925,180	\$693,614	\$103,726,441	<b>\$25,240,435</b>

Tuscola average per county in ROI \$11,048,556.88  
Mattoon average per county in ROI **\$3,605,776.43**

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(page 5.2-3, Section 5.2.2.1)**

Existing Air Quality

**T32-5**

“The nearest non-attainment areas are located in Indianapolis, Indiana (152 miles [244.6 kilometers] away) and Vigo County, Indiana (71 miles [114.3 kilometers] away).”

This location is correct; however the distance appears to be in error. IEPA had originally provided information indicating that the distance to the nearest nonattainment area (O<sub>3</sub>) is 86.3 miles not 152 miles.

**(Page 5.2-4, Section 5.2.2.2)**

Cities within ROI

**T32-6**

“Tuscola is not within 50 miles (80.5 kilometers) of any of the 10 largest cities in Illinois. The closest of the 10 largest cities to Tuscola is Springfield to the west.”

While technically correct, the twin cities of Champaign and Urbana, when considered as a single metropolitan area, would be the sixth largest in the state, and is only 24 miles north of Tuscola.

**(Page 5.4-3, Section 5.4.2.1)**

Thickness of optional reservoir

**T32-7**

“At the Tuscola Site, the St. Peter is estimated to be over 200 feet (61 meters) thick with good lateral continuity and permeability.”

The correct figure is 100 feet. The St. Peter at Mattoon is known to be 200ft thick, but the value for Tuscola is in doubt, but is estimated at 100ft. Other references to this thickness in the EIS correctly use the 100ft. figure.

**(Page 5.4-10 , Section 5.4.3.1)**

Powerplant site surface geology

**T31-8**

“The surficial geology of the power plant site includes glacial deposits that are likely 40 to 250 feet (12.2 to 76.2 meters) thick.”

While the thickness of the surficial deposits may have this large range in thickness within a 5 to 10 mile radius of the Tuscola site, at the site itself, the thickness is about 180 to perhaps about 220 or a little more. This is based on several pieces of information. There is a tributary bedrock valley mapped on the statewide bedrock topography map. In addition, the site is on the east flank of the Arcola moraine, a late Wisconsin feature of the Lake Michigan lobe. The glacial sediment in the moraine is a few 10's of feet thicker than surrounding plain.

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The ISGS drilled two test holes on the south side of the site with the GeoProbe last year and were stopped by resistance to drilling at about 42 feet. A paleosol was encountered at this depth, developed in older glacial deposits. (There are two paleosols developed in older glacial deposits at the nearby Tuscola quarry, one at about 20 feet, and one at about 35 feet ).

There are few water-well records and engineering boring records that penetrate the glacial deposits and encounter rock. None are at the site, but ones near the site indicate a thickness of about 200 feet. At the town of Tuscola, records indicate a thickness of about 120 to 150 feet, and at the nearby Tuscola quarry it is just 40 feet thick.

We suggest replacing this statement with the following”

“The surficial geology of the power plant site includes glacial deposits that are about 200 feet thick. The site is underlain by a tributary to the Pesotum bedrock valley segment of the Mahomet bedrock valley system which has an elevation as low as 450 feet at the site. Within a 5-mile radius of the Tuscola site, the thickness of unconsolidated deposits ranges from less than 50 feet to more than 200 feet. At the Tuscola Quarry, 4 miles east of the Tuscola site, the thickness of unconsolidated deposits is about 40 feet.”

**T32-8**

Sources of information:

Herzog, B.L., B.J. Stiff, C.A. Chenoweth, K.L. Warner, J.B. Sievering, C. Avery, 1994  
Illinois State Geological Survey, Champaign, Illinois  
ISGS GIS Database  
GISDB\_BEDGEO.IL\_Bedrock\_Topography\_1994\_Ln

Illinois State Geological Survey, 1994  
Illinois State Geological Survey, Champaign, Illinois  
ISGS GIS Database  
GISDB\_QTGEO.IL\_Drift\_Thickness

Hansel, K., Berg, R. C., Phillips, A.C., and Gutowski, V.G, 1991, Glacial sediments, landforms, paleosols, and a 20,000-year-old forest bed in east-central Illinois: Geological Society of American North-Central Section 33rd Annual Meeting, April 1999, Illinois State Geological Survey, Guidebook 26, 31p.

**(Page 5.4-12, Section 5.4.3.2)**

Nearby wells

**T32-9**

“The Tuscola Site subsurface ROI is surrounded by operating and abandoned petroleum exploration and production wells, with several hundred within 5 miles (8.0 kilometers) of the proposed injection site, and likely approaching 100 within 2 miles (3.2 kilometers).”

According to ILOIL (<http://runoff.isgs.uiuc.edu/website/iloil/viewer.htm>), there are 197 operating and abandoned oil and gas wells within a two mile radius of the Tuscola injection site. Of the 197 wells, 9 are active gas storage wells operated by NGPL in the Cooks Mills Consolidated field in the Cypress

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**T32-9** sandstone, 5 are active oil wells in the Rosiclare, McClosky, and St Louis at Cooks Mills, 90 are plugged Rosiclare oil wells at Cooks Mills, 37 are plugged Rosiclare oil wells in the Chesterville East field about 1.5 to 2.0 miles N-NW of the injection site, and 56 are plugged dry holes. All the dry holes had Mississippian targets, except 3 drilled to Devonian, and 3 to the Trenton.

**(Page 5.4-6, Section 5.4.22)**

Seismic activity

**T32-10** “The most recent seismic event, on December 6, 2006, was a 2.7 magnitude earthquake centered 101 miles (162.5 kilometers) from the midpoint between the power plant and sequestration site.”

The 2006 date is incorrect. Chapter 4 references this same event as occurring in 2005.

**(Page 5.6-1, Section 5.6.1.2)**

Impacted aquifers

**T32-11** “Because neither the specific aquifer to be used for the water supply nor well locations have yet been selected, the analysis addresses a number of aquifers that could be used.”

The process water supply source description and the analysis that follows this statement clearly indicate that the Mahomet aquifer is the only aquifer that might be impacted (indirectly) by the water supply from the Kaskaskia River.

**(Page 5.6-6, Section 5.6.3.2)**

CO2 Plume Radius

**T32-12** “Reservoir modeling indicates that the largest plume radius would be approximately 1.2 miles (1.9 kilometers) over 50 years of injection at a rate of 1.1 million tons (1 MMT) per year.”

The radius here is incorrect. In all other references to the Tuscola plume radius the number given is 1.1 miles (1.8 kilometers).

**(Page 5.10-5, Section 5.10.3.1)**

Historic preservation at powerplant site.

**T32-13** “IHPA concurrence with the results and recommendations contained in the archaeological survey report is pending.”

On January 30, 2007, IHPA concurrence was received stating that no significant historic, architectural, and archaeological resources are located in the proposed project area. This letter is attached in Appendix A of the EIS.

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Page 6.4-10, Section 6.4.3.2) and (Page 7.4-10, Section 7.4.3.2)**

Monitoring

**TX7-1**

“Although injection-induced seismicity is unlikely, monitoring methods discussed in Section 6.4.4 would further reduce the possibility of accidentally inducing seismicity”

The referenced section 6.4.4 (7.4.4) does not exist in the EIS. In fact, no section of the document thoroughly addresses the means and methods that will be used to monitor the injected CO2 plume or to provide early detection of leaks from the CO2 pipelines and storage formations.

**(Page 6.19-4, Table 6.19-3) and (Page 7.19-3, Table 7.19-3)**

Wage rates

**TX7-2**

“Table 6.19-3 (7.19-3) provides 2003 average hourly wages for Freestone, Leon, and Limestone counties (Ector County) for trades that would be required for construction of the proposed project. The minimum and maximum wages for these trades were not available.

Wage rates for these areas of Texas are available at the Texas Workforce Commission website: <http://www.tracer2.com/cgi/dataanalysis/AreaSelection.asp?tableName=Oeswage>. Also, the wages cited by this source seem significantly higher than those given in the corresponding tables.

**(Page C-4, Table C.1-2)**

**G9-7**

Air Quality Regulations

1. With respect to permitting, the facility will be subject to PSD not NSR requirements, the citation to 35 Ill. Adm. code 203 does not seem appropriate here.
2. Since the source appears to be major, there probably should be a citation to Section 39.5 of the Illinois Environmental Protection Act 415 ILCS 5/39.5 for CAAPP
3. Section 111 of the CAA is mentioned when addressing toxics but only in the context of mercury. 40 CFR part 63 contains other types of recordkeeping and reporting for nonmajor sources of HAPs, that may be applicable. Also many sources in Illinois are required to report toxic emissions pursuant to 35 IAC 232.
4. While many provisions of 40 CFR 60 are listed, Subparts VV and KKKK are not. These may be applicable unless the source meets certain requirements.

**G9-10**

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Risk Assessment, Page 4-2, Table 4.1) and (Risk Assessment, Page 4-12, Table 4.5)**

Pipeline diameters

**#10**

1. The diameters of the pipelines for Mattoon and Tuscola given in these two tables differ (19.3” and 16” as opposed to 14.4” and 14.4”).
2. The calculations of these diameters for Tuscola and Odessa are suspect. It is expected that the diameter of the Tuscola pipeline would be slightly larger than the diameter of the Mattoon pipeline due to their difference in length (0.5mi. vs 11 mi.) if they are delivering the same quantities of CO2 at the same operating conditions. In like manner, a 12” diameter pipeline for Odessa seems unreasonably small compared to the Jewett pipeline since Odessa’s is longer. Was the same methodology used to calculate pipeline diameters for all four sites? The diameter will impact the amount of waste water to be handled during hydrotesting, and the results of the risk analysis.
3. The small 12” diameter pipeline was apparently used in the risk assessment for the entire length of the pipeline at Odessa. The risk assessment should have been performed with the diameter, valving and structures of the existing pipeline that is proposed, or the diameter adjusted to reflect a new pipeline adequate for the entire distance. The risk assessment was performed on a virtual pipeline next to the existing pipeline, so it is not representative of the proposal to use the existing pipeline.

**(Risk Assessment, Page 4-21, Section 4.5.1.2)**

Risk Results

**#11**

“No individuals are expected are expected to be affected by CO2, since the impact zone is within 33 feet (10 meters) of the injection well.”

The words “are expected” are repeated in this sentence.

**(Risk Assessment, Page 4-27, Section 4.5.3.2)**

Risk Results

**#12**

“Based on the population density, less than 1 individual is estimated to be potentially exposed to levels of H2S that can cause adverse effects (0.051 ppmv) from a wellhead rupture, but none for CO2. Thus, these results indicate that although there is greater likelihood of health effects for nearby populations from H2S than CO2 releases, these may only be mild transient effects.”

The H2S level given here (0.051ppmv) should be 0.51 ppmv.

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Risk Assessment, Page 4-32, Section 4.5.5)**

Risk Results for Co-Sequestration Experiment

**#13**

“During the time that it would take for the cosequestered gas to be produced and to be transported to the injection wells, a pipeline rupture or leak could occur at the higher H<sub>2</sub>S concentration of 20,000 ppmv. Thus, the predicted concentrations of H<sub>2</sub>S from a release could be 200 times higher than the standard scenarios where H<sub>2</sub>S was a maximum of 100 ppmv. During co-sequestration the H<sub>2</sub>S concentrations would be greater than the NIOSH’s IDLH criterion of 100 ppmv for 30-minute exposures.”

If the Alliance plans to co-sequester 2% H<sub>2</sub>S with the CO<sub>2</sub>, then the risk assessment should be updated to evaluate the potential consequences of releases at that concentration, in the same manner as those evaluations conducted for the 100 ppmv concentration and discussed in Sections 4.17, 5.17, 6.17 and 7.17 of the Environmental Impact Statement.

**(Risk Assessment, Tables 5-13, 5-16, 5-19 and 5-22)**

**G9-11**

Chronic effects on biota

Assessment of risks of H<sub>2</sub>S to ecological receptors is almost non-existent, even though such risks could be significant since animals, especially burrowing animals, will likely be the most highly exposed receptors following post-injection releases. Although there are no existing ecological criteria/screening values, at minimum the assessment should provide some discussion of H<sub>2</sub>S ecological risks in the uncertainty section (Section 6.3). Beyond this, it may be possible to

**G9-12**

quantitatively address ecological risks using the procedures discussed in a recent paper (P. Gallegos *et al.* 2007. Wildlife ecological screening levels for inhalation of volatile organic chemicals. *Environ. Toxicol. Chem.* 26: 1299-1303.) if suitable toxicological data are available.

**(Risk Assessment, Page 5-24, Section 5.3.4.3)**

Undocumented wells

**G9-13**

“The potential for release due to poorly abandoned wells is treated in the same manner as poorly constructed and abandoned deep wells. The number of undocumented wells per site was estimated based expert judgment using information on the degree of historical mineral exploration activity in the area.”

The number of undocumented wells, estimated based on expert judgment for the four facilities, seems low for the Texas facilities (13 for Jewett, 2 for Odessa) in comparison to the Illinois facilities (2 for Mattoon, 3 for Tuscola), considering the long history of oil and gas exploration in Texas and the existence of on-site and close vicinity wells at the Texas sites versus none known in the vicinity of the two Illinois sites. The Texas Land and Mineral owners Association ([www.tlma.org/water.htm](http://www.tlma.org/water.htm)) estimates 32% of the oil and gas wells ever drilled in Texas are unproductive and waiting to be plugged by someone. Also, change “poorly abandoned wells” to “undocumented wells” in the first line of Section 5.3.4.3, to be consistent with the title of this section.

**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

**(Risk Assessment, Page 5-26, Section 5.4.1)**

Post injection exposure analysis

**G9-14**

“The injection site is planned to be located in the center of the 444-acre (180-hectare) plant site property.”

Since the injection site at the proposed Mattoon facility will be within the plant boundary, it may be appropriate to evaluate the indoor inhalation pathway for workers at the facility, and to evaluate corresponding mitigation and/or early warning measures. CO<sub>2</sub> and H<sub>2</sub>S monitoring and warning devices placed within buildings should be a minimum design component.

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**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

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**Response to Comment #1:** Flare releases could not be modeled in accordance with EPA modeling guidance with any greater accuracy because of the lack of information at the current preliminary/conceptual design of the FutureGen Project. To get a sense of the concentration of pollutants from the FutureGen Project, the DOE and the Alliance assumed a scenario where all the emissions would be released from a single source (i.e., the heat recovery steam generator) and that unplanned restarts would contribute the most emissions as would be the case of flaring events. The emissions and predicted concentrations presented in the EIS are based upon a conservative "emissions envelope," which was estimated using the worst-case operating scenarios (i.e., multiple unplanned restart events) and multiple designs cases. Once a site is selected and the FutureGen Project design is complete pollutants specific to flare releases and associated concentrations would be addressed further as part of the air permit application process. Therefore, the text will remain as presented in the EIS.

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**Response to Comment #2:** The text has been revised in Section 2.5.2.2 as follows, "In terms of DOE's research program, the total timeline includes 1 year of baseline data collection, 4 years of active injection and 2 years of post-injection monitoring."

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**Response to Comment #3:** Odor releases from sources associated with the FutureGen Project could not be quantified because of the lack of data at the current preliminary/conceptual stage of the FutureGen Project design. Assumptions about the types of odors that would be released from the FutureGen Project and the conclusion that the odors would be limited to the facility boundaries are based on a similar situation at an existing power plant (Wabash River Coal Gasification Repowering Project, Terre Haute, Indiana: a 262 MWe commercial scale integrated gasification combined cycle [IGCC] power plant – see [www.fossil.energy.gov/programs/powersystems/publications/Clean\\_Coal\\_Topical\\_Reports/topical20.pdf](http://www.fossil.energy.gov/programs/powersystems/publications/Clean_Coal_Topical_Reports/topical20.pdf) for an overview) and information in an EIS for a proposed (and permitted) power plant (Orlando Gasification Project, Orlando, Florida: a 285 MWe commercial scale IGCC power plant – see [www.netl.doe.gov/technologies/coalpower/cctc/EIS/orlando\\_pdf/FrontMatter%20FINAL%20revised%2011207.pdf](http://www.netl.doe.gov/technologies/coalpower/cctc/EIS/orlando_pdf/FrontMatter%20FINAL%20revised%2011207.pdf) for an overview). Referencing an existing IGCC power plant and the EIS for another proposed IGCC power plant is the best available information at the site selection stage. The design work and equipment selection is not yet available to support more detailed analyses.

Once a site is selected and the FutureGen Project design is complete, odor releases and associated concentrations could be addressed further as part of the air permit application process.

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**Response to Comment #4:** In Table S-12 and Table 3-13, Summary Comparisons of Impacts, Wetlands and Floodplains, it is stated that for utility and transportation corridors in the floodplains, wetlands would be impacted in certain segments and that there would be temporary impacts from the placement of construction equipment and trenching for underground utilities. Similar statements of potential impacts for utility and transportation corridors were presented in Section 4.8.3.1 and Section 5.8.3.1. Section 3.1.8 does state that all proposed utility corridors for all four proposed sites would involve construction within the 100-year floodplain, yet it further states that these impacts would be temporary. It was decided to show upper bounds for all impacts for all four sites because at this stage of the project it has not been decided what corridors or options would be selected.

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**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

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**Response to Comment #5:** The hazard analysis assumed that a Claus Unit would be installed. No analyses were done for the situation where sulfuric acid would be produced instead of elemental sulfur. The Alliance has never considered using a sulfuric acid production plant. However, if this option were pursued, DOE would evaluate this design change in the Supplement Analysis.

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**Response to Comment #6:** The effect of slow leakage from an injection well or other wells was estimated in the same manner using the same flux rate, and regardless of the probability of an accident occurring. The other wells were considered to be located near the injection wells, since that is where a release of CO<sub>2</sub> could occur. The number of people potentially affected by hypothetical leakage from a well is influenced by the meteorological conditions used in the modeling for each site, the volume of gas released from a well, and the population in the vicinity of a well. The potential area of impact from a post-injection well release was estimated using EPA's SCREEN3 model. These predicted areas are small, as shown in the figures as circles in Section 5 of the Risk Assessment (Figure 5-3 Jewett, Figure 5-4 Odessa, Figure 5-5 Mattoon, Figure 5-6 Tuscola). The potentially affected population was estimated based on the population density in the entire circle, because the release could be a continuous source and wind directions and stability conditions could vary. With respect to potential impacts of a release, the proximity of population is the most important factor. There are differences in the number of people near the injection wells at each site. The population densities are lowest in Odessa and the immediate vicinity of the injection site at Mattoon. The area around the Tuscola injection site is sparsely populated to the south, but has a higher density to the north. Jewett has a low population density at one of the injection sites, but has Texas Department of Criminal Justice (TDCJ) facilities near the other injection site.

The probability shown in Section 6.2, Table 6-11, in the Risk Assessment is "zero" only for release from slow deep oil and gas wells at Mattoon, Tuscola, and Odessa. There could be leakage from the injection well, the observation wells, or undocumented deep wells at all the sites.

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**Response to Comment #7:** The standard depth of burial for pipelines is 3 feet (1 meter). Burying the pipeline to a deeper depth has been used in urban areas to reduce the potential for pipeline disturbance that might cause a pipeline punctures. Burying the pipeline deeper would decrease the probability of a rupture, but a pipeline rupture or large hole is still expected to release gas to the atmosphere.

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**Response to Comment #8:** Suggested monitoring and mitigation measures were provided in Table S-16 of the EIS and included in-line inspection vehicles and intelligence pigs in the pipeline to detect early corrosion, frequent clean-outs, and bleed valves to control the location and direction of releases should a puncture occur, in addition to automated systems such as a Supervisory Control and Data Acquisition (SCADA) system. Because the CO<sub>2</sub> would be highly pressurized within the pipeline, even a small leak (<1 percent) would result in a pressure and temperature change that would be detected by the required computational pipeline monitoring system. Even smaller leaks (<0.1 percent) would be detectable through noise or snow visible at the surface during periodic required patrols. As a project that would advance all aspects of CO<sub>2</sub> capture, transport and sequestration, additional pipeline monitoring measures may be evaluated by the FutureGen Alliance.

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**G8. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

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**Response to Comment #9:** Assumptions about the types of odors that would be released from the FutureGen Project and the conclusion that the odors would be limited to the facility boundaries are based on a similar situation at an existing power plant (Wabash River Coal Gasification Repowering Project) and information in an EIS for a proposed (and permitted) power plant (Orlando Gasification Project). This approach of both referencing an existing IGCC power plant and referencing the EIS for another proposed IGCC power plant is sufficient here where we are at the site selection stage and the design work and equipment selection is not yet available to support more detailed analyses. Once a site is selected and the FutureGen Project design is complete, the issue of odor releases and associated concentrations could be addressed further as part of the air permit application process.

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**Response to Comment #10:**

1. The pipeline diameters in Table 4-1 of the Risk Assessment were changed to 14.4 inches for Mattoon and Tuscola, but the diameters are accurate elsewhere (in Tables 4-5 through 4-8). This typographic error did not influence the risk calculations.
2. The pipeline diameters were provided by the FutureGen Alliance and were based on required well head pressures, pipeline length, friction pressure drop, and bounding soil temperature conditions. The volume in a pipeline segment between the check valves was computed for each site to determine maximum gas release scenarios for the Risk Assessment.
3. The outside diameter of the existing CO<sub>2</sub> pipeline at Odessa is 16 inches, however, the inside diameter of 12.8 inches was used to calculate quantities of gas in the pipeline for the Risk Assessment.

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**Response to Comment #11:** This sentence has been corrected in the revised Risk Assessment.

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**Response to Comment #12:** This sentence has been corrected in the revised Risk Assessment to show the adverse effects level for H<sub>2</sub>S as 0.51 ppmv. Please note that the correct value of 0.51 ppmv is shown elsewhere on the same page as the typo in the Risk Assessment; the correct value was indicated in the EIS.

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**Response to Comment #13:** The pipeline walk method was used to estimate the potential effects of pipeline releases due to ruptures and punctures at each of the four sites for a co-sequestration test. The results have been summarized in Section 4.5.5 of the revised Risk Assessment. Appendix D has been prepared with the tabulated results and plots showing the number of people that could potentially be affected. In addition, additional mitigation measures that could be implemented during the co-sequestration test are presented.

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**G9. Illinois EPA (Reed, Michael T.)**

- Toxic and Hazardous Materials
- #1 | “The FutureGen Project would use a variety of process chemicals, primarily for the treatment of process water and maintenance of the cooling towers.”
- Have the antiscalants, biocides and other chemicals that will be used in the process water, cooling tower water, etc. been evaluated for their potential impact to local biota from cooling water drift air emissions, or any other potential air emission sources?
- Air Quality Regulations
- #2 | 1. With respect to permitting, the facility will be subject to PSD not NSR requirements, the citation to 35 Ill. Adm. code 203 does not seem appropriate here.
- #3 | 2. Since the source appears to be major, there probably should be a citation to Section 39.5 of the Illinois Environmental Protection Act 415 ILCS 5/39.5 for CAAPP
- #4 | 3. Section 111 of the CAA is mentioned when addressing toxics but only in the context of mercury. 40 CFR part 63 contains other types of recordkeeping and reporting for nonmajor sources of HAPs, that may be applicable. Also many sources in Illinois are required to report toxic emissions pursuant to 35 IAC 232.
- #5 | 4. While many provisions of 40 CFR 60 are listed, Subparts VV and KKKK are not. These may be applicable unless the source meets certain requirements.
- Air Quality Regulations
- #6 | “The proposed FutureGen Project is a federal action under the jurisdiction of the General Conformity Rule. However, all four proposed plant sites and sequestration sites are located regions that are in attainment for all criteria pollutants. Therefore, a project located at these sites would not be subject to the General Conformity Rule.”
- The federal general conformity requirements are mentioned, but not the state requirements at 35 IAC 255. In addition, there are several other Illinois air quality regulations that were not mentioned:
- #7 | 1. The relevant SO2 requirements at 35 IAC 214.301.
- #8 | 2. The relevant PM requirements at 35 IAC 212, e.g. opacity and emissions (212.123, 212.124, 212.301, 212.314, 212.323).
- #9 | 3. The relevant CO requirements at 35 IAC 216.121 (if there is a boiler).
- #10 | 4. The relevant NOx requirements at 35 IAC 217.121. In addition, there are upcoming statewide control regulations that may apply.

**G9. Illinois EPA (Reed, Michael T.)**

Chronic effects on biota

**#11** Assessment of risks of H<sub>2</sub>S to ecological receptors is almost non-existent, even though such risks could be significant since animals, especially burrowing animals, will likely be the most highly exposed receptors following post-injection releases.

**#12** Although there are no existing ecological criteria/screening values, at minimum the assessment should provide some discussion of H<sub>2</sub>S ecological risks in the uncertainty section (Section 6.3). Beyond this, it may be possible to quantitatively address ecological risks using the procedures discussed in a recent paper (P. Gallegos *et al.* 2007. Wildlife ecological screening levels for inhalation of volatile organic chemicals. *Environ. Toxicol. Chem.* 26: 1299-1303.) if suitable toxicological data are available.

Undocumented wells

“The potential for release due to poorly abandoned wells is treated in the same manner as poorly constructed and abandoned deep wells. The number of undocumented wells per site was estimated based expert judgment using information on the degree of historical mineral exploration activity in the area.”

**#13** The number of undocumented wells, estimated based on expert judgment for the four facilities, seems low for the Texas facilities (13 for Jewett, 2 for Odessa) in comparison to the Illinois facilities (2 for Mattoon, 3 for Tuscola), considering the long history of oil and gas exploration in Texas and the existence of on-site and close vicinity wells at the Texas sites versus none known in the vicinity of the two Illinois sites. The Texas Land and Mineral owners Association ([www.tlma.org/water.htm](http://www.tlma.org/water.htm)) estimates 32 percent of the oil and gas wells ever drilled in Texas are unproductive and waiting to be plugged by someone. Also, change “poorly abandoned wells” to “undocumented wells” in the first line of Section 5.3.4.3, to be consistent with the title of this section.

Post injection exposure analysis

“The injection site is planned to be located in the center of the 444-acre (180-hectare) plant site property.”

**#14** Since the injection site at the proposed Mattoon facility will be within the plant boundary, it may be appropriate to evaluate the indoor inhalation pathway for workers at the facility, and to evaluate corresponding mitigation and/or early warning measures. CO<sub>2</sub> and H<sub>2</sub>S monitoring and warning devices placed within buildings should be a minimum design component.

**G9. Illinois EPA (Reed, Michael T.)**

To: Ron Swager, Patrick Engineering

From: Michael T. Reed, Illinois EPA

Date: June 25, 2007

Subject: Illinois EPA comments on FutureGen EIS and Risk Assessment

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Attached is Illinois EPA comments on the FutureGen EIS and Risk Assessment documents. The comments pertain to only those portions of the reports that are applicable to the Illinois sites (Tuscola and Mattoon). They are also regarding only those portions of the report that were requested to be reviewed.

The comments attached have been provided by the appropriate Illinois EPA staff. If there are any specific questions regarding any of the comments, please do not hesitate to contact me and I will see that you get an answer. My email is [Michael.Reed@illinois.gov](mailto:Michael.Reed@illinois.gov) and I can be reached at 217-782-4651.

**G9. Illinois EPA (Reed, Michael T.)**

**Future Gen Comments**

- G9-15** | 1. Many applicable requirements have not directly been addressed
- G9-2** | 2. With respect to permitting, the facility will be subject to PSD not NSR requirements, the citation to 35 Ill. Adm. code 203 on page C-4 does not seem appropriate here.
- G9-3** | 3. the source appears to be major, there probably should be a citation to Section 39.5 of the Illinois Environmental Protection Act 415 ILCS 5/39.5 for CAAPP
- G9-4** | 4. Also on page C-4, they mention Section 111 of the CAA when addressing toxics but only in the context of mercury, 40 CFR part 63 contains other types of recordkeeping and reporting for nonmajor sources of HAPs, that may be applicable. Also many sources in Illinois are required to report toxic emissions pursuant to 35 IAC 232.
- G9-5** | 5. While many provisions of 40 CFR 60 are listed, Subparts VV and KKKK are not, it may be applicable unless the source meets certain requirements.
- G9-6** | 6. They mention the federal general conformity requirements on page C-9, but not the state requirements at 35 IAC 255.
- G9-7** | 7. They omit to mention any of the relevant SO2 requirements at 35 IAC 214.301.
- G9-8** | 8. They omit to mention any of the relevant PM requirements at 35 IAC 212, e.g. opacity and emissions(212.123, 212.124, 212.301, 212.314, 212.323.
- G9-9** | 9. They omit to mention any of the relevant CO requirements at 35 IAC 216.121 (if there is a boiler).
- G9-10** | 10. They omit to mention any of the relevant NOx requirements at 35 IAC 217.121. In addition, there are upcoming statewide control regulations that may apply.
- G8-13** | 11. The assessment of risks associated with the short-term trial injection that will include 2% (20,000 ppm) H2S is inadequate, and if there is the possibility that this amount of H2S will be routinely included in the captured gas stream then the risk assessment is grossly inadequate. There should be a more in-depth analysis of the potential consequences of releases that contain 20,000 ppm H2S, including maps of the potentially affected areas and estimates of the number of people affected at each site. (Note that this will require modification of the corresponding discussion of H2S risks in Section 4.17 of the Environmental Impact Statement.)
- G9-11** | 12. Assessment of risks of H2S to ecological receptors is almost non-existent, even though such risks could be significant since animals, especially burrowing animals, will likely be the most highly exposed receptors following post-injection releases. Although
- G9-12** | there are no existing ecological criteria/screening values, at minimum the assessment

**G9. Illinois EPA (Reed, Michael T.)**

- G9-12** | should provide some discussion of H<sub>2</sub>S ecological risks in the uncertainty section (Section 6.3). Beyond this, it may be possible to quantitatively address ecological risks using the procedures discussed in a recent paper (P. Gallegos *et al.* 2007. Wildlife ecological screening levels for inhalation of volatile organic chemicals. *Environ. Toxicol. Chem.* 26: 1299-1303.) if suitable toxicological data are available.
- G9-14** | 13. Since the injection site at the proposed Mattoon facility will be within the plant boundary, it may be appropriate to evaluate the indoor inhalation pathway for workers at the facility in the post-injection assessment.
- G9-13** | 14. The number of undocumented wells, estimated based on expert judgment for the four facilities, seems low for the Texas facilities (13 for Jewett, 2 for Odessa) in comparison to the Illinois facilities (2 for Mattoon, 3 for Tuscola), considering the long history of oil and gas exploration in Texas (especially near Jewett) versus none known for the two Illinois sites.
- G8-9** | 15. There should be discussion of the potential for odor issues, at minimum in the uncertainty section, and possibly in a separate section using the Level of Distinct Odor Awareness of 0.01 ppm developed by the Acute Exposure Guideline Levels Committee as the basis for a quantitative assessment.
- G8-11** | 16. On page 4-21, delete the second "are expected" from the next-to-last line of the last full paragraph.
- G8-12** | 17. On page 4-27, change 0.051 ppmv to 0.51 ppmv in the 11<sup>th</sup> line of the next-to-last paragraph.
- G9-13** | 18. On page 5-24, change "poorly abandoned wells" to "undocumented wells" in the first line of Section 5.3.4.3, to be consistent with the title of this section.
- G9-16** | 19. "Significant amounts of air emissions (especially SO<sub>2</sub>) from the FutureGen Project are expected to occur during the unplanned restarts, as a result of plant upset when the plant exhaust is being vented to the atmosphere. These unplanned restart emissions would occur for short durations and could result in exceedance of short-term 3-hour SO<sub>2</sub> Prevention of Significant Deterioration (PSD) increments at the Mattoon, Tuscola, and Odessa sites and short-term 3-hour and 24-hour SO<sub>2</sub> PSD increments at the Jewett Site. However, the probabilities of such exceedance are very low . . . Emissions from normal operation of the FutureGen Power Plant would not exceed the PSD increments for any of the criteria pollutants."  
Comment: The Prevention of Significant Deterioration (PSD) regulations do not provide an exemption to meeting the SO<sub>2</sub> PSD increments on the basis of "unplanned restarts", or planned restarts, for that matter. For the short-term averaging periods (3-hour, 24-hour), modeling results must show that the applicable PSD increment level (concentration) will not be exceeded more than once a year for a given receptor location.

**G9. Illinois EPA (Reed, Michael T.)**

**G9-17**

20. On page 4.2-3, Section 4.2.2.1, paragraph 3: You indicate that the closest non-attainment area (NAA) to the proposed Mattoon Power Plant and Sequestration site is Indianapolis, Indiana. Information originally provided by IEPA for Section 4.2 indicates that the closest NAA to Mattoon, IL is St. Louis, MO-IL, which is approximately 72.3 miles from the proposed site. The closest maintenance area (MA) and distance indicated in the EIS is correct for Vigo County, IN.

**G9-18**

21. On page 5.2-3, Section 5.2.2.1, paragraph 3: You indicate that the closest non-attainment area location to Tuscola, IL is Indianapolis, Indiana. This location is correct however, the distance appears to be in error. IEPA had originally provided information indicating that the distance to the nearest nonattainment area (O<sub>3</sub>) is 86.3 miles verses 152 miles which is stated in the EIS document.

**G9-19**

22. In Volume 1, Section 2.5.6.1, page 2-61, it states: "Although the FutureGen Project is being developed to be the first near-zero-emissions coal power plant, low levels of air emissions would be generated by process units such as the gasifier, combustion turbines, and the cooling tower."

Comment: The FutureGen Project triggers review under the Prevention of Significant Deterioration (PSD) regulations because it will exceed the "major source thresholds of 100 tons per year" for four pollutants (SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, and CO) based upon estimated initial startup emissions for 2012. This is not a "near-zero-emissions" facility, even though touted as such, and serious consideration should be given to removing occurrence of this "near-zero-emissions" language in the EIS.

**G9-20**

23. In Volume 1, Section 3.1.2, page 3-1, it states: "Impacts related to visibility, regional haze, and nitrogen and sulfur deposition in Class I areas were also considered. DOE also reviewed the applicability of air regulations and regional air quality plans and the potential for impacts from vapor plumes and odors."

Comment: The EIS provides virtually nothing in the way of quantitative estimates of odor impacts (for any averaging time). If odor modeling was performed based upon all sources (flare, fugitives, and stack releases)--rather than a hypothetical single source (HRSG stack) as used for the criteria pollutant modeling--and upon instantaneous impacts (3-5 seconds, the length of time to take a breath of air), would the modeling results support the claim that "odors of hydrogen sulfide (H<sub>2</sub>S) and ammonia are expected to be limited to within the facility boundary (p. 3-4)?"

**G9-21**

24. In the Summary, Section S.6.5.2, page S-49: "Associated with . . . unplanned restarts are short-term increases to facility emissions due to the need to flare process gases for a short period . . ."

Comment: Flare releases are not modeled the same as traditional "smokestack" releases. Since "unplanned restarts" result in significant SO<sub>2</sub> emissions from the flare, what would be the likely change in modeling results (NAAQS and PSD increment) if flare emissions were truly modeled as a flare following USEPA modeling guidance rather than as the hypothetical HRSG stack emissions?

**G9. Illinois EPA (Reed, Michael T.)**

**G9-22**

25. In the Summary, Section S.6.5.3: Antiscalants, biocides and other chemicals will be used in the process water, cooling tower water, etc.

Comment: Have these chemicals been evaluated for their potential impact to local biota from cooling water drift air emissions, or any other potential air emission sources?

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**G9. Illinois EPA (Reed, Michael T.)**

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**Response to Comment #1:** DOE added the following text to Sections 4.2.3.2; 5.2.3.2; 6.2.3.2; and 7.2.3.2 under the discussion of local plume visibility:

“Evaporated water would be pure water, although water droplets carried with the exhaust air (called drift) would have the same concentration of impurities as the water entering and circulating through the tower. Water treatment additives could contain anti-corrosion, anti-scaling, anti-fouling and biocidal additives which can create emissions of VOCs, particulate matter, and toxic compounds. The drift is not expected to cause excessive pitting or corrosion of metal on nearby structures or equipment due to the relatively small amount of water released and the presence of trace amounts of anti-corrosion additives. Similarly, the treatment additives would not be expected to cause adverse impacts to local biota due to the very small amounts that would be released.

However, as a best management practice, the drift rate and associated deposition of solids could be reduced by employing baffle-like devices, called drift eliminators.”

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**Response to Comment #2:** DOE concurs and the citation of IL regulations in Table C.1-2 has been corrected.

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**Response to Comment #3:** DOE concurs and the citation 35 IAC 270 for the Clean Air Act Permit Program was added to Table C.1-2.

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**Response to Comment #4:** The discussions focus on the Clean Air Mercury Rule. 40 CFR Part 63 is already cited in the table under the NESHAP discussing the HAPs. The citation 35 IAC 232 was added to Table C.1-2.

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**Response to Comment #5:** DOE does not believe that 40 CFR 60 Subpart VV “Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry” would be applicable to the FutureGen facility. Subpart VV applies to facilities designated as in the Synthetic Organic Chemicals Manufacturing Industry. DOE understands that the provisions of Subpart KKKK "Standards of Performance for Stationary Combustion Turbines" may be applicable to the project if the exemptions presented in §60.4310 are not appropriate. A final applicability analysis for the facility will be completed in concurrence with the final design for the facility. No change was made to the EIS.

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**Response to Comment #6:** DOE concurs and has revised the reference presented on in Table C.1-2. A citation to IL regulations has been provided in the table.

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**Response to Comment #7:** Because the EIS is not meant to be a permit application and is based upon conceptual design information, a complete applicability determination for all of the regulatory requirements has not been made. It is anticipated that such a determination will be included in the permit application for the facility. The text will remain as presented in the EIS.

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**G9. Illinois EPA (Reed, Michael T.)**

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**Response to Comment #8:** Because the EIS is not meant to be a permit application and is based upon conceptual design information, a complete applicability determination for all of the regulatory requirements has not been made. It is anticipated that such a determination will be included in the permit application for the facility. The text will remain as presented in the EIS.

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**Response to Comment #9:** CO requirements specific to boilers have not been considered in this EIS because the EIS is not meant to be a permit application. Additionally, because of the fact that the FutureGen Project design is in a conceptual stage, information on the specific equipment that would be used is not yet available. After the site is selected and the facility design is completed, the applicability of regulations specific to each component will be reviewed as part of the air permitting process. The text will remain as presented in the EIS.

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**Response to Comment #10:** Because the EIS is not meant to be a permit application and is based upon conceptual design information, a complete applicability determination for all of the regulatory requirements has not been made. It is anticipated that such a determination will be included in the permit application for the facility. The text will remain as presented in the EIS.

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**Response to Comment #11:** H<sub>2</sub>S is expected to diffuse in the subsurface and to react with the rock formations during upward migration, which would minimize or eliminate releases to the atmosphere, as described for potential human exposures. Accordingly, H<sub>2</sub>S is not likely to migrate upward into shallow soils where burrowing animals could be present. In addition, toxicity data for comparing soil gas to H<sub>2</sub>S concentrations are not available. Text was added to the Biological Resources Sections 4.9.3.2; 5.9.3.2; 6.9.3.2; and 7.9.3.2 under Operational Impacts as follows: "If there were upward migration of the sequestered gas, the H<sub>2</sub>S within the gas would diffuse in the subsurface, which would minimize or eliminate its release to the atmosphere. Subsequently, migration of H<sub>2</sub>S into shallow soils at concentrations harmful to burrowing animals and other ecological receptors is not likely."

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**Response to Comment #12:** A statement was included in Section 6.3 of the Risk Assessment explaining that the ecological risks were conducted at a screening level due to the lack of site-specific information on biota. In addition, toxicity data for assessing ecological risks from H<sub>2</sub>S concentrations are not available, except for the freshwater aquatic criteria provided in Table 3-8 of the Risk Assessment. Consideration of ecological effects could be used to help design appropriate monitoring of the FutureGen facilities to obtain soil gas measurements of CO<sub>2</sub> and H<sub>2</sub>S in the shallow subsurface environment (assuming toxicological data for H<sub>2</sub>S effects on biota are determined in the future).

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**G9. Illinois EPA (Reed, Michael T.)**

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**Response to Comment #13:**

There are five mature oil fields within a 10-mile radius of the Mattoon Site. The Tuscola injection site is within a part of the Cooks Mills Consolidated Oil Field and a gas storage field is nearby. There are existing wells within the subsurface ROI at both Mattoon and Tuscola, as shown in Figure 2-14 for Mattoon and Figure 2-17 for Tuscola of the Risk Assessment. Jewett has two injection sites both located near oil and gas production areas (see Figure 2-8 in the Risk Assessment), so a larger number of undocumented wells was used at this site. The injection site at Odessa has fewer nearby wells than Jewett; as seen in Figure 2-11 of the Risk Assessment, of which two were within the subsurface ROI for one of the injection wells. A detailed survey to identify abandoned or unknown wells is planned at the selected FutureGen site; any wells found would be properly sealed.

The change “poorly abandoned wells” to “undocumented wells” was made in the first line of Section 5.3.4.3, to be consistent with the title of this section and was added to the revised Risk Assessment.

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**Response to Comment #14:**

Monitoring and alarm systems for gas releases are discussed in the Health and Safety sections of the EIS. While specific inhalation pathways are not presented (because the power plant design is not complete), it is acknowledged that certain catastrophic events (such as fire or explosion) would result in death for on-site workers. Section S.11, Table S-16 and Section 3.4, Table 3-13 have been amended to add the use of indoor monitoring and warning devices as a method to mitigate impacts to facility workers.

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**Response to Comment #15:**

The section on regulations in the EIS serves to provide an overview of the major types of regulations that may be applicable to a power plant and that drive major issues related to the operations in the power plant and its potential impact on the environment. Regulations specific to a particular pollutant or equipment are typically of concern during the permitting process, when determining the types of control and standards. Additionally, the State agency may allow for variance from a specific regulation as part of the issuance of the permit. Therefore, discussions of every specific regulation are not practical at this time.

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**Response to Comment #16:**

The emissions and predicted concentrations presented in the EIS are based upon a conservative "emission envelope", which was estimated using the worst-case operating scenarios and multiple designs cases. Understanding that the PSD regulations do not exempt exceedances of the PSD increment under any condition and the fact that the FutureGen Project is in a conceptual stage of design, the EIS attempts to show that statistically, based on the worst-case and conservative estimates, the probability of emissions from the plant exceeding the PSD increment are low to none. This approach is used to help site selection for the power plant. Once a site is selected and the FutureGen Project design is complete, the issue of SO<sub>2</sub> emissions and associated PSD increment would be assessed further as part of the air permit application process. The text will remain as presented in the EIS.

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**Response to Comment #17:**

The text in Section 4.2.2.1 has been revised as follows: “The nearest non-attainment and maintenance areas are located in St. Louis, MO-IL (72.3 miles [116.3 kilometers] away)...”

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**G9. Illinois EPA (Reed, Michael T.)**

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**Response to Comment #18:** The text in Section 5.2.2.1 has been revised to indicate that Indianapolis, Indiana is 86.3 miles (138.9 kilometers) from the proposed Tuscola Power Plant Site.

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**Response to Comment #19:** The term "near-zero emissions" is used only in connection with the underlying purpose and need for the project and DOE acknowledges that the project, while still emitting very low pollutants compared to other coal-powered electric plants, would still be a major air pollution source as defined by the Clean Air Act, as stated in the Air Quality sections of the EIS (4.2, 5.2, 6.2 and 7.2).

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**Response to Comment #20:** Assumptions about the types of odors that would be released from the FutureGen Project and the conclusion that the odors would be limited to the facility boundaries are based on a similar situation at an existing power plant (Wabash River Coal Gasification Repowering Project, Terre Haute, Indiana: a 262 MWe commercial scale integrated gasification combined cycle [IGCC] power plant – see [www.fossil.energy.gov/programs/powersystems/publications/Clean\\_Coal\\_Topical\\_Reports/topical20.pdf](http://www.fossil.energy.gov/programs/powersystems/publications/Clean_Coal_Topical_Reports/topical20.pdf) for an overview) and information in an EIS for a proposed (and permitted) power plant (Orlando Gasification Project, Orlando, Florida: a 285 MWe commercial scale IGCC power plant – see [www.netl.doe.gov/technologies/coalpower/cctc/EIS/orlando\\_pdf/FrontMatter%20FINAL%20revised%2011207.pdf](http://www.netl.doe.gov/technologies/coalpower/cctc/EIS/orlando_pdf/FrontMatter%20FINAL%20revised%2011207.pdf) for an overview). This approach of both referencing an existing IGCC power plant and referencing the EIS for another proposed IGCC power plant is sufficient here where we are at the site selection stage and the design work and equipment selection is not yet available to support more detailed analyses. Once a site is selected and the FutureGen Project design is complete, the issue of odor releases and associated concentrations could be addressed further as part of the air permit application process. The text will remain as presented in the EIS.

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**Response to Comment #21:** Flare releases could not be modeled with any greater accuracy because of the lack of information at the current preliminary/conceptual design of the FutureGen Project. To get a sense of the concentration of pollutants from the FutureGen Project, the DOE and the Alliance assume a scenario where all the emissions would be released from a single source (i.e., the HRSG) and that unplanned restarts would contribute the most emissions as would be the case of flaring events. The emissions and predicted concentrations presented in the EIS are based upon a conservative "emissions envelope", which was estimated using the worst-case operating scenarios (i.e., multiple unplanned restart events) and multiple designs cases. This approach is used to help in achieving an important goal of the EIS, which is site selection for the project. Once a site is selected and the FutureGen Project design is complete, the issue of pollutants specific to flare releases and associated concentrations would be addressed further as part of the air permit application process. Therefore, the text will remain as presented in the EIS.

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**G9. Illinois EPA (Reed, Michael T.)**

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***Response to Comment #22***

The following text has been added to Sections 4.2.3.2; 5.2.3.2; 6.2.3.2; and 7.2.3.2 under the discussion of local plume visibility:

“Evaporated water would be pure water, although water droplets carried with the exhaust air (called drift) would have the same concentration of impurities as the water entering and circulating through the tower. Water treatment additives could contain anti-corrosion, anti-scaling, anti-fouling and biocidal additives which can create emissions of VOCs, particulate matter, and toxic compounds. The drift is not expected to cause excessive pitting or corrosion of metal on nearby structures or equipment due to the relatively small amount of water released and the presence of trace amounts of anti-corrosion additives. Similarly, the treatment additives are not expected to cause noticeable adverse impacts to local biota due to the very small amounts released.”

However, as a best management practice, the drift rate and associated deposition of solids could be reduced by employing baffle-like devices, called drift eliminators.”

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**G10. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

Summary

- J19-1** | The description incorrectly states that the proposed Jewett plant site is bordered by U.S. Highway 79 (US 79). Please revise the paragraph to indicate the plant site is bordered only by Farm-to-Market (FM) Road 39.
- J19-2** | In Table S-3, the description indicates that the proposed Jewett injection site is located approximately 16 miles east of Fairfield in Freestone County. Please revise the description to also include the proposed injection site on the TDCJ property in Anderson County.
- O53-2** | The last entry in Table S-4 on this page mentions that the proposed injection targets are a “lower interval of the Delaware Mountain Group sandstones and an upper interval of Queen formation sandstones.” This is ambiguous and could be misconstrued. Please clarify that the lower target is the Delaware Mountain Group (not a lower interval of the DMG) and the upper target is the lower part of the Queen Formation.
- O53-3** | In Table S-4, the description incorrectly states that the proposed sequestration site for the Odessa site is “3 miles (4.8 kilometers) east of Fort Stockton.” Please revise the description to state that the outer boundary of the injection reservoir area is more than 8 miles (12.9 kilometers) east of Fort Stockton, and the actual injection sites will be farther.
- TX5-1** | In Figure S-14, the number of injection wells and plumes shown (10) doesn't match injection scenario mentioned in summary (at least 3 or 8 wells, depending on injection rate). Please clarify the discrepancies.
- TX5-2** | **TCEQ** - In Table S-12, regarding Air Quality – Modeling results suggest a relatively higher probability of exceedances of the SO<sub>2</sub> PSD increments and Annual PM<sub>2.5</sub> levels that approach the NAAQS at the Jewett site. These are higher than would be expected for the rural East Texas area. The ambient air quality data used for this analysis, described in Appendix E, indicates that all monitors are located in highly urbanized areas not representative of the Jewett area. Please consider the following recommended monitoring locations as more representative alternatives for the Jewett site: Kaufman (SO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) - 80 mi.- would probably be the most representative and could replace Dallas North; Fayette County (SO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) - 100 mi - would be good second choice and probably should be used instead of Aldine; Tyler Airport (NO<sub>x</sub> and O<sub>3</sub>) would also be acceptable; Alabama Coushatta (O<sub>3</sub>) - 90 mi. - but it has limited use do to the limited number of parameters measured.
- TX5-3** | **TCEQ** - In Table S-12 regarding Air Quality – The Table lists predicted concentrations from each of the four sites, and Tables E-17 and E-18 of Appendix E list the same information for Jewett and Odessa, respectively, with additional information included as footnotes to the tables. For Jewett, the 3-hr concentration is noted to be the 618<sup>th</sup> maximum concentration, and the 24-hr concentration is noted to be the 88<sup>th</sup> maximum concentration. Probabilities of exceeding the short-term SO<sub>2</sub> increment (both 3-hr and 24-hr) are also presented with the listed concentrations. The same approach with different ranked concentrations is also presented for Odessa (33<sup>rd</sup> maximum concentration for the 3-hr concentration). Please clarify the rationale for selecting the predicted concentrations listed for the SO<sub>2</sub> plant upset scenarios.
- J19-3** | In Table S-12, regarding Physiography and Soils - Up to 73 acres within the Jewett power plant site are reportedly to be disturbed for transportation corridor infrastructure construction. This is almost 5 times more than at any other site and over 40 times higher than at the Odessa site. Please provide an explanation why this site is different from the other candidate sites or revise the estimate.

**G10. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

- O53-4** | In Table S-12, regarding Surface Water – The DEIS indicates that anticipated pipeline construction for the Odessa site will require approximately 3 to 6 stream crossings. No perennial streams exist within any of the proposed corridors for this site, and only a limited number of ephemeral draws could potentially be impacted by construction. There will be no CO2 pipeline crossings of perennial streams, except potentially along the ROW for the existing commercial CO2 pipeline from the plant site to the sequestration site. Please revise the description to distinguish between perennial stream crossings and intermittent or ephemeral stream crossings and if these occur within existing or new ROW.
- O53-5** | In Table S-12 regarding Biological Resources – The DEIS incorrectly suggests that primarily row crops would be lost to any new corridor construction for the Odessa site. Please revise the description to indicate that the affected area is primarily non-arable, brush lands.
- J19-4** | In Table S-12, regarding Biological Resources – The DEIS indicates that up to 63 miles of “high quality deer and turkey hunting ground” would be lost to utility corridor construction at the Jewett site. Please revise the description to clarify that pipeline construction is common in this area and would result in little or no long-term impact on hunting resources.
- TX5-4** | Incomplete and Unavailable Information – The DEIS incorrectly suggests that the disposition of the wastewater from the on-site sanitary wastewater treatment plants for the Jewett and Odessa sites is undetermined. Please revise the information to clarify that the on-site wastewater systems will be designed according to standard industry practice to ensure that no discharge occurs.
- J19-5** | Table S-14 includes proposed power plants that are no longer being considered. Please remove references to Big Brown 3, Tradinghouse 3 & 4, and Lake Creek 3 power plants.
- J19-6** | Potential Cumulative Impacts for Alternative Sites (Jewett) – The DEIS states that Texas is continuing to work on the restoration of the Trinity River. While this is true, the segments of the Trinity River near the proposed Jewett plant and sequestration sites are not currently listed as impaired for any water quality standards. Please revise the description to clarify that this portion of the Trinity River is not impaired.
- J19-7** | Volume I  
Under Table 2-3, the “Feature Heading: Sequestration site....”, the DEIS fails to identify the secondary seal provided by the Midway Group. Please correct sentences to read: “Both the Woodbine and Travis Peak formations lie beneath a primary seal, the Eagle Ford Shale, which has a thickness of 400 feet (122 meters) and shales of the Midway Group secondary seal, which has a thickness of 700 feet (215 meters).... There are also over 0.4 mile (0.6 kilometer) of low permeability carbonates and shales, including the Midway Group secondary seal, above the Eagle Ford that create additional protection for shallow drinking water aquifers.”
- J19-8** | The description incorrectly states that the proposed Jewett plant site is bordered by U.S. Highway 79 (US 79). Please revise the paragraph to indicate the plant site is bordered only by Farm-to-Market (FM) Road 39.
- J19-9** | In Table 2-3, regarding Jewett Site Descriptions – Same comments as identified in SUMMARY, Table S-3.
- O53-6** | The last entry in Table 2.4 on this page mentions that the proposed injection targets are a “lower interval of the Delaware Mountain Group sandstones and an upper interval of Queen formation sandstones.” This is ambiguous and could be misconstrued. Please clarify that the lower target is the Delaware Mountain Group (not a lower interval of the DMG) and the upper target is the lower part of the Queen Formation.

**G10. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

**O53-7** | In Table 2-4, regarding Odessa Site Description – Same comments as identified in SUMMARY, Table S-4.

**O53-8** | In Figure 2.14, the number of injection wells and plumes shown (10) doesn't match any injection scenario. Please clarify the discrepancies.

**#1** | **TCEQ** - Under the heading, "Annual Monitoring Methods section," the DEIS incorrectly describes the LiDAR technology. Please correct sentence to read "LiDAR is an aerial technique that uses laser pulse travel times from aircraft to land surface...."

**TX5-6** | In Table 3-3, regarding Summary Comparison of Impacts – Same comments as Table S-12 in SUMMARY

**TX5-7** | **TCEQ** - Air Quality – The DEIS indicates that "Air modeling was conducted to assess the potential for impacts to ambient air quality conditions at each site from operating the proposed power plant. Because local air quality monitoring data were not available for any of the alternative sites, monitoring data from the closest attainment area to each site were used as a surrogate data for the local background ambient air quality." Information regarding the ambient air data provided in Appendix E indicates that all of the monitoring stations are located in urban areas which are not representative of the rural plant sites in Texas. The Draft EIS then misuses the "high ambient concentrations" taken from the urban background monitors and states that the PM<sub>2.5</sub> NAAQS would be approached at the proposed FutureGen sites. Please revise the Draft EIS to clarify how unlikely this scenario would be considering the very conservative estimates of ambient background concentrations. Please consider the following recommended monitoring locations as more representative alternatives for the Jewett site: Kaufman (SO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) - 80 mi.- would probably be the most representative and could replace Dallas North; Fayette County (SO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) - 100 mi - would be good second choice and probably should be used instead of Aldine; Tyler Airport (NO<sub>x</sub> and O<sub>3</sub>) would also be acceptable; Alabama Coughatta (O<sub>3</sub>) - 90 mi. - but it has limited use do to the limited number of parameters measured. Also, please consider the following recommended monitoring locations as more representative alternatives for the Odessa site: Although Odessa and Hobbs NM sites are good choices, El Paso is not. Other sites that might be used are Carlsbad NM (NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) - 110 mi, Artesia NM (SO<sub>2</sub> and NO<sub>x</sub>) -130 mi., Lawton OK (O<sub>3</sub>) - 300 mi, and Big Bend (O<sub>3</sub> and PM<sub>2.5</sub>) - 200 mi.

**O53-9** | On the last bulleted item on the page, the EIS mentions Lower Delaware Mountain Group and upper interval of Queen formation. Please clarify that the lower target is the Delaware Mountain Group (not a lower interval of the DMG) and the upper target is the lower part of the Queen Formation.

**J19-10** | Physiography and Soils – The DEIS suggests that up to 73 acres within the Jewett power plant site are reportedly to be disturbed for transportation corridor infrastructure construction. This is almost 5 times more than at any other site and over 40 times higher than at the Odessa site. Please provide an explanation why this site is different from the other candidate sites or revise the estimate.

**#2** | Surface Water – The DEIS describes the actions to be taken to control non-point pollution during normal operations. Please revise this section to specify the requirement to obtain a Multi-Sector General Permit for industrial storm water control during post-construction operations.

**O53-10** | Surface Water – The DEIS suggests that the "...Odessa sites would include underground crossings of surface waters by CO<sub>2</sub> pipelines. In the unlikely event of a CO<sub>2</sub> pipeline leak near one of these crossings, surface water impacts could include a reduction in pH and localized high concentrations of CO<sub>2</sub> and H<sub>2</sub>S." There will be no CO<sub>2</sub> pipeline crossings of perennial streams, except potentially along the ROW for the existing commercial CO<sub>2</sub> pipeline from the plant site to the sequestration site. Please revise the description to distinguish between perennial stream crossings and intermittent or ephemeral stream crossings and if these occur within existing or new ROW.

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- O53-11** | The target sequestration formation shown as “Lower Delaware Mountain Group and upper interval of the Queen Formation” is incorrect. Please clarify that these should be Delaware Mountain Group (primary) and Lower Queen Formation (secondary)
- J19-11** | Table 3-7 includes proposed power plants that are no longer being considered. Please remove references to Big Brown 3, Tradinghouse 3 & 4, and Lake Creek 3 power plants.
- J19-12** | **TCEQ - Potential Cumulative Impacts for Alternative Sites (Jewett)** – The characterization of the potential for new sources near the proposed Jewett power plant site implies a greater level of certainty than may actually exist. Please revise the DEIS to read, “As listed in Table 3-7, there are five coal-fueled power plants within a 50-mile (80.5-kilometer) radius of the proposed Jewett Power Plant Site in various stages of planning and permitting. In addition, the NRG Limestone Electric Generating Station plans to add a lignite-fired boiler and 800-MW electric generating unit. Based on planning data, all of these plants could begin operation before the completion of the FutureGen Project.”
- J19-13** | **TCEQ - Potential Cumulative Impacts for Alternative Sites (Jewett)** – The DEIS suggests that a cumulative air quality impact analysis would largely be driven by the combined emissions of the proposed facilities listed in Table 3-12 (proposed coal fired power plants near Jewett). If a full impacts analysis is required, it will be pollutant specific, and the Area of Impact (AOI) will be defined from the project modeling. The emission inventory for the cumulative modeling analysis may include additional sources other than just the proposed coal fired power plant listed in Table 3-12. Please revise the description to indicate that the project modeling analysis will evaluate all sources of applicable pollutants within the AOI.
- J19-14** | Table 3-12 includes data for proposed power plant that are no longer being considered. Please remove references to Big Brown 3, Tradinghouse 3 & 4, and Lake Creek 3 power plants.
- J19-15** | **TCEQ - Potential Cumulative Impacts for Alternative Sites (Jewett)** – The DEIS incorrectly implies that the emissions from new sources will necessarily result in adverse air quality impacts. Permit requirements should effectively prevent adverse air quality impacts from new sources. Please revise the description to read, “Table 3-12 summarizes the air emissions estimated for these proposed power plants. Should the projects go forward, they would release tens of thousands of tons of criteria pollutants into the atmosphere.”
- J19-16** | **TCEQ - Potential Cumulative Impacts for Alternative Sites (Jewett)** – The DEIS suggests that ambient concentrations of PM<sub>2.5</sub> are much closer to the NAAQS. There is no ambient monitoring data in the Jewett area to support this statement. The Draft EIS misuses the “high ambient concentrations” taken from the urban background monitors (Houston) and states that the PM<sub>2.5</sub> NAAQS would be approached at the proposed FutureGen sites. Please revise the description to read, “Cumulative air emission from proposed facilities in the region would likely cause the PM<sub>2.5</sub> concentrations to increase.
- J19-17** | **TCEQ - Potential Cumulative Impacts for Alternative Sites (Jewett)** – The DEIS incorrectly implies that the emissions from other proposed sources are expected to consume remaining PSD increments. Please revise the description to read, “While the FutureGen Project would emit pollutants, the levels would be very small, and future air quality degradation in the region would be dominated by the other proposed power plants. The State has evaluated these projects and has determined that emissions increases in the ROI would not cause or contribute to a condition of air pollution.
- O53-12** | Table 3-13 incorrectly indicates that “Some surface water use would occur in Odessa, Jewett, and Tuscola. Impacts of water use are likely to be more important for the Odessa Site.” No surface water will be used for either the Jewett or Odessa sites. Please revise the table to remove references to Jewett and Odessa surface water use.

**G10. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

- #3** | In Table C.1-2, regarding State and Federal Regulatory and Permitting Requirements – Table C.1-2 incorrectly cites 30 TAC 122 as the applicable state rule that would require compliance with New Source Performance Standards (NSPS). Please revise the table to indicate that conformance with NSPS is required during New Source Review under 30 TAC 116.
- #4** | In Table C.1-2 regarding State and Federal Regulatory and Permitting Requirements – Table C.1-2 incorrectly cites 30 TAC 113 as the applicable state rule that would require compliance with the National Emissions Standards for Hazardous Air Pollutants (NESHAP). Please revise the table to indicate that conformance with NESHAP is required during New Source Review under 30 TAC 116.
- #5** | In Table C.1-3 regarding State and Federal Regulatory and Permitting Requirements – Table C.1-3 incorrectly cites 30 TAC 106 as the applicable state rule that would require an Air Construction Permit if a federal PSD permit is not necessary. Please revise the table to indicate that State New Source Review requirements are covered by 30 TAC 116, although 30 TAC 106 is referenced regarding General Permit requirements.
- TX5-8** | In Table C.1-3 regarding State and Federal Regulatory and Permitting Requirements – Table C.1-3 incorrectly indicates that 30 TAC 122 would require a state Air Operating Permit to be issued to a minor source if it is determined that a Title V operating permit under the federal CAA would not be required. Please revise the table to clarify that while 30 TAC 122 codifies the Texas rules necessary to implement the delegated federal Title V program, Texas has not established any additional state operating permit requirements not mandated by federal statute.
- TX5-9** | In Table C.1-3 regarding State and Federal Regulatory and Permitting Requirements – Table C 1-3 cites requirements for a Hydrostatic Test Discharge Permit for Texas but does not include any similar requirement for Illinois. Please revise the table to show comparable regulatory information for both states, as applicable.
- TX5-10** | In Table C.1-3 regarding State and Federal Regulatory and Permitting Requirements – Upon delegation of the NPDES program, Texas adopted the Texas Pollution Discharge Elimination System (TPDES) program. Please revise the table to reference TPDES, rather than NPDES, requirements.
- TX5-11** | In Table C.1-3 regarding State and Federal Regulatory and Permitting Requirements – Table C 1-3, in reference to Solid Waste Management, On-Site Disposal of Nonhazardous Industrial Solid Waste (30 TAC Ch. 335), inappropriately describes requirements for the permitting of hazardous waste disposal. The disposal or treatment of hazardous waste is not anticipated on the FutureGen site, and associated permitting should not be applicable. Please revise the table to clarify that on-site disposal of nonhazardous waste does not require a permit in Texas.
- TX5-12** | **RRC** - In Table C.1-3 regarding State and Federal Regulatory and Permitting Requirements – Table C 1-3, in reference to Underground Injection Control Permit includes typographical errors. Please revise the table to change “Texas Council on Environmental Quality” to “Texas Commission on Environmental Quality” and the term “projective” of oil, gas or geothermal resources in the second sentence to “productive.”
- #6** | Risk Assessment Methodology – The appendix does not include a description of the methodologies or assumptions used to assess the Total Cancer Risk and Total Hazard Coefficient. Please revise the appendix to describe these methodologies.

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- TX5-13** | **TCEQ - Air Modeling Protocol** – The appendix notes that the TCEQ pre-processed AERMET data are required in AERMOD modeling analyses. These AERMET pre-processed data are not required. The meteorology used for Texas is conservative screening meteorology--predicted concentrations, particularly long-term averages, will be higher than would be expected if more refined surface roughness length values were used. An applicant can always run AERMET with the proper technical justification for representative selections of Albedo, Bowen Ratio, and surface roughness length in AERMET.
- Please revise the following text in section E.3.2.1:
- “The Texas Commission on Environmental Quality’s (TCEQ) ~~Emissions Banking~~ Air Dispersion Modeling Team (ADMT) (~~EBMT~~) has prepared AERMOD meteorological data sets that ~~are required to~~ can be used for air dispersion modeling in the state of Texas.”
- “The preprocessed meteorological data sets provided by TCEQ incorporate conservative ~~appropriate~~ values of the above three surface characteristics.”
- J19-18** | **TCEQ - In Table E-8 regarding Air Modeling Protocol** – The appendix lists the Jewett Land Use Characterization by season. The “winter” table is incomplete (only lists sectors 1,2,5,6 out of a total of 12 sectors). Please revise this table to include all sectors or explain the discrepancy.
- O53-13** | **TCEQ - In Table E-9 regarding Air Modeling Protocol** – In Table E-9 for Odessa, the “annual” table lists an average Bowen Ratio value that does not seem consistent with the 12 sector average values. Please revise the table to correct the annual average Bowen Ratio value.
- J19-19** | **TCEQ - Air Modeling Protocol** – The DEIS lists “The nearest ambient monitors to the site and the pollutants monitored at these locations ...” and indicates that “The stations selected are in proximity to the Jewett site.” It further includes Table E-11 which “presents the representative yet conservative background for these criteria pollutants for the proposed Jewett site.” Please consider the following recommended monitoring locations as more representative alternatives for the Jewett site: Kaufman (SO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) - 80 mi.- would probably be the most representative and could replace Dallas North; Fayette County (SO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) - 100 mi - would be good second choice and probably should be used instead of Aldine; Tyler Airport (NO<sub>x</sub> and O<sub>3</sub>) would also be acceptable; Alabama Coushatta (O<sub>3</sub>) - 90 mi. - but it has limited use do to the limited number of parameters measured.
- J19-20** | **TCEQ - In Table E-11 regarding Air Modeling Protocol** – The appendix lists background ambient air quality for Jewett which is not consistent with the corresponding table in Volume 2, Table 6.2-2. Please revise this information to be consistent or explain the discrepancies.
- O53-14** | **TCEQ - Air Modeling Protocol** - The DEIS lists “The nearest ambient monitors to the site and the pollutants monitored at these locations ...” and indicates that “The stations selected are in proximity to the Odessa site.” It further includes Table E-12 which “presents the representative yet conservative background for these criteria pollutants for the proposed Odessa site.” Please consider the following recommended monitoring locations as more representative alternatives for the Odessa site: Although Odessa and Hobbs NM sites are good choices, El Paso is not. Other sites that might be used are Carlsbad NM (NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) -110 mi, Artesia NM (SO<sub>2</sub> and NO<sub>x</sub>) -130 mi., Lawton OK (O<sub>3</sub>) - 300 mi, and Big Bend (O<sub>3</sub> and PM<sub>2.5</sub>) - 200 mi.
- O53-15** | **TCEQ - In Table E-12 regarding Air Modeling Protocol** – The appendix lists background ambient air quality Odessa which is not consistent with the corresponding table in Volume 2, Table 7.2-2. Please revise this information to be consistent or explain the discrepancies.

**G10. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

Volume II

- J19-21** | The DEIS incorrectly cites table references. Please correct second sentence to read “Key features of the Jewett Site are listed in Table 6.1-1.”
- J19-22** | The DEIS incorrectly cites table and figure references. Please correct last sentence to read “Following Table 6.1-1, Figures 6.1-1, 6.1-2, and 6.1-3 illustrate...”
- J19-23** | Table 6.1-1, under “Feature Heading: Sequestration site...”, fails to identify the secondary seal provided by the Midway Group. Please correct sentences to read: “Both the Woodbine and Travis Peak formations lie beneath a primary seal, the Eagle Ford Shale, which has a thickness of 400 feet (122 meters) and shales of the Midway Group secondary seal, which has a thickness of 700 feet (215 meters).....There are also over 0.4 mile (0.6 kilometer) of low permeability carbonates and shales, including the Midway Group secondary seal, above the Eagle Ford that create additional protection for shallow drinking water aquifers.”
- J19-24** | The description incorrectly states that the proposed Jewett plant site is bordered by U.S. Highway 79 (US 79). Please revise the paragraph to indicate the plant site is bordered only by Farm-to-Market (FM) Road 39.
- J19-25** | In Table 6.1-1 regarding Jewett Site Features – Same comments as shown for Summary, Table S-3
- J19-26** | **TCEQ - Operational Impacts** – The DEIS notes an amount of annual mercury predicted by AERMOD to be deposited and within a certain distance from the project site. However, given the units presented, this seems to be the annual ground-level concentration predicted by AERMOD. Please revise these statements to reflect “ground-level concentrations” rather than “deposition.”
- J19-27** | The DEIS incorrectly indicates that the average annual precipitation at the Jewett site is “about 15 inches.” Please revise the average annual precipitation to approximately 43 inches to more accurately reflect meteorological conditions in the area.
- J19-28** | In Table 6.3-1 regarding Seasonal Weather Data – The weather precipitation data in the table is incorrectly labeled. Please revise the table to clarify that this reflects “Average Monthly Precipitation” rather than “Precipitation.”
- J19-29** | Figure 6.4-1, has been constructed using only those wells that were assigned API numbers by the Railroad Commission of Texas (RCT). BEG identified an additional category of oil and gas wells in the RCT database that have location coordinates, but which have not been assigned an API number. There are 11 non API-numbered wells (shapefile name: Wells\_RRC\_AreaofInterest\_HOB, shp) located within the 50-Year (1.7 mile) radius circles around the three Jewett Site injection wells. Hence there are a total of 46 wells within the defined ROI.  
  
Please note that figure 6.4-1 uses the number 35 for wells within the Jewett ROI, whereas all text in the EIS uses the number 57 for wells within the Jewett ROI. In both cases, the number of wells should be 38 for the Woodbine ROI and 46 for the combined Woodbine and Travis Peak ROI. Please locate this data entry error throughout the document and correct.
- J19-30** | The plume radius indicated in the legend of Figure 6.4-1 is inconsistent with Section 6.4.1.1 Region of Influence, where the ROI for subsurface is defined as: Numerical modeling indicates that the plume radius associated with injecting 2.8 million tons (2.5 MMT) per year for 20 years would be 1.7 miles (2.7 kilometers)...., Please correct the legend to read: “Jewett Sequestration Site 20-Yr plume at 2.5 MMT/year (1.7 Mile radius)”
- J19-31** | Figure 6.4-2, incorrectly characterizes the Midway Group. The 700 ft (215 meter) thick Midway Group is actually all marine shale except for 10-30 foot thick sands in the top 50-100 feet. Please show that this unit should be depicted as shale in the stratigraphic column shown in Figure 6.4-2.

**G10. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

- J19-32** | Figure 6.4-2, fails to indicate that the Midway Group is a distinctly defined secondary seal or ultimate seal overlying the injection horizons and Eagle Ford primary seal. Please add blue shading on the right hand side of the figure corresponding to the Midway Group to show this as a seal.
- J19-33** | Figure 6.4-2 indicates that the drinking water aquifer extends down to depths of approximately 1,300 feet, which corresponds to the base of the Wilcox strata. The drinking water aquifer does not extend down in to strata of the Midway Group. Please correct this inconsistency.
- J19-34** | In Figure 6.4-2, under Explanation, incorrectly indicates that the information on the geologic column is mostly based on seismic profile of the Northern Injection Site. Please correct the “note” to read: “Note: Geologic column mostly based on a geophysical log of Well 42161316290000”
- J19-35** | The DEIS fails to identify the secondary seal provided by the Midway Group. Under the section heading: “Geological Resources in the Jewett Area,” please correct the third paragraph to read: “The primary sequestration reservoir at the site is the Woodbine formation, which is overlain by the Eagle Ford shale primary seal occurring at a depth of approximately 0.8 mile (1.3 kilometers) below the ground surface. The Woodbine is also overlain by the Midway Group secondary seal occurring at a depth of approximately 0.25 mile (0.4 kilometer) below ground surface.”
- J19-36** | Under section heading: “Geological Resources in the Jewett Area,” third paragraph, please correct sentence to read: “It is reported that up to 46 known wells penetrate the Eagle Ford Shale that lie within the footprint of the 20-year 2.8 million tons (2.5 MMT) per year plume (radius of 1.7 miles [2.7 kilometers]) (FG Alliance, 2006c).”
- J19-37** | The DEIS fails to identify the secondary seal provided by the Midway Group. Under section heading Seals, Penetrations, and Faults, subsection heading Primary Seal, please correct sentence to read: “The primary caprock seal for the Jewett Sequestration Site is the Eagle Ford Shale.”
- J19-38** | The DEIS incorrectly identifies the number of known wells that penetrate the primary seal. Under section heading Seals, Penetrations, and Faults, subsection heading Secondary Seals, second paragraph, please correct second sentence to read, “Thirty-eight wells that penetrate the primary seal are located within the maximum plume footprint of the two Woodbine CO<sub>2</sub> injection wells”
- J19-39** | The DEIS fails to identify the secondary seal provided by the Midway Group. Under section heading Seals, Penetrations, and Faults, subsection heading Secondary Seals, third paragraph, please add sentence to end of paragraph: “The ultimate seal at the Jewett Sequestration Site is provided by shales of the Midway Group secondary seal, which is 700 feet (215 meters) thick and lies below the base of the freshwater aquifer.”
- J19-40** | The DEIS incorrectly identifies the number of known wells that penetrate the primary seal. Under section “Operational Impacts, subheading Sequestration Site,” please correct last paragraph to read: “Forty-six wells are reported to penetrate the primary seal, the Eagle Ford Shale within the 20-Yr, 2.5 MMT per year ROI.” Also, please delete the reference because number is incorrect in the FG Alliance (2006) document.
- J19-41** | Physiography and Soils, Transportation Corridors – The DEIS indicates that “Approximately 48 to 73 acres (19 to 30 hectares) of soil would be impacted by proposed road construction and improvements” at the Jewett site. Please provide an explanation why this site is different from the other candidate sites or revise the estimate.
- O53-16** | The second entry in Table 7.1-1 on this page mentions that the proposed injection targets are a “lower interval of the Delaware Mountain Group sandstones and an upper interval of Queen formation sandstones.” This is ambiguous and could be misconstrued. Please clarify that the lower target is the Delaware Mountain Group (not a lower interval of the DMG) and the upper target is the lower part of the Queen Formation.”

**G10. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

- O53-17** | In Table 7.1-1 regarding Odessa Site Features – Same comments as shown for Summary, Table S-4
- O53-18** | In Figure 7.1-3, the number of injection wells and plumes shown (10) doesn't match any injection scenario. Please clarify discrepancies.
- O53-19** | Affected Environments – The DEIS incorrectly indicates “The proposed (Odessa) injection site is located ... approximately 3 miles (4.8 kilometers) east of Fort Stockton.” Please revise the description to clarify that the outer boundary of the injection reservoir area is actually more than 8 miles from Fort Stockton, and actual injection wells will be farther.
- O53-20** | **TCEQ - Operational Impacts** – The DEIS notes an amount of annual mercury predicted by AERMOD to be deposited and within a certain distance from the project site. However, given the units presented, this seems to be the annual ground-level concentration predicted by AERMOD. Please revise these statements to reflect “ground-level concentrations” rather than “deposition.”
- O53-21** | The DEIS incorrectly indicates that the average annual precipitation at the Odessa site is “about 5 inches.” Please revise the average annual precipitation to approximately 15 inches to more accurately reflect meteorological conditions in the area.
- O53-22** | In Table 7.3-1 regarding Seasonal Weather Data – The weather precipitation data in the table is incorrectly labeled. Please revise the table to clarify that this reflects “Average Monthly Precipitation” rather than “Precipitation.”
- O53-23** | The meaning of “sandstone carbonate” in the third paragraph is unclear. Please clarify if this is referring to sandstones and carbonates (separate units) of the Trinity Group.
- O53-24** | The meaning of the statement “The depth interval of the injection reservoir for the lower Queen Formation is between approx. 0.5 to 1.0 mile for the Delaware Mountain Group.” Is unclear. Please clarify statement.
- O53-25** | This section states that 4 wells are required for lower injection rate and 10 for higher; summary document says at least 3 wells are required for lower rate and at least 8 for higher rate. Please clarify this inconsistency.
- O53-26** | Wetlands – The DEIS states “No areas potentially subject to Section 404 jurisdiction are located within the CO2 pipeline corridor east or west of the proposed (Odessa) power plant site.” However, only one CO2 pipeline is proposed to connect to the existing pipeline located east of the plant site. This Ector County pipeline segment should not be confused with the two pipeline corridors that have been proposed coming from existing CO2 pipelines east and west of the injection reservoir in Pecos County. Please revise the text to clarify this description.
- TX5-14** | Final Risk Assessment Report  
In Table 2-1 regarding Summary of Surface and Subsurface Features of Four Candidate Sites – The Climate data for the Jewett and Odessa sites, labeled as “Range of Seasonal Precipitation,” is incorrect and actually reflects monthly seasonal averages. Please revise the table to reflect actual annual averages, comparable to the Illinois data, of approximately 42.6 inches for Jewett and 14.9 inches for Odessa.
- TX5-42** | In Table 2-1 regarding Summary of Surface and Subsurface Features of Four Candidate Sites – The Surface Water Resources information incorrectly identifies the lake near the Jewett site as “Lake Limonite.” Please revise the description to correctly name the lake as Lake Limestone, rather than Lake Limonite.

**G10. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

- O53-27** | In Table 2-3 regarding Weather Information for Odessa, TX – The table incorrectly labels the weather data. Please revise the table to clarify that the values represent “Average Monthly Precipitation” rather than Precipitation; and “Average Wind Speed” rather than Wind Speed for each season.
- O53-28** | Offsite Populations – The DEIS states that for the Odessa site “Fort Stockton is about 8 miles (13 kilometers) west of the injection site, although there may be a shorter distance between the nearest of the 10 injection wells and the town, depending on the exact location of the wells.” Please revise the description to clarify that Fort Stockton is actually more than 8 miles from the outer boundary of the estimated maximum extent of the injection reservoir and that the exact well locations will be farther, not nearer, to the town.
- O53-29** | Key Factors Affecting Risk Assessment - The DEIS incorrectly states that populated areas are within 8 miles of the CO2 injection site for Odessa. Please revise the description to clarify that Fort Stockton is the closest populated area and is more than 8 miles from the outer boundary of the estimated maximum extent of the projected injection reservoir and that the exact well locations will be farther, not nearer to town.

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**G10. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

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**Response to Comment #1:** Section 2.5.2.2 was revised as follows: “LiDAR is an aerial technique that uses laser pulse travel times from an aircraft to the land surface to obtain high resolution topography data.”

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**Response to Comment #2:** Section 3.1.7 was revised to read, “For all sites there would be a requirement to obtain a Multi-Sector General Permit for industrial stormwater control during post-construction operations.”

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**Response to Comment #3:** Table C.1-2 has been revised to cite “30 TAC 116” was revised to “30 TAC 113” under NESHAP.”

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**Response to Comment #4:** Table C.1-2 has been revised to cite “30 TAC 116” instead of “30 TAC 106” under the Air Construction Permit.

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**Response to Comment #5:** Table C.1.3 has been revised to cite “30 TAC 116” instead of “30 TAC 106”.

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**Response to Comment #6:** The methodologies and assumptions are presented in the Risk Assessment Report. The Risk Assessment Report is included with the EIS.

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**G11. U.S. Environmental Protection Agency (Anne Norton Miller)**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUL 26 2007

OFFICE OF  
ENFORCEMENT AND  
COMPLIANCE ASSURANCE

Mr. Mark L. McKoy  
NEPA Document Manager  
FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880,  
Morgantown, WV 26507-0880

Dear Mr. McKoy:

In accordance with our responsibilities under Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the Environmental Protection Agency (EPA) has reviewed the Department of Energy's (DOE) FutureGen Project Draft Environmental Impact Statement (EIS) (CEQ# 20070213). Our general comments are highlighted below.

The FutureGen Project was conceived to support the initiatives and recommendations of the National Energy Policy issued in May 2001. This included research, development, and demonstration programs with goals to develop and demonstrate coal power systems with near zero environmental emissions, while maintaining low production costs. In addition, this project supports the President's announcement emphasizing the need for the FutureGen Initiative, and other federal initiatives such as the National Climate Change Technology Initiative and the Hydrogen Fuel Initiative. These initiatives aim to reduce the Nation's output of greenhouse gas emissions from coal-fired energy production, to improve the global environment, and to provide advanced technologies to meet the world's energy needs.

Through this project, DOE proposes to provide federal funding to the FutureGen Alliance, Inc. for the design, construction, and operation of the first coal-fueled plant to produce electricity and hydrogen (H<sub>2</sub>) with geologic sequestration of carbon dioxide. The current foreign government pledges of \$80 million in addition to DOE's funding account for 74 percent of the net cost of the project. The goal is to prove the technical feasibility and potential economic viability of co-production of electricity and H<sub>2</sub> fuel from coal, while capturing and sequestering CO<sub>2</sub> and greatly reducing other air emissions. Another goal is to verify the effectiveness, safety, and permanence of CO<sub>2</sub> stored in geologic formations. The long-term benefit would be to test advanced power generation systems using Integrated Gasification Combined Cycle technology at a sufficiently large scale to allow industries and utilities to assess the project's potential for commercial application.

Internet Address (URL) ■ <http://www.epa.gov>

**G11. U.S. Environmental Protection Agency (Anne Norton Miller)**

While there are existing power plants that capture CO<sub>2</sub>, in order to meet the FutureGen Project objectives, DOE requires advancements in the facility's design, experimentation in a near-laboratory setting, and operational technology development. These advancements would be more appropriate for a research platform, such as the FutureGen Project, rather than an existing commercial power plant. Major components needed to support the proposed project include:

- A power plant site and plant infrastructure;
- A sequestration site for CO<sub>2</sub> injection wells-related infrastructure, with a deep saline formation (i.e., the geologic formation where CO<sub>2</sub> would be stored);
- Utility connections and corridors (e.g., water supply, sanitary wastewater, electric transmission, natural gas pipelines, and CO<sub>2</sub> pipelines); and
- Transportation routes (rail and truck).

DOE has identified four reasonable alternative sites and will determine which sites, if any, are acceptable to host the project. The four sites include Mattoon, Illinois; Tuscola, Illinois; Jewett, Texas; and Odessa, Texas. If DOE approves more than one site, the host site will be selected by the Alliance. After the host site is selected, the Alliance will conduct additional site characterization studies, prepare a site-specific design (including any design modifications that would reduce risks), and obtain relevant environmental, utility, and operational permits for the project. EPA understands that based on the results of the additional site-characterization and site-specific preliminary design, DOE will re-examine the potential risks as part of a Supplemental Analysis or a Supplemental EIS before proceeding with funding for construction. A supplemental EIS may be required if there are substantial changes to the proposed action or significant new circumstances or information relevant to environmental concerns.

**Comments/Recommendations**

**General**

The draft EIS indicates in several sections that FutureGen will use injection wells permitted as *Class V (experimental) wells* under EPA's Underground Injection Control program. While this is appropriate under the current regulatory structure, EPA is developing a strategy that may determine how large-scale, and commercial-scale, geologic sequestration projects will be permitted in the future. A new management framework for geologic sequestration injection wells may establish a totally new class of injection wells, with requirements tailored specifically for CO<sub>2</sub> geologic sequestration. It may become advantageous for injection wells related to FutureGen to be permitted under such a classification scheme. EPA will continue to develop this framework over the next several years, as data are collected from the pilot-scale and demonstration-scale geologic sequestration projects, and from research and development efforts led by DOE and their Regional Sequestration Partnerships.

#1

**G11. U.S. Environmental Protection Agency (Anne Norton Miller)**

**Cumulative Impacts**

#2

Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. In making this determination, some basis should be established for consideration for the appropriate delineation of both spatial and temporal boundaries, identifying “reasonably foreseeable future actions” surrounding the proposed action. The draft EIS identifies the spatial boundary of cumulative impacts (within a 50-mile radius). However, the temporal boundary of the impacts is not clear. DOE expects the plant would operate for at least 20 to 30 years, and potentially up to 50 years. The draft EIS indicates that this project would potentially use up 1.6 billion gallons of water/year and that much of this water may be lost to the local area and downstream consumers. For this reason, EPA recommends that the cumulative impacts of water use be evaluated for at least the potential 50-year operational life of the project.

**Protecting Underground Sources of Drinking Water**

#3

The draft EIS discusses public “water supply aquifers,” “potable drinking water aquifers” and “near-surface freshwater aquifers” without defining what these terms mean. The Safe Drinking Water Act defines underground sources of drinking water and describes how they must be considered under the Underground Injection Control program. We suggest that the final EIS contain a definition for each of the three types of aquifers that are discussed.

**Wetlands**

#4

EPA recommends that the draft EIS provide more details on how many wetlands may be impacted at each alternative site. For example, a table of direct and indirect impact acreages would be useful. For each location alternative, we recommend describing specific mitigation where impacts cannot be avoided; that is, the location of potential mitigation sites, wetland type, and ratios.

Base on the above issues we have rated the draft EIS Environmental Concerns/Insufficient Information (EC-2), (see enclosed “Summary of EPA Rating System”).

**G11. U.S. Environmental Protection Agency (Anne Norton Miller)**

We appreciate the opportunity to review this draft EIS. We look forward to reviewing the final EIS related to this project. The staff contact for the review is Marthea Rountree and she can be reached at (202) 564-7141.

Sincerely,



Anne Norton Miller  
Director  
Office of Federal Activities

Enclosure:  
Summary of EPA Rating System

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**G11. U.S. Environmental Protection Agency (Anne Norton Miller)**

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**Response to Comment #1:** DOE understands that the Class V well classification cited in the EIS is appropriate under the current regulatory structure, but these regulations are subject to change in the future as more information is gained from pilot and demonstration-scale geologic sequestration projects.

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**Response to Comment #2:** While it would be appropriate to quantify water use for a 50-year period, it is generally difficult to obtain information on future projects over that timeframe. However, additional literature search was conducted and text was added to address the long-term use of groundwater aquifers in the regions surrounding the power plant sites. In Illinois, information regarding projected use of the Mahomet aquifer through 2020 was added. For the Texas sites, information from the 2007 State Water Plan was incorporated where statistics on water use projected until 2060 were presented.

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**Response to Comment #3:** DOE has replaced the phrases “potable aquifers”, “potable water aquifers”, “drinking water aquifers,” “near-surface fresh water aquifer,” and other phrases having the same meaning with the phrase “underground sources of drinking water,” unless the context or source information indicates that something other than the regulation protected aquifers are being discussed. In particular, changes were made in Section 3.1.6 of the EIS. As a conservative measure, all aquifers are assumed to be legally protected underground sources of drinking water (USDWs) unless otherwise indicated by source document information or regional information about ground water salinity. DOE has made changes globally in the EIS in accordance with the guidance given here.

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**Response to Comment #4:** As discussed during the July 23<sup>rd</sup>, 2007 meeting between EPA and DOE regarding EPA comments/clarifications on the FutureGen EIS document, a Supplement Analysis will be required once the site is selected. Currently, the EIS document relies on a combination of wetland delineation and National Wetland Inventory (NWI) mapping to characterize wetland types, locations, and to determine potential impacts.

As indicated within the EIS Section 3.1.8, wetlands have been assessed at all four proposed sites; “DOE assessed the potential impacts to wetland and floodplain resources based on field verification (wetland delineation) and National Wetland Inventory (NWI) mapping. The Mattoon and Tuscola sites included field verification for the power plant sites and other project components (e.g., utility corridors), allowing for quantitative analysis using potential acreage (hectares) of impacts. The Jewett and Odessa sites included field verification for only the proposed power plant sites and relied on NWI mapping for all other project components, allowing for a qualitative assessment limited to wetland type occurring within the project component areas.” This level of wetland analysis is further emphasized within each site-specific chapter (Sections 4.8.2.1; 5.8.2.1; 6.8.2.1; and 7.8.2.1).

The EIS tabulates impacts of wetlands (upper bounds scenario) that may occur from the construction of the power plant. Table S-12 and Table 3-3, notes the following wetland acreages at the power plant sites which could potentially be impacted – Mattoon: 0.05 acres low quality farm pond; Tuscola: None; Jewett up to 2 acres low quality wetlands, up to 0.1 acre moderate quality wetlands, and up to 18 acres low quality ponds; and Odessa: None. As also indicated in Table S-69 and Table 3-3 “Site design and layout would avoid impacts to wetlands that are on the site....” Wetland delineations have been conducted along both Mattoon and Tuscola utility corridors allowing for the tabulation of

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**G11. U.S. Environmental Protection Agency (Anne Norton Miller)**

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wetland impacts (worse case scenario) which may occur from construction of utilities have been included in Table S-12 and Table 3-3, "Mattoon: up to 29.2 acres; Tuscola: up to 5 acres." As detailed information (wetland delineation) regarding the utility corridors is not available for the Texas sites, DOE used the best available information (NWI mapping). Since NWI mapping is less accurate than field-verified wetlands information, the primary data that can be extracted from NWI mapping is the potential for wetland presence and the type of wetlands that can be expected in the area. For this reason, the EIS used the NWI mapping to determine the presence (number of potential wetlands affected) and wetland type within an approximately 800-foot corridor for the proposed water supply pipelines and an approximately 700-foot corridor for the proposed CO<sub>2</sub> pipelines. Overall, the NWI mapping indicates that wetlands within both Texas Sites are less than 0.5 acre, with the exception of a few wetland complexes associated with streams, or larger man-created surface water impoundments. Impacts to these larger wetland systems would most likely be avoided through directional drilling or through shifting pipeline alignments. Impacts to the smaller wetland systems (less than 0.5 acre) within the 700 to 800 foot corridor study areas could be avoided through the design process. Field verification would be required of all corridors once the respective site was selected. Regardless, impacts to these wetlands would be mitigated through the Section 404 permitting process. (Jewett – USFWS. 1988. National Wetland Inventory Maps for Buffalo, Butler, Jewett, Donie, Keechi, Lanely, Long Lake, Tennessee Colony, Turlington, and Yard, Texas, quadrangles; Odessa – USFWS. 1994. National Wetland Inventory Maps for Amburgey Ranch, Andrew, China Ranch, Clabber Hill Ranch, Cowden Place, Douro, East Mesa, East Mesa SW, Florey, Goldsmith, Kermit, NW, Metz, Monohans, North Cowden. Panther Dlufl, Penwell, Pyote East, Red lakes, Saddle Butte, Seminole SE, Versue and Wheeler).

All four alternative sites have low quality of wetlands and low abundance of wetlands occurring throughout the potential project areas (either impacted by farming or mining activities). A majority of wetlands could be avoided through design and best management practices, and the mitigation required through Section 404 permitting. Therefore, it is DOE's opinion that the level of wetland analysis and evaluation of potential impacts discussed in the EIS provides sufficient data to consider potential wetland impacts and mitigation for each alternative and a reasoned alternative choice even though some data is lacking. Furthermore, the EIS acknowledges areas in which wetland data is lacking or where further studies are required throughout the document. Table S-12 and Table 3-3 (Jewett and Odessa) "Wetland delineation required for verification;" Section 3.1.8 (Jewett and Odessa) "With the exception of wetlands at the power plant site, all other areas would require a wetland delineation to verify wetland mapping." This is further emphasized in Section 3.1.8 (see quote above) and within Sections 6.8 and 7.8 of the EIS.

EPA's request for specific "mitigation where impacts cannot be avoided; that is, the location of potential mitigation sites, wetland types and ratios..." would require a wetland impact determination and specific wetland mitigation measures that are negotiated during the Section 404 permitting process. The USACE emphasizes avoidance, minimization of wetland impacts followed by mitigation of those impacts. During the permitting process, the actual design and construction footprint for both the power plant and associated utilities would be known and could be adjusted (i.e., shift in corridor alignment) to avoid or minimize impacts.

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**M1. Ashworth, Larry**

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**From:** Angela Griffin [mailto:angela@colestogether.com]  
**Sent:** Tuesday, June 26, 2007 12:40 AM  
**To:** Swartz, Lucy L; Debra Walker  
**Subject:** Names

You asked for the names of the people I've talked to who had questions.

- #1 | Larry Ashworth – said his questions were coming from Bruce Daily  
Tom Donnell – said his questions were coming from Bruce Daily. Tom is a huge advocate of the project and friend to Bruce Daily. Tom has tried to convince Bruce this project is in the public's best interest. He provide Bruce's questions to me in an effort to have them addressed to give Bruce a higher degree of comfort with th project. However, when I left a message for Bruce to offer one-on-one time with Gretchen, he didn't call back

Tom is a Director on the Coles County Farm Bureau and presented the Resolution to support the project to th Farm Bureau (which was passed).

Angela Griffin  
President  
Coles Together  
400 Airport Road  
Mattoon, IL 61938  
217-258-5627 -phone  
217-254-1369 - cell  
217-235-9492 - fax  
[angela@colestogether.com](mailto:angela@colestogether.com)  
[www.colestogether.com](http://www.colestogether.com)

**M1. Ashworth, Larry**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**M2. Donnell, Tom**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

#1

2 TOM DONNELL: Thank you. I'll try to be brief.  
3 I've had a long day. I buried my very best friend of 53  
4 years today, but I feel so strongly about this project that  
5 I came here tonight.

6 There are some other farmers in the audience that  
7 will speak in event we have a lot of negative talkers.  
8 Otherwise, I'll be the only farmer, I guess, that will be  
9 speaking. They allowed me to speak, because I like to  
10 talk.

11 Okay. The EIS states that 200 acres of farmland will  
12 be converted for use for the power plant site. As a farmer  
13 and a member of the Coles County Farm Bureau, I have no  
14 objection to this, particularly in light of the fact that  
15 the use is to construct and demonstrate that we could use  
16 coal efficiently without contributing to greenhouse gas  
17 emissions.

18 Keep in mind that a lot of this land can still be  
19 used for farm services. Also, for anyone who is concerned  
20 about loss of farmland, putting the project in Mattoon  
21 ultimately converts less farmland because Mattoon is the  
22 only proposed site that can accommodate the injection well  
23 on-site for the CO-2.

0047

24 Almost everything has been covered here tonight

1 except one thing; and Mr. Oliver stated this or touched on  
2 it when he spoke. Mr. Oliver stated that we, that we want  
3 to use this technology around the globe in all types of  
4 weather and all climates, South Africa, India, China, South  
5 Korea, Japan. You name it.

6 300 days ago I spoke here and I brought up something  
7 very important. Illinois has different types of weather.  
8 We have extreme cold. We have extreme hot and humid. Our  
9 competing state has the same type of weather all the time.  
10 The same boring, long weather all the time.

11 (Laughter.)

12 So if we want to prove that this can be used around  
13 the world, we need to locate it in Illinois.

14 I am really amazed at the folks that put together the  
15 Environmental Impact Statement. In 21 simple page, they  
16 put a lot of information in here. But looking at this  
17 statement, I have to wonder why we have to bother to hold a  
18 hearing here tonight; because, obviously, the two Texas  
19 sites just don't qualify.

20 (Laughter.)

21 Read the statement and you'll see what I mean.

22 It has to be either Mattoon and or Tuscola; and  
23 Mattoon is slightly ahead of Tuscola.

24 (Laughter.)

0048

1 Gentlemen, I do hope that you let Mr. Nolte get his  
2 corn harvested before we start construction; but let's  
3 start construction soon.  
4 Thank you.

**M2. Donnell, Tom**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**M3. Mattoon Schools (Lilly, Larry D.)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

5                   LARRY LILLY: Good evening. My name is  
6   Larry Lilly; and as Superintendent of the Mattoon schools,  
7   I am pleased to publicly welcome representatives of  
8   FutureGen and all of you to Riddle Elementary School.  
9                   As you can imagine, we are extremely proud of our  
10   wonderful educational facilities here in Mattoon. In 2003,  
11   we opened this beautiful elementary school along with  
12   Williams Elementary School which is an identical building  
13   on the other side of town.  
14                   Over the past 2 years, we've completed extensive  
15   remodel of Mattoon High School and are now in the process  
16   of our final building upgrades to our middle school.  
17                   Our facilities were built and renovated with  
18   community growth in mind and we believe are among the  
19   finest in the state. As a result, Mattoon schools are now  
20   in the position to welcome an influx of FutureGen families  
21   and their children to our 21st century classrooms.  
22                   We invite you to tour our facilities and meet our  
23   staff and talk with our parents and students. In so doing,  
24   we are confident that you will be impressed with the warm,  
  
1   caring, learning atmosphere in Mattoon schools.  
2                   Please know that we are ready to partner with  
3   FutureGen, your employees, and your, and their children.  
4                   We thank you for this opportunity and appreciate all

#1

0052

**M3. Mattoon Schools (Lilly, Larry D.)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**M4. Daily, Bruce**

*Bruce DAILY*

*Mattoon*

#1

For 30 years my family has lived on a farm located near the intended site of the FutureGen plant. From the beginning, I have been concerned about the ramifications for our neighborhood if Mattoon is selected. Several hours spent studying the Environmental Impact Study (EIS) have confirmed that those concerns are indeed valid. I feel that these concerns may be shared not only by the residents of the 22 homes that are within 1 mile of the plant, but also by some Mattoon residents, particularly parents of children who attend Riddle School.

A closer look at the FutureGen Environmental Impact Study reveals the FutureGen plant to be a potentially unfriendly neighbor—loud, smelly, and dangerous.

I would like to share some pertinent sections of the Environmental Impact Study.

#2

Section 4.17-20 states, "Toxic impacts would be dominated by releases of H<sub>2</sub>S and SO<sub>2</sub> from the Claus process unit. The resulting plumes could extend from .3 to 1.4 mi. from the point of release. There are 22 family residences or farm home sites and one elementary school within the plume release radius."

The EIS reveals that an explosion occurring at the FutureGen plant would cause 143 people to experience "irreversible adverse effects," from SO<sub>2</sub> with 4 life threatening, and 19 "irreversible adverse effects from H<sub>2</sub>S, 10 life threatening," (Table 4.17-17-Effects to the public from explosion at the FG plant).

#3

Virtually every newspaper story about FutureGen uses the phrase "near zero emissions" to describe the plant. FG would pump 1.1 million tons of CO<sub>2</sub> in to the ground per year. Additionally the plant will produce air emissions that are described in table 4.2-1. On an annual basis FutureGen would emit 543 tons per year of sulfur oxides, that number decreasing as fewer start-ups are performed. All other air pollutant measurements stay relatively constant. These other air pollutants include: nitrogen oxides 750 tons/yr., particulate matter 111 tons/yr., carbon monoxide 611 tons/yr., volatile organic compounds 30 tons/yr., mercury .011 tons/yr..

#4

FutureGen will be burning five 100 car trainloads of coal per week-perhaps it's all perspective, but it seems these levels are a far cry from zero.

#5

The EIS states that "because emissions of some criteria pollutants are projected to exceed 100 tons per year, (even with less than 3 restarts per year) the FutureGen Project would be classified as a major source under Clean Air regulations."

#6

Page 4.2-14 indicates the area around the plant would be subject to acid rains.

**M4. Daily, Bruce**

#7

Page 4.2-14 also states, "Operation of the FutureGen Project may cause noticeable odors. The chemical components that cause odors are hydrogen sulfide and ammonia."

#8

This phrase is in section 4.17.4 regarding risk assessment of CO2 sequestration: "The approach to risk analysis for CO2 sequestration is still evolving."

#9

Page 3-22 is about noise from the plant. "Pneumatic or electric rail car shakers could generate noise levels of up to 118 dba. If the shaker is used on every rail car, the shaker would be used an estimated 253-428 times per week." 118 dba is about the same noise level as a jet takeoff. This would be in addition to the noise of the trains themselves.

#10

The agricultural property outside the city limits has been rezoned by the city of Mattoon. I believe this does not accomplish what zoning should. A good zoning plan promotes orderly development, with industries grouped. It does not hopscotch a prime agricultural/suburban area. Apparently at some point the State of Illinois would have agreed. Page 4.11-19 reads, "The proposed Mattoon Power Plant sites a LESA score of 255 points exceeds the 225 point threshold for lands that under the Illinois LESA system should be reevaluated so that the site could be returned for agricultural use."

I also believe a good zoning plan should protect the residents of a neighborhood from nuisances, danger, and the degradation of their enjoyment of their property and the lowering of their property value.

#11

The FutureGen Project is an experiment. I believe it is an experiment that should be conducted where the fewest people will be impacted by its possible negative consequences.

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#### M4. Daily, Bruce

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- Response to Comment #1:** Potential noise effects are discussed in the draft EIS for Mattoon in Section 4.14. Aesthetics and Human Health, Safety and Accidents are discussed in Sections 4.12 and 4.17, respectively. Although the FutureGen plant is an industrial facility with issues that may concern the nearby population, every effort will be made to minimize impacts as the site selection is made and final plant design work proceeds. Also, the Record of Decision may require the Alliance to make commitments for or complete specific actions (such as mitigation for specific impacts) as a condition to receive the government funding.
- 
- Response to Comment #2:** The risk of an event is a combination of the event likelihood times the event consequences. The case referred to above is a rupture of the Claus unit, which was evaluated to show potential impacts of acts of terrorism or sabotage as required by recent court cases (see Section 4.17.5 of the EIS). This case does not represent normal operating conditions or small gas releases and is an unlikely event. The case resulting in potential effects to the largest number of people was for explosion of the Claus Unit at the plant, which would be a rare event, less likely to occur than other releases such as from the CO<sub>2</sub> pipeline or injection well. The number potentially experiencing irreversible effects by SO<sub>2</sub> was 143 out to a distance of 1.4 miles and life-threatening effects from SO<sub>2</sub> to a distance of 0.2 miles. The distance to which irreversible effects from H<sub>2</sub>S could be experienced was estimated as 0.5 miles and 0.4 miles to life-threatening effects. The Riddle Elementary School is outside the estimated area where irreversible adverse effects from SO<sub>2</sub> or H<sub>2</sub>S were estimated to occur if such an explosion should occur. The text in Section 4.17.3.2 has been revised as follows: "There are 22 family residences or farm home sites within the 1.4-mile (2.3-kilometer) plume release radius. The Riddle Elementary School would be outside this plume radius, situated approximately 1.75 miles (2.8 kilometers) from the assumed point of release."
- 
- Response to Comment #3:** The term "near-zero emissions" is used only in connection with the underlying purpose and need for the project and DOE acknowledges that the FutureGen Project, while still emitting very low pollutants compared to other coal-powered electric plants, would still be a major air pollution source as defined by the Clean Air Act, as stated in the Air Quality Sections (4.2; 5.2; 6.2; and 7.2).
- 
- Response to Comment #4:** The term "near-zero emissions" is used only in connection with the underlying purpose and need for the project and DOE acknowledges that the project, while still emitting very low pollutants compared to other coal-powered electric plants, would still be a major air pollution source as defined by the Clean Air Act, as stated in the Air Quality Sections (4.2; 5.2; 6.2; and 7.2).
- 
- Response to Comment #5:** Although the FutureGen Project would be a major source of air emission according to the Prevention of Significant Deterioration (PSD) regulations under the Clean Air Act, it would emit less emissions than state of the art conventional coal-fired power plants or existing coal-fueled IGCC power plants. *See Response to Comment #4 above.* Comment noted and will be included in the Administrative Record of the EIS.
- 
- Response to Comment #6:** As stated in the EIS, because the FutureGen Project power plant would emit NO<sub>x</sub>, SO<sub>2</sub>, and CO<sub>2</sub>, it would be subject to the Acid Rain regulations under the Clean Air Act. These regulations require continuous monitoring of these pollutants to ensure that regulatory allowances are not exceeded. Comment noted and will be included in the Administrative Record of the EIS.
-

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#### M4. Daily, Bruce

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- Response to Comment #7:** Hydrogen sulfide and ammonia are odorous chemicals; however, as is stated in the EIS, the odor would only be noticeable within a short distance of the proposed power plant site and would pose no health hazard to workers or the public. Comment noted and will be included in the Administrative Record of the EIS.
- 
- Response to Comment #8:** This sentence in its entirety and the context in which it was meant is provided in the EIS Section 4.17.4. While the approach may change as more CO<sub>2</sub> sequestration and CO<sub>2</sub>-EOR projects are implemented, there is adequate information on which to base the FutureGen Risk Assessment based on naturally occurring CO<sub>2</sub> releases and the substantial amount of information that exists on CO<sub>2</sub> enhanced oil recovery operations.
- 
- Response to Comment #9:** This statement is correct in that the noise generated by rail car shakers would be about the same noise level as a jet takeoff. However, since the FutureGen Project is in its early stages of design, it is not known if rail car shakers would be used during coal unloading operations. Text in Section 3.1.14 relating to noise from rail car shakers was included in the DEIS only to acknowledge that equipment source noise levels as high as 118 dBA may be generated if rail car shakers are used to loosen coal material from the walls of the rail cars during unloading. The predicted maximum noise level resulting from the operation of rail car shakers are based on equipment manufacturers' specification data. It assumes the noise and vibration source (e.g., rail car shaker) is in an open-air environment with no acoustical enclosures, sound damping devices, or walls. DOE did not evaluate the impacts of intermittent noise and vibrations that may be generated by rail car shakers if they are used. However, the noise and vibration associated with rail car shakers would be considered if they are included in the final design. Such an analysis would also include the noise dampening effect of any enclosures or sound deadening devices included in the design.
- 
- Response to Comment #10:** DOE cannot direct the City of Mattoon as to how to conduct their zoning practices. In Section 4.11.3.1, it is stated that prime farmland conversions are not prohibited and the Coles County Comprehensive Plan identifies the power plant site as suitable for potential economic (that is, non-agricultural) development.
- 
- Response to Comment #11:** One or more of the site selection criteria used in the Request for Site Proposals focused on the preference for sequestration sites that were not under high population areas. All four sites under consideration have low population densities overlying the proposed sequestration reservoirs. The primary reason for wanting a sparsely populated area was to have opportunities for monitoring and investigation activities, like monitoring wells and seismic surveys.
- The EIS examined health and safety risks associated with catastrophic power plant accidents (such as fires or explosions) and the resulting impacts to local populations. For these analyses, population density statistics were used. While such events would be unlikely to occur, the EIS provides a side-by-side comparison of the public health and safety impacts for each site under these scenarios.
-

**M5. Upchurch Group (Dwiggins, Mark)**

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

#1

**PUBLIC HEARING COMMENT CARD**

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2008

WHAT HAPPENS TO THE MERCURY THAT IS REMOVED  
THE COAL? PROCESSED AND SOLD?

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME MARK DWIGGINS ORGANIZATION MATTOON THE UPCHURCH  
ADDRESS 123 N-15<sup>TH</sup> ST. CITY CHATTANOOGA STATE IL ZIP 61938  
E-MAIL ADDRESS mdwiggins@upchurchgroup.com

**M5. Upchurch Group (Dwiggins, Mark)**

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**Response to Comment #1:**

The current conceptual design of the power plant includes activated carbon filters that should remove mercury with a high capture efficiency. The specific equipment and vendor of services have not yet been identified, so specific information is not available at this time on the handling of the spent carbon filter material and the ultimate fate of the mercury. It is expected that a service provider would periodically replace the spent carbon filter material with fresh filter material. The spent filter material would either be sent to a hazardous wastes landfill or would be processed to remove mercury and other captured materials. Mercury and other constituents captured by the carbon filters would not be stored, released, or disposed of on the FutureGen site nor sequestered with the CO<sub>2</sub>.

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M6. Gire, Jim

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

MATTOON

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

#1

Radioactive isotopes in coal - fly ash, slag, other  
waste byproducts

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME Jim Gire ORGANIZATION citizen  
ADDRESS 1625 Reynolds Drive CITY Charleston STATE IL ZIP 61920  
E-MAIL ADDRESS Girex4@consolidated.net

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**M6. Gire, Jim**

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**Response to Comment #1:**

Text has been revised in the Air Quality sections (4.2, 5.2, 6.2 and 7.2) as follows:

“Coal is largely composed of organic matter, but some trace elements in coal are naturally radioactive. These radioactive elements include uranium (U), thorium (Th), and their numerous decay products, including radium (Ra) and radon (Rn). During coal processing (e.g. gasification) most of the uranium, thorium and their decay products are released from the original coal matrix and are distributed between the gas phase and the ash product. Almost all radon gas present in feed coal is transferred to the gas phase. In contrast, less volatile elements such as thorium, uranium, and the majority of their decay products are almost entirely retained in the solid ash or slag.

The concentration of uranium and thorium in coal is low. Analyses of Eastern and Western coals show that in the majority of samples, concentrations of uranium and thorium fall in the range from slightly below 1 to 4 parts per million (ppm). Similar uranium and thorium concentrations are found in a variety of common rocks and soils. For example, average thorium concentration in the earth’s crust is approximately 10 ppm. Based on standards for hazardous pollutants, EPA determined that current levels of radionuclide emissions (both parent elements and various decay products) from coal-fired boilers represent a level of risk that protects the public health with an ample margin of safety. Therefore, since the FutureGen plant objective is to achieve near-zero emissions and will have greater particulate control, the risk from air emissions for the FutureGen plant is projected to be less than the plants represented in the EPA study.

The fate and transport of radionuclides in a coal combustion power plant is reasonably well understood, and most radionuclides (with the exception of radon, see below) will partition to the slag or ash. However, limited research to date has been conducted on gasification facilities. DOE sponsored testing and measurement of a number of trace substances, including radionuclides, at the Louisiana Gasification Technology Inc (LGTI) facility located within the Dow Chemical complex in Plaquemine, Louisiana. The objective was to characterize such emissions from an integrated gasification combined cycle power plant. Sampling and chemical analyses included samples from inlet streams (e.g. coal, makeup water, ambient air conditions) and outlet streams leaving the plant (e.g. slag, water, exhaust streams). Limited data indicates that radionuclides behave in a similar manner to combustion facilities but the available data is insufficient to draw significant conclusions. As mentioned previously, FutureGen will have extremely high particulate control compared to conventional coal plants, a requirement for reliable operation of combustion turbines. In addition, FutureGen will have advanced highly efficient control equipment for removal of other syngas contaminants including mercury, sulfur and CO<sub>2</sub> beyond those that were included in the LGTI facility. These additional emission control devices provide added locations where radionuclides may be trapped, resulting in substantially lower emissions compared to existing facilities that use conventional technologies.

Radon is a naturally occurring, inert gas that is formed from normal radioactive decay processes. Radon in the atmosphere comes largely from the natural release of radon from rock and soil formations close to the surface. Radon in coal will be present in the gas phase (e.g. gas bubbles within the coal). The source of the radon is from the decay over time of uranium 235 and 238 or thorium 232 that would have occurred in the coal seam. Some of the radon gas in the coal would be released during mining and coal preparation prior to

**M6. Gire, Jim**

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arriving at the FutureGen plant. The radon released during the gasification process would be present in the syngas product leaving the gasifier. Various syngas cleaning and conditioning processes will be included in the FutureGen plant, likely including water and solvent scrubbing processes as well as absorbent/adsorbent systems. Since radon is soluble in water it is possible that a significant portion of the radon will be transferred to the water stream. Some radon will likely pass through the various scrubbing operations and will be emitted through the stack gas. Technology is currently available and commercially used to remove radon from water (e.g. granular activated carbon, aeration processes) and waste water treatment facilities will be designed to provide suitable control of regulated pollutants.

DOE recognizes that radionuclides are present at detectable levels in coal throughout the U.S. While EPA has indicated that the risk of exposure from emissions from utilities is substantially lower than risks from background radiation, DOE acknowledges that there are research gaps related to the ultimate fate of radionuclides in advanced coal technologies. Characterization and monitoring of gaseous and solid effluents from the facility will be consistent with necessary requirements to ensure compliance with required permits. As a research facility aimed to provide the pathway of achieving coal-based energy generation with zero emissions, FutureGen is a likely candidate location for advancing the understanding of the ultimate fate of trace substances in coal including the ultimate fate of radionuclides.”

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**M7. Freeland, D.**

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

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#1

Since this is an experimental project, what guarantees do we have that it will not create difficult problems for the surrounding communities and citizens?

If problems do arise, can we be assured that Future-Gen will make every effort to correct the problems?

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME: Diane Freeland ORGANIZATION: Private Citizen  
ADDRESS: 109 Arbogate Dr. CITY: Mattoon STATE: IL ZIP: 61938  
E-MAIL ADDRESS: \_\_\_\_\_

**M7. Freeland, D.**

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**Response to Comment #1:**

The project should be sufficiently funded to take care of problems that arise, so that the local communities do not have to pay the costs. Both DOE and the FutureGen Alliance are looking at the possible accident scenarios that could occur and intend to use this information in designing and operating the facility more safely. The Alliance (as an incorporated legal entity) will be liable for damages that occur in connection with the power plant construction and operation during the co-funded period. The Alliance will continue to have liability as long as they own the facility. Under the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), both the Alliance and DOE could have responsibilities to pay for certain types of environmental clean-up costs (for toxic substances) for long after the project is finished, even if the facilities have been sold to and used by other parties. Regarding the sequestration part of the project, the same degree of liability exists for the responsible parties, except as modified by any legislation by the host state.

The State of Illinois has recently enacted a new law (Clean Coal FutureGen for Illinois Act, Public Act 095-0018) that shifts some liability from the Alliance to the State for damages arising from leakage of CO<sub>2</sub> from the subsurface facility. CERCLA does not apply to CO<sub>2</sub> sequestration. However, Underground Injection Control Program regulations and enforcement would apply to CO<sub>2</sub> sequestration to protect the quality of underground sources of drinking water.

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M8. Roytek, Phyllis Rita

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

MATTOON

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

#1

We have the land,  
We have the MANPOWER,  
We have the WATER,  
We have the electric,  
We have the coal,  
We have the INTEREST,  
We have the housing,  
We have the schools,  
We have the ENTHUSIASM,  
We need FutureGen in MATTOON

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME Phyllis Rita Roytek ORGANIZATION Homemaker  
ADDRESS 4 Western Ave. Hgts CITY MATTOON STATE IL ZIP 61938  
E-MAIL ADDRESS \_\_\_\_\_

**M8. Roytek, Phyllis Rita**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**M9. Mattoon Fire Department (Strader, Mitch)**

To The Future Gen Committee

My name is Mitch Strader and I am a Captain on the Mattoon Fire Dept. I want to thank you for considering Mattoon as a finalist host site for Future Gen and to encourage you to select us as the host site. I will not put down any of the other finalist sites, but I will take the time to try to sell Mattoon to you.

The Mattoon Fire Dept. is here to help you in any way we can. We are one of the best Fire Depts. in downstate IL and are staffed with some of the best trained firemen around. We train in house weekly and also at the University of IL Fire Institute and National Fire Academy. Several of our firefighters also teach and work at the Institute. We are aware that there are many hazards involved with building and running a coal fired power plant, and want to offer our assistance and expertise in making this facility the safest it can possibly be. We want your workers, the plant and the people of Mattoon to be as safe as they can be. We have three aerial fire trucks fully staffed 24/7 along with rescue, confined space and haz-mat trained personnel on staff. Our Fire Dept. is one of the largest and best staffed depts., per capita, in the State with 38 firefighters on staff.

Illinois is one of the leaders in the country with complying with federal mandates since 9-11. We have several MABAS Team members here in Mattoon and quick access to more manpower and specialized equipment whenever needed.

The Coles County Memorial Airport is one of the finest facilities of its kind around. We can accept most planes except the jumbo jets. The Mattoon Fire Dept. protects the Airport with full time fire protection. So, all of this makes it a much safer landing site for your incoming flights.

We have utmost belief that we can answer any needs that you will have. Mattoon is the best site to host this project, on many different levels, and look forward to working with you. We are here to serve you and the people of Mattoon with whatever needs, cares or concerns arise.

Capt. Mitch Strader  
Mattoon Fire Dept.

#1

**M9. Mattoon Fire Department (Strader, Mitch)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**M10. Crossroads Workforce Investment Board (Thompson, Kyle)**



July 9, 2007

Mr. Mark L. McKoy  
Environmental Manager  
US Department of Energy  
National Energy  
Technology Laboratory  
P.O. Box 880  
Morgantown, WV 26507

Dear Mr. McKoy:

As a resident living in East Central Illinois, it is with strong conviction that I support construction of the FutureGen site in Mattoon. As an employee of Crossroads Workforce Investment Board, located in Mattoon, with interests in the development of a more skilled workforce I offer my interest and excitement about the potential growth and opportunity that a FutureGen site will bring to this area.

Sincerely,

A handwritten signature in black ink that reads "Kyle Thompson". The signature is written in a cursive, slightly slanted style.

Kyle Thompson  
Mattoon, IL 61938

#1

**M10. Crossroads Workforce Investment Board (Thompson, Kyle)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**M11. U.S. Representative Timothy Johnson (Bloomer, Phil)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

18 PHIL BLOOMER: Good evening. Tim can't be here  
19 tonight. He'd much rather be here than where he is, which  
20 is in Washington, D.C. But this matters a great deal to  
21 him, so he asked me to come instead.

22 I was looking through the file on this project  
23 today. And I noticed that he'd been writing letters  
24 advocating for this since 2002. So it's been close to his

0027

1 heart for a long time. And it's good for Mattoon. It's  
2 good for this district. It's good for the nation and the  
3 environment for a lot of reasons. And the state folks here  
4 and the people from Mattoon have put all of those reasons  
5 down in voluminous and arcane and esoteric detail.

6 But one of the things Tim talks about a lot is that  
7 there are less quantifiable reasons for bringing a project  
8 such as this here. And that has to do with the nature of  
9 the people who live and work here. There is a level of  
10 integrity and a work ethic that is part of our culture of  
11 the Midwest in Central Illinois. We're pretty proud of  
12 it. And we need to underscore that and tell these people  
13 that we're the best place for it to be.

14 So know that Tim Johnson is working on your behalf  
15 and let's put our best foot forward. I won't take any more  
16 of your time. This meeting this evening is for you to  
17 express your opinions not for public officials like me.  
18 They've all heard from people like me.

19 Thank you.

#1

**M11. U.S. Representative Timothy Johnson (Bloomer, Phil)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**M12. Illinois Department of Commerce and Economic Opportunity (Lavin, Jack)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

0028 24 JACK LAVIN: Thank you, Mark.

1 My name is Jack Lavin. I'm the Director of the  
2 Illinois Department of Commerce and Economic Opportunity.  
3 I am Governor Rod Blagojevich's point person on the  
4 FutureGen Project. And on behalf of Governor Rod  
5 Blagojevich, it's my pleasure to welcome, back to Illinois,  
6 the US Department of Energy officials, Mark McKoy and  
7 Tom Sarkus and the FutureGen Industrial Alliance, Mike Mudd  
8 and Jerry Oliver, to Illinois for another round of public  
9 hearing which are critical next step for this important  
10 selection process.

11 We have been actively engaged in this process for  
12 more than 4 years. And, as you can see, there is a high  
13 level of energy, buzz, and excitement surrounding FutureGen  
14 and its impact on our state, the country, and the world.

15 My many thanks to Mayor Charlie White and  
16 Angela Griffin, President of Coles Together, as well as all  
17 of today's attendees for their continued participation and  
18 enthusiasm throughout the process.

19 This has truly been a partnership, from the  
20 beginning, with local, state, and federal government.  
21 You've heard representatives from Senator Durbin and Obama,  
22 Congressman Shimkus, Phil Bloomer with Congressman  
23 Johnson's office, Congressman Costello and all of the  
24 delegation in Washington, D.C. are very engaged in this

0029 1 project.

2 I also want to recognize our state legislators, State  
3 Senator Dale Righter, State Representative Chapin Rose,  
4 have been very active in Springfield advocating for this  
5 project. And I want to thank them.

6 I also want to recognize Bill Hoback, the Director of  
7 the Illinois Office of Coal Development at DCO and his team  
8 who have been the resident experts and advocates for  
9 FutureGen.

10 And as a former coal miner, Bill Hoback, no one  
11 better understands the importance of clean coal technology  
12 and the significance of FutureGen. And everything I've  
13 learned about coal is from Bill Hoback. So, Bill, thank  
14 you and your team for all the hard work that you've done in  
15 putting our application together and getting Mattoon and  
16 Tuscola into the final four.

17 I also want to recognize our partners in labor that  
18 are here. Alan Wentz, with the Lincoln Land Building and  
19 Trades. Evan Sink with the United Mine Workers. The  
20 AFL-CIO has been very supportive in working with us in  
21 Springfield. Phil Vanette of the Illinois Coal  
22 Association. University of Illinois. Southern Illinois  
23 University. Eastern Illinois University. It's really been  
24 a great partnership.

**M12. Illinois Department of Commerce and Economic Opportunity (Lavin, Jack)**

0030

1 And I say this. FutureGen is, indeed, the future of  
2 energy. And I'm here today to tell you that Illinois is  
3 ready for FutureGen.

4 I say this to the Department of Energy, the FutureGen  
5 Industrial Alliance, the people of the State of Illinois  
6 and the folks at Mattoon and Tuscola, the foundation is  
7 poured. The house is built. And the table is set. We  
8 reached this point with quiet confidence and high  
9 anticipation. And we have benefited from the input of  
10 people from throughout Illinois, including planners,  
11 elected officials, business leaders, farmers, laborers and  
12 some of the top scientific and engineering talent from  
13 anywhere in the world.

14 There may be no economic development project in the  
15 history of this state that approaches the scope of  
16 FutureGen. And the local communities here at East Central  
17 Illinois and the hard-working people who live in Coles and  
18 Douglas counties have met every challenge along the way.  
19 This region wants to show the world how to use coal  
20 cleanly, to capture and store CO-2.

21 We have worked creatively, cooperatively on solutions  
22 to complex problems and nurtured each other as valued  
23 partners in this endeavor which will pay dividends for  
24 decades to come.

0031

1 We have said all along that Illinois is the place for  
2 FutureGen, based on the merit of the these two sites,  
3 alone. And I feel more confident of that today than of any  
4 time in the past. Some of the best minds in the state have  
5 helped us in reaching this stage. We have had top to  
6 bottom cooperation from government and private sector; and  
7 we wouldn't be here today if we didn't have absolutely the  
8 best local partners possible in Angela Griffin and  
9 Brian Moody and their respective FutureGen teams.

10 As we head down the home stretch, I'd like to  
11 reiterate all the distinct advantages Illinois offers  
12 FutureGen, starting with our geology. Illinois is blessed  
13 with the geology to demonstrate this breakthrough  
14 technology as well and probably better than anywhere in the  
15 United States, including our competitors in Texas.

16 We have deep, thick, porous sandstone reservoirs and  
17 the safety margin of at least two cap rock seals, never  
18 before penetrated. Illinois, in addition, offers a  
19 platform from a geology standpoint that will maximize the  
20 transferability and the FutureGen technology to cites  
21 throughout the United States and the world.

22 We have been examining and documenting this potential  
23 with the help of top scientists in this region for more  
24 than 3 years.

#1

**M12. Illinois Department of Commerce and Economic Opportunity (Lavin, Jack)**

0032

1 From a water standpoint, both sites offer more than  
2 the ample water for FutureGen's needs and do so at a  
3 reasonable cost without negatively impacting current or  
4 future water supply in the region.  
5 Our location. Among other advantages, our sites are  
6 almost ideally situated in relation to the nation's major  
7 coal fields, saving the Alliance millions of dollars every  
8 year in rail costs as well as further minimizing the carbon  
9 profile of the project.  
10 Leadership. The project has garnered bipartisan  
11 support from elected Illinois leaders in Congress and in  
12 Springfield. And we, as a state, particularly under  
13 Governor Rod Blagojevich, have never lost faith in a long  
14 term potential for Illinois coal.  
15 We have the research capacity. We have leading coal  
16 research institutions supporting Illinois' bid for  
17 FutureGen, including Southern Illinois University in  
18 Carbondale and our partner state, Indiana's Purdue  
19 University. Two of the top coal research centers in the  
20 nation.  
21 And by the way, we do have the governor of Indiana's  
22 support. And we're working on and I think we have  
23 Kentucky's support. And we'll soon have other states'  
24 support.

#1 0033

1 And we have the University of Illinois, premier  
2 research university with the Number 4 Engineering Program  
3 in the country; and right in our own, right in our backyard  
4 here, a top state university at Eastern Illinois  
5 University.  
6 Illinois' investment package includes an unmatched  
7 \$17 million grant to the FutureGen Alliance. In addition,  
8 we have committed the Illinois State Geological Survey and  
9 some of the nation's top scientists in their field to  
10 oversee the long-term monitoring of CO-2 once it is  
11 captured and stored. In addition, we have low-interest  
12 loans through our Illinois Finance Authority and various  
13 tax credits through our Enterprise Zones.  
14 As I have emphasized, as I emphasized at the last  
15 round of FutureGen hearings, Illinois is a coal state, not  
16 an oil and gas state. We have demonstrated our belief in  
17 coal through investments of millions of dollars in the  
18 development and deployment of clean coal technology. We  
19 have, in the past several weeks, permitted the first two  
20 coal gasification projects to be advanced anywhere in  
21 America in the past 20 years. And we are very close to  
22 permitting and breaking ground on the gasification project  
23 in far northwestern Illinois that will make nitrogen  
24 fertilizer from coal and quite significantly begin

**M12. Illinois Department of Commerce and Economic Opportunity (Lavin, Jack)**

0034

#1

1 producing for US consumption the first low-sulfur, diesel  
2 motor fuel made from Illinois coal.  
3 The fundamentals for FutureGen are in place. Water,  
4 geology, location, economics, research, political  
5 leadership and community support with all of you here  
6 tonight.  
7 With science on our side and all of these strategic  
8 assets, we are confident that the world's cleanest coal  
9 plant will be built in our state and be successful.  
10 It is a marriage made in heaven. We're all here  
11 today because we share in this vision and we believe in the  
12 possibilities of this facility to change the way we look at  
13 energy production.  
14 And as I have said many times, FutureGen needs  
15 Illinois; and Illinois needs FutureGen.  
16 Thank you very much for all of you being here  
17 tonight.

**M12. Illinois Department of Commerce and Economic Opportunity (Lavin, Jack)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**M13. Illinois State House of Representatives (Rose, Chapin)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

0035

22 CHAPIN ROSE: Welcome. Welcome to Illinois.  
23 Welcome to chairmen and advisors. It was nice to talk to  
24 you earlier. Welcome to this wonderful school here in

1 Mattoon.

2 We are very excited to have you here this evening,  
3 and I know that Director Lavin is going to talk a lot about  
4 really the team effort that's gone into FutureGen  
5 Illinois.

6 I represent both sites in both locations; and  
7 unfortunately, this may be my only opportunity to address  
8 the crowd. Because we're due back at Springfield tomorrow  
9 through Saturday; so I may not be in Tuscola.

10 I want to take just this quick opportunity to  
11 highlight a few of the items that Jack talked about. The  
12 geology is here. The technology is here. And the coal is  
13 here. And I know Jack just did it much more eloquently  
14 than I can, but let's just take a look around East Central  
15 Illinois and look at what we have to offer.

16 We've got wonderful schools. We have wonderful  
17 health care opportunities. You have diversity. Lakeland  
18 College. Our new interim president from Lakeland is  
19 sitting back here, Scott Lensink is here tonight. You've  
20 got the University of Illinois to the north; and, of  
21 course, you've got Southern Illinois and their coal  
22 research center. All of these resources are at your  
23 disposal. And I will do everything I can to help make the  
24 state resources be at your disposal.

#1

0036

1 This, truly, has been a team effort. In my 5 years  
2 in Springfield, I've never quite seen anything like it.  
3 Having grown up a short ways from here in Charleston, a  
4 little over ten miles to the east, we've even got  
5 Charleston and Mattoon working together in a team  
6 partnership to bring FutureGen to East Central Illinois.

7 We are very excited to have you. I want to close,  
8 just briefly, by saying some quick thank yous, primarily,  
9 to Angela and Brian from Tuscola and Mattoon and  
10 Phil Hoback, Director Lavin, and Governor Rod Blagojevich.  
11 We are very excited to have you here.

12 The geology is here. The technology is here. The  
13 coal is here. We want FutureGen to be here in Illinois.

14 Thank you very much.

**M13. Illinois State House of Representatives (Rose, Chapin)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**M14. City of Sullivan (Short, Ann)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

18 ANN SHORT: Good evening. I want to welcome you  
19 all to Central Illinois, again. I am Ann Short. I'm the  
20 Mayor of Sullivan; and that's located just 15 miles down  
21 Illinois Route 121, right on the proposed site in Mattoon.  
22 And as mayor, I want to express to you support of the City  
23 Council and the citizens of Sullivan for the construction  
24 of FutureGen at that site.

0037

1 I'm also a member of the Sullivan Chamber and  
2 Economic Development Board, which also supports the  
3 construction of FutureGen here. Both these organizations  
4 feel that locating the site in Illinois would be a  
5 tremendous plus for Central Illinois.

6 However, locating it in Mattoon would be a great  
7 benefit for the Sullivan community. The Sullivan community  
8 can offer the employees of FutureGen, both in construction  
9 and long term, the opportunity for first-class recreation  
10 at our Lake Shelbyville. We can also offer cultural  
11 entertainment through our Little Theater on the Square,  
12 which is a professional equity theater who offers  
13 performances year-round. And we also have available  
14 housing opportunities in Sullivan and have a first-rate  
15 school system that can accommodate many new students.

16 The Sullivan community believes that there will be an  
17 economic opportunity for current businesses to expand and  
18 for the development of new businesses to serve the needs of  
19 the FutureGen operation. The Sullivan Chamber and Economic  
20 Development Board is working with our local businesses to  
21 determine what products and services we can provide for  
22 FutureGen and encouraging those businesses to be ready to  
23 step forward when the site is selected.

24 Again, we're thrilled that you have chosen these

0038

1 sites in Illinois; and we hope to see you return soon with  
2 a positive decision.

3 Thank you.

**M14. City of Sullivan (Short, Ann)**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**M15. Coles Together (Griffin, Angela)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

7                   ANGELA GRIFFIN: On behalf of Coles Together,  
8                   the City of Mattoon, again, welcome to everyone tonight.  
9                   Of course, it's always good to see the Mayor, the  
10                  Honorable Charlie White. Mayor, thank you for your  
11                  leadership on this important project. And it's important  
12                  to remember that John Inyart, the Mayor of Charleston and  
13                  Charleston City Council has provided important leadership  
14                  on the project, as well.

15                  As Mr. McKoy, explained, we're here tonight to take  
16                  comments on the Draft Environmental Impact Statement that's  
17                  been published. The Mattoon team has had an opportunity to  
18                  review the Environmental Impact Statement, and we have  
19                  found it to be extremely thorough in its analyses.

20                  The conclusions and the impacts reported appear to be  
21                  based on adequate documentation and supporting data. We  
22                  also found it to be consistent with the data that we  
23                  generated when we were doing our own research and testing  
24                  and providing information for the environmental impact

1                  volumes which were used in producing the Environmental  
2                  Impact Statement.

3                  But we're here tonight to hear your opinions of the  
4                  environmental impact statement. We encourage you to use  
5                  this opportunity to express your views and ask questions.  
6                  We're committed not only to the integrity of this project  
7                  but also to the integrity of this process, and your  
8                  participation tonight will help maintain both.

9                  Thank you for coming out, and thank you for your  
10                  support.

#1

0039

**M15. Coles Together (Griffin, Angela)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**M16. Metzger, Kent**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

14 KENT METZGER: Good evening. Thank you. My  
15 name is Kent Metzger, and I am a neighbor to FutureGen and  
16 also a supporter of FutureGen. So I want to, first, thank  
17 you for the opportunity to speak and give me an opportunity  
18 to review the report.

19 I have one comment on the report, and then I want to  
20 go into some other things and my thoughts on the, on  
21 FutureGen.

22 In the report, under the climate section, it said  
23 that all four sites subject to permanent drought and severe  
24 drought. I think there's an issue of magnitude of scale

#1 0040

1 there. What's a drought in Illinois is a wet season in  
2 Texas. And, when it comes to water and availability, I  
3 think Illinois has Texas hands down on water.

4 As you can see, we're kind of in a drought right now;  
5 and the corn is 6, 7 feet tall and starting to tassel. And  
6 if there was a drought in Texas right now, the sagebrush  
7 would be dead, so.

8 Also, I believe that Odessa, Texas, the evaporation  
9 rate is about three times what it is in Mattoon and  
10 Tuscola. And Jewett, Texas is about twice that. So, even  
11 when we get the rain, at least we can hang on to it here in  
12 Illinois.

13 I want to give you a couple perspectives as a  
14 neighbor. And not only am I a neighbor, but I'm also an  
15 engineer, have a couple of businesses here in town, one  
16 engineering firm, one contracting firm. My background is  
17 in mining and engineering. I've worked in the coal  
18 industry and been in the consulting business for 19 years  
19 now. So I've got a little bit of technical experience when  
20 it comes to these issues.

#2

21 But some of the issues that came up and I think are  
22 concerns as, as neighbors and as people in the community  
23 is, 1. What's this place going to look like? Esthetically,  
24 is it going to be a pleasing site?

**M16. Metzger, Kent**

0041

1 And I would hope -- and I throw this out there to  
2 everyone involved -- that since this is going to be a show  
3 place for technology, that it also be a show place that is  
4 esthetically pleasing to the community. If we're going to  
5 be bringing world travellers in to check this facility out,  
6 we want them to be impressed with your facility and our  
7 community, as well. We're going to do our best to make you  
8 proud of our town.

9 In reviewing the report, I noticed that there was  
10 going to be a 250-foot high stack. You know, in corn  
11 country that sounds like a pretty tall, tall stack. So I  
12 went around, and I tried to figure out what in the area is  
13 250 feet high.

14 A mile-and-a-half northwest of the site there's a  
15 grain elevator at Coles Station. And that elevator is  
16 about a hundred and eighty feet tall. I don't think a  
17 250-foot stack, a mile-and-a-half from a hundred eighty  
18 foot high grain elevator is really going to stand out, so.

19 And then as I drove around the area and if you go out  
20 in the parking lot here tonight on the way out and you look  
21 to the northwest, you can't even see that grain elevator.  
22 Because, even though we think we live in flat corn country,  
23 there is topography here and there are trees here. So,  
24 esthetically, I don't think that's going to be an issue. I

#2

0042

1 think people will become, it's going to become so common  
2 place seeing a stack that they'll be oblivious to it. I  
3 think probably most of the people that came in on 121  
4 didn't notice that grain elevator that is a hundred eighty  
5 feet tall. So I think that's the one issue that, that  
6 we'll just come to grips with and will get common place to  
7 see it.

8 Another issue is, I know people are going to be  
9 upset, we're taking crop production out and we're going to  
10 build a plant there. You know, one of the things we're  
11 going to replace that field with is a lake. And most  
12 people don't really mind looking at lakes. And it's going  
13 to be a good-sized lake. So, you know, probably 40 or 50  
14 acre region.

15 Another issue, esthetically, is high-tension  
16 transmission lines. I also challenge everybody in this  
17 room to name the number of high-tension transmission lines  
18 they saw on the way to the school tonight. And there are  
19 some within eyesight. If I looked out the window right  
20 now, I could see them. People don't notice these things.  
21 Esthetically, they're common place.

22 Another issue, noise. You know from the new journey  
23 point, there are a lot of ways to handle noise. And I'm  
24 sure that those will come into consideration with this

#3

**M16. Metzger, Kent**

0043

1 plant. If we're going to dig a 450 acre lake, we're going  
2 to have plenty of dirt to build berms to attenuate that  
3 noise.

4 And where I live, a-mile-and-a-quarter west of the  
5 property, I live in a wooded area. And I can say, without  
6 a doubt, that in the winter it's louder in my yard than it  
7 is in the summer. It's because there are trees there, and  
8 those trees block the noise. So we throw up a berm -- I  
9 think that sounds easy -- we put a berm in with the plants  
10 and trees. We're in control of the noise with natural  
11 features.

#3

12 In my experience working in the coal mines, I know  
13 there are different ways to handle coal, some are noisier  
14 than others. I hope that the methodology we use are the  
15 quietest methods possible. We don't have to clang cars  
16 together to dump them. They can be placed on a, and  
17 pivoted while they're all connected. You don't have that  
18 loud banging and this and that.

19 And we have a coal, we have a train track right  
20 there. And I feel my house rumble every once in a while.  
21 And that's going to continue. But you know it's going to  
22 continue whether this plant is there or not. So the  
23 benefits outweigh the problems with having more trains.

24 Another issue is site lighting and light pollution.

0044

1 We live in the country. We like living in the country.  
2 But there are ways, engineering ways, to control that light  
3 to avoid as much light pollution as possible to where it's  
4 minimum.

#4

5 Another issue is roads and traffic. You know, I  
6 touched on the train issue. We have trains. We'll have a  
7 few more trains, probably three trains a week. I think  
8 three trains a week is a good trade off for what we're  
9 going to get out of this plant.

10 And we're going to have trucks. And, during  
11 construction, we're going to have a lot of trucks. But, as  
12 I was looking around the area, the 200 East Road, which is  
13 the east property line of the property, it's an asphalt  
14 road. It's going to handle a lot of traffic. We're going  
15 to have a lot of dirt and dust from the road traffic.  
16 Obviously, we're going to have some dirt and dust during  
17 construction. That what water trucks are for. And that's  
18 the way construction sites work. So we can come to grips  
19 with that.

#5

20 And another issue is community safety. And they're  
21 going to be generating some chemicals there and some  
22 materials on-site which are potentially hazardous. But,  
23 again, we're used to being around those things. We take  
24 them for granted.

#6

**M16. Metzger, Kent**

0045

#6

1           This school is within 3/4 of a mile of at least three  
2 manufacturing facilities where they handle materials that  
3 could be harmful to us as citizens.  
4           There is also an anhydrous ammonia plant within a  
5 very short distance of that. One of the most dangerous  
6 chemicals in our area is anhydrous ammonia. And we're so  
7 used to it that we don't even take it into consideration a  
8 lot of times. If you speak with the fire fighters and they  
9 talk about dealing with chemical control in an accident,  
10 ammonia, ammonia is one of the biggest things they have to  
11 be concerned with.  
12           And, also, explosion. Everybody says it's going to  
13 blow it up. It's going to take out the school and this and  
14 that.  
15           The other, one of the most common explosion hazards  
16 in our area or in the world is grain dust explosion.  
17 Again, we're used to that. There are risks in everything  
18 we do, but I believe that FutureGen beyond payment and  
19 technology is also going to be faded as taking care of our  
20 area and the safety of our people.  
21           So, with that, thank you.

**M16. Metzger, Kent**

4 KENT METZGER: My name is Ken Metzger, again.  
5 And I didn't want to make any comments. But one thing  
6 that's come up, you know, to get this is, I think, if some  
7 of you could speak with Angela if they have any ideas. But  
8 part of this process is to come up with a way to get rid of  
9 some of these by-products. Because they're actually useful  
10 in other chemical processes and whatnot.

11 So, if any, this is a big group and a lot of minds  
12 out there, a lot of good minds out there, if you can think  
13 of something, a use for the CO-2 or the hydrogen or what  
14 not, I think that would be very helpful for them to put  
15 together a package to make a bigger presentation as to  
16 another thing we can provide for the team.

17 So, thank you.

#7

**M16. Metzger, Kent**

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**Response to Comment #1:** The National Environmental Policy Act (NEPA) requires federal agencies to evaluate the environmental impacts of proposed actions, so that they can make informed decisions. Public involvement is a key component of the NEPA process, so that agencies can solicit and address concerns from the public. The EIS addresses impacts to nearby residents (in terms of aesthetics, noise, and health and safety). DOE outlines those impacts which are considered unavoidable (such as the visual impacts of the power plant) and describes methods that can be taken during the design and operational phases of the project to minimize these impacts (see Tables S-16 and 3-13).

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**Response to Comment #2:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #3:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #4:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #5:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #6:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #7:** Comment noted and will be included in the Administrative Record of the EIS.

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**M17. Crossroads Workforce Investment Board (McShane, Jim)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

#1

7                    MARK MC SHANE: Thank you for this opportunity  
8                    to comment. The Crossroads Workforce Investment Board  
9                    happens to cover 14 counties which includes both  
10                   locations. And the board is very excited about the  
11                   opportunity that's here that we can see develop in our  
12                   area. We're concerned about having enough folks that are  
13                   trained in order to build this project. And, working with  
14                   the trades, we've supported some of what they're doing to  
15                   recruit. We're looking at the job potential and also the  
16                   income generation that this will help in our region.  
17                   And I really appreciate the leadership Jack Lavin has  
18                   had on the state end and the local team that has really put  
19                   a lot of work into this. And we want to be big supporters  
20                   of this. Our board supports this a hundred percent.  
21                   Thank you.

**M17. Crossroads Workforce Investment Board (McShane, Jim)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**M18. Illinois Coal Association (Gonet, Phil)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

1 PHIL GONET: Good evening. My name is  
2 Phil Gonet. I'm the President of the Illinois Coal  
3 Association.

4 On behalf of our industry, I enthusiastically welcome  
5 you to our state. We, in the coal industry, are very  
6 excited about this project. As you may know, you may not  
7 know, and I wanted to bring in a few facts that may not be  
8 covered in your Environmental Impact Statement, about  
9 coal.

10 We have a long history of safe and successful coal  
11 mining here in Illinois. The first commercial coal mining  
12 actually started in 1810 in Jackson County. And by the  
13 1880's, coal mining was well established and fueling the  
14 power needs of both Chicago and St. Louis.

15 The Illinois Coal Association, by the way, started in  
16 1878; so we have a long history here. But even more  
17 impressive than our history is the abundance of coal. And  
18 I'm sure you know that. But I'm not sure everyone in the  
19 audience knows that's here tonight.

20 We are known as the Saudi Arabia of coal. In fact,  
21 the energy content of our coal is greater than the energy  
22 content of the oil in Saudi Arabia and Kuwait combined. As  
23 you probably know from the Illinois State Geological  
24 Survey, our coal reserves, recoverable reserves are over

0050

#1

1 100 billion tons of coal.

2 And to put that in a perspective, one of the earliest  
3 speakers talked about how much capacity we have in the  
4 United States to store CO-2. To give you an example of how  
5 much coal we have in Illinois, our country used 1.1 billion  
6 tons of coal last year. So we, in Illinois have enough  
7 coal to power this country for the next 100 years. So this  
8 is an abundance of coal here in Illinois you find nowhere  
9 else in the country. One other state, Montana, which is  
10 not in the running for this project, actually does have  
11 more coal than us in Illinois.

12 So this project is important to Illinois. It's  
13 important to the economy of the United States. That's one  
14 thing that hasn't come up tonight, the economic value of  
15 energy to this country. 52 percent of our energy in the  
16 United States, right now, comes from coal. And we need to  
17 find a way to burn that coal more cleanly and more  
18 environmentally friendly. And this project will do this.

19 So, to mirror the slogan that the Department of  
20 Commerce and Economic Opportunity has come up with:

21 The state needs FutureGen. The country needs  
22 FutureGen. In fact, the world needs FutureGen. But  
23 FutureGen needs Illinois.

0051

24 So we welcome you here, and we hope to have you

1 back. Thank you.

**M18. Illinois Coal Association (Gonet, Phil)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**M19. International Brotherhood of Electrical Workers Local 146 (Taylor, John)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

15 JOHN TAYLOR: My name is John Taylor. I'm a  
16 lifelong resident of Mattoon. As a matter of fact, I just  
17 live 7 blocks straight down Western Avenue. I've been  
18 there for 35 years.

19 I represent the International Brotherhood of  
20 Electrical Workers Local 146 out of Decatur. I would like  
21 to assure the FutureGen Alliance gentlemen and the  
22 Department of Energy that, if you so elect to use the  
23 Mattoon site, which we hope that you do, we have a highly  
24 qualified, skilled labor source for electrical workers.

0053

1 Our local union has built a 2-unit power plant in Coffeen,  
2 Illinois, for Ameren CIPS approximately 40 years ago.

3 We also built a 2-unit fossil plant at Kincaid,  
4 Illinois, for Commonwealth Edison. That was done in the  
5 60's and 70's. And then, low and behold, the new  
6 technology caught up with us too. We built a single-unit  
7 nuclear plant at Clinton, Illinois. And we have 650  
8 electricians just champing at the bit to come in and do  
9 this work for you.

10 And I kept waiting for someone from the building and  
11 trades to stand up here and speak representing organized  
12 labor. And, if there's anyone in the crowd, they've waited  
13 me out. So, I guess I ended up with the duty.

14 But we would welcome you. We're looking forward to  
15 working with you. And anything we can do, at all, to  
16 assist, we will do that. Give you a good job, efficient  
17 job and a quick job.

18 And thank you for your comments.

#1

**M19. International Brotherhood of Electrical Workers Local 146 (Taylor, John)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**M20. Bell, Jim**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

#1

0058

13 JIM BELL: My name is Jim Bell. I am a neighbor  
14 to the proposed FutureGen site. And my views are contrary  
15 to most all that have been stated here this evening. You  
16 know, I'm one of these guys, it's not in my backyard, you  
17 know. Mr. Metzger, back here, is a neighbor of mine. And,  
18 you know, he makes a lot of points that possibly could kind  
19 of gloss over some of the problems with a facility like  
20 this, if that be done. And I have no assurance that those  
21 things will be done at this point.

22 Nearly everyone that commented up here had something  
23 to gain this evening. I have a lot of neighbors that, you  
24 know, they don't really want to speak out against the

1 community. And I don't really want to either, but we do  
2 have concerns out there as neighbors, for health and  
3 esthetics and just our daily living, you know. And I guess  
4 that's about all I have to say. So, thank you.

5 (Applause.)

**M20. Bell, Jim**

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**Response to Comment #1:**

The National Environmental Policy Act (NEPA) requires federal agencies to evaluate the environmental impacts of proposed actions, so that they can make informed decisions. Public involvement is a key component of the NEPA process, so that agencies can solicit and address concerns from the public. The EIS addresses impacts to nearby residents (in terms of aesthetics, noise, and health and safety). DOE outlines those impacts which are considered unavoidable (such as the visual impacts of the power plant) and describes methods that can be taken during the design and operational phases of the project to minimize these impacts (see Tables S-16 and 3-13).

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**M21. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8)*

Description of reservoir in process water section.

#1

“If a larger reservoir were constructed (approximately 40 acres [16.2 hectares] in size) with a capacity of 200 million gallons (757 million liters), the Mattoon WWTP effluent would be sufficient by itself to supply the proposed plant’s process water.”

This calculation was based on a minimum process water supply requirement of 3.6MGD. With the increased process water requirement of 4.3MGD, this calculation was redone and resulted in a reservoir size of 310 million gallons and approximately 44 acres. If Charleston WWTP effluent is added, the reservoir may be reduced to 25.5 Acres and 114 million gallons.

Surface water impacts

#2

Cassell and Kickapoo creek flows reduced by process water withdrawals (3,000 gallons per minute [gpm] [11,356 liters per minute (lpm)]) from Mattoon and possibly Charleston wastewater treatment plants.

This statement may imply that process water is being withdrawn from these streams. Reword as follows to avoid this misconception: "Cassell and Kickapoo creek flows reduced by diversion of effluent discharge water from Mattoon and possibly Charleston wastewater treatment plants to provide process water (3000 gallons per minute [gpm][11,356 liters per minute (lpm)]).

Impacted Wetlands

#3

“Up to 29.2 acres (11.8 hectares) of wetlands could be impacted along the transmission line and process water corridors.”

Since the number of impacted wetlands at Mattoon varies significantly with the choice of transmission corridors and water supply options, we suggest appending, “,depending on the options chosen.” to this statement.

Wetlands

#4

“The appropriate type and ratio of wetland mitigation would be determined through the Section 404 permitting process.”

The following paragraph from Volume II, Page 4.8-1:

“IDNR has the authority to regulate wetlands under the Interagency Wetland Policy Act of 1989 (IWPA) for projects that receive funding or technical assistance from the state. The IWPA defines federal money that passes through a state agency as state funding. Isolated, farmed, and U.S. Army Corps of Engineers (USACE) jurisdictional wetlands are state jurisdictional wetlands under the IWPA. IDNR accepts the procedures outlined in the 1987 USACE Wetland Delineation Manual for delineating wetlands. The IWPA requires mitigation for all adverse impacts regardless of the size of the impacted area or the wetland quality.”

**M21. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8)*

#4 | Should be also be inserted after the first full paragraph on Page 3-11 in Volume 1.

Biological Resources

#5 | "The proposed Mattoon Power Plant and Sequestration Site has potential habitat for the federally-listed Eastern sand darter and the Indiana bat. Habitats for the state-listed Kirtland's snake and the federally-listed Eastern sand darter have been found in the vicinity of the process water supply line corridor.

The list reference for the Eastern Sand Darter is incorrect. It is state-listed not federally-listed. Please correct as follows: "The proposed Mattoon Power Plant and Sequestration Site has potential habitat for the state-listed Eastern Sand Darter and the federally-listed Indiana Bat. Habitats for the state-listed Kirtland's Snake and Eastern Sand Darter have been found in the vicinity of the process water supply line corridor."

Mattoon process water pipeline length

#6 | "The Mattoon process water pipelines would traverse up to 14.3 miles (23 kilometers)."  
The pipeline from the Mattoon WWTP would traverse only 7.5 miles. Adding the optional pipeline to deliver water from the Charleston WWTP would increase this to 14.3 miles. We suggest changing this statement to read, "The Mattoon process water pipelines would traverse 7.5 miles (12 kilometers) or 14.3 miles (23 kilometers) depending on the option chosen."

Description of surface water crossings by utility corridors

#7 | "Construction of the proposed water supply pipeline at the Mattoon Site would cross five surface waters,"  
Only two streams or drainage ditches will be crossed by the Mattoon-only water supply line and 138 kV connection options for the Mattoon project. An additional three crossings would be encountered if the Charleston supplemental water supply pipeline was utilized. We suggest changing this statement to read, "Construction of the proposed water supply pipeline at the Mattoon Site would cross two to five surface waters depending on the options chosen."

Mattoon surface water impacts

#8 | **Operations:**  
Streams affected: Cassell and Kickapoo creek flows reduced by process water withdrawals (3,000 gallons per minute [gpm] [11,356 liters per minute (lpm)]) from Mattoon and possibly Charleston wastewater treatment plants.

**M21. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8)*

#8 For the Mattoon site, the proposed FutureGen plant will use wastewater that Mattoon discharges to Kickapoo Creek and that Charleston discharges to Cassell Creek. Cassell Creek flows into the Kickapoo Creek, which flows into the Embarras River downstream of Lake Charleston. The FutureGen plant requires 3,000 gpm of wastewater, which represents 62% of the average effluent discharged from both wastewater treatment plants. This water will be impounded in a reservoir to be built at the Mattoon site. This reservoir should provide flexibility to mitigate any problems associated with low flows in Cassell and Kickapoo Creeks. In addition, the IDNR has provided its opinion that diverting these effluents would positively impact these streams, allowing them to return to a more natural state.

Existing Air Quality

#9 “The nearest non-attainment and maintenance areas are located in Indianapolis, Indiana (146 miles [235.0 kilometers] away) and Vigo County, Indiana (46 miles [74.0 kilometers] away).”

Information originally provided by IEPA for Section 4.2 indicates that the closest NAA to Mattoon, IL is St. Louis, MO-IL which is approximately 72.3 miles from the proposed site. The closest maintenance area (MA) and distance indicated in the EIS is correct for Vigo County, IN.

Nearby residences

#10 “There are two residences located adjacent to, two residences located within 0.25 mile (0.5 kilometer) of, and 20 additional residences located within 1 mile.”

The local economic development authority, Coles Together, has options on several of the residential properties that are closest to the power plant site and is negotiating others. If FutureGen is located in Mattoon these properties will be purchased and vacated thus reducing the population with the greatest impacts and/or exposure risks.

Stream quality

#11 “Cassell Creek is not listed as impaired (IEPA, 2006).”

This is wrong. While Cassell Creek is not included on the 303(d) list, it is listed as not supporting its Aquatic Life Use due to a recent fish kill.

Zoning

#12 “Because the proposed Mattoon Power Plant Site lies 1 mile (1.6 kilometers) west of the Mattoon city limits, it lies within the extra-territorial area where the City of Mattoon Zoning Ordinance may be applied, but the area is currently not zoned.”

Please replace the above sentence with the following:

“On May 15, 2007 the City rezoned the portion of FutureGen proposed site that lies within the 1.5 mile extra-territorial area from the existing rural-suburban use to industrial use.”

**M21. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8)*

Right-of-ways

“North of the Mattoon city limits, the corridor lies on private property for 2 miles (3.2 kilometers). Three property owners own the 2 miles (3.2 kilometers) of ROW, which would require new easements in an area that appears to be primarily farm land. Option contracts have been secured to purchase the three necessary easements. For the last 3.5 miles (5.6 kilometers) of the corridor, the pipeline would be placed on the public ROW of CR 900N. The road ROW is 60 feet (18 meters) wide, with the roadway surface averaging 20 feet (6 meters) wide.”

**#13** Please replace the above sentences with the following:

“North and west of the Mattoon city limits, the corridor lies on private property for 5.5 (8.9 kilometers) miles. Three property owners own the first 2 miles (3.2 kilometers) of ROW, which would require new easements in an area that appears to be primarily farm land. For the last 3.5 miles (5.6 kilometers) of the corridor, the pipeline would be placed on the ROW of CR 900N. The ROW is proscribed rather than dedicated, and therefore new easements will be required from the current land owner. Option contracts have been secured to purchase two of the three necessary easements from the property owners in the first two miles. Negotiations continue for the remaining easements.”

Transportation Corridors

“Assuming the existing road ROWs are of sufficient size to accommodate any new construction, there would be no change to the land use of the transportation corridors.”

**#14** Please replace the above sentence with the following:

“The only change to the existing road ROW would be at County Highway 13 and the intersection of State Route 121. The intersection would be rebuilt so that CH13 would approach SR 121 at right angles. A turn lane would be constructed on SR 121.”

**M21. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8)*

Sales Tax Collections

“Coles County collected \$45 million in property taxes in 2003 and \$9.2 million in sales taxes in 2004 (FG Alliance, 2006a). The counties located within the ROI each collected an average of \$38.9 million in sales taxes (FG Alliance, 2006a).”

The figure for average sales tax collections is incorrect - \$38.9M is far too high. Our analysis of sales tax data for this region gives approximately \$3.6M. See the spreadsheet below:

**Sales Tax Liability for Calendar year 2004- collected 02/04 through 01/05**

*(source- Illinois Department of Revenue report to Tuscola City government)*

#15

	State Sales Tax	Municipal Tax	Home Rule Tax	Non-Home Rule Tax	County Tax	Countywide sales tax	County ROT for Sublic	Total Sales Tax	Sales tax less State portion
	<i>(5% of State's 6.25 sales tax rate)</i>	<i>(1% of State's 6.25 sales tax rate)</i>	<i>(locally imposed tax rate)</i>	<i>(locally imposed tax rate)</i>	<i>(1% of State's 6.25 sales tax rate)</i>	<i>(.25% of State's 6.25 sales tax rate)</i>	<i>(locally imposed tax rate)</i>		
Douglas	\$9,058,419	\$1,787,760	\$224,558	\$87,125	\$283,216	\$454,763		\$1,895,841	\$2,837,422
Coles	\$25,174,371	\$5,772,686	\$0	\$1,875,570	\$272,997	\$1,258,449		\$34,354,073	\$9,179,702
Cumberland	\$1,595,858	\$350,739	\$0	\$0	\$23,998	\$79,745		\$2,050,340	\$454,482
Moultrie	\$4,523,272	\$782,826	\$0	\$0	\$286,699	\$226,040		\$5,818,837	\$1,295,565
Champaign	\$90,256,640	\$20,837,964	\$12,330,091	\$0	\$946,226	\$4,511,204	\$3,879,529	\$132,761,654	\$42,505,014
Edgar	\$5,778,968	\$1,326,920	\$0	\$352,006	\$135,823	\$288,927		\$7,882,644	\$2,103,676
Macon	\$55,307,269	\$13,017,177	\$9,635,081	\$937,188	\$303,655	\$2,764,646	\$2,231,963	\$84,196,979	\$28,889,710
Piatt	\$3,987,042	\$847,603	\$0	\$0	\$76,096	\$199,185		\$5,109,926	\$1,122,884
Clark	\$4,677,610	\$959,397	\$0	\$0	\$153,890	\$233,705	\$693,614	\$6,718,216	\$2,040,606
Effingham	\$28,798,083	\$6,352,176	\$0	\$0	\$297,389	\$1,439,581		\$36,887,229	\$8,089,146
Shelby	\$4,658,393	\$953,803	\$0	\$0	\$156,812	\$232,897		\$6,001,905	\$1,343,512

Tuscola ROI	\$195,681,839	\$44,723,675	\$22,189,730	\$3,251,889	\$2,328,710	\$9,782,959	\$6,111,492	\$284,070,294	<b>\$88,388,455</b>
Mattoon ROI	\$78,486,006	\$16,959,387	\$224,558	\$1,962,695	\$1,475,001	\$3,925,180	\$693,614	\$103,726,441	<b>\$25,240,435</b>

---

**M21. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8)*

---

**Response to Comment #1:** The 40 acres is described as “approximate”. With a planned capacity of 200 million gallons, this still provides 46 days of supply at 4.3 mgd. Because there is more than adequate land area to accommodate a larger reservoir within the planned 200 acre disturbance footprint at the power plant site a larger reservoir could be accommodated. This information will be taken into account as the planning process progresses, therefore and the final site design may dictate a reservoir of a different size that would be analyzed in a Supplement Analysis; therefore, the text will remain as presented in the EIS.

---

**Response to Comment #2:** Tables S-12 and 3-3 have been revised as follows: “Streams affected: Cassell and Kickapoo creek flows reduced by diversion of effluent discharge water from Mattoon and possibly Charleston wastewater treatment plants to provide process water (3,000 gallons per minute [gpm] [11,356 liter per minute [lpm)].”

---

**Response to Comment #3:** In Section 3.8.1; Table S-12; and Table 3-13; Summary Comparisons of Impacts, Wetlands and Floodplains, it states that "up to 29.2 acres" could be impacted. DOE decided to show the upper bound for all impacts for all four sites because at this stage of the project it has not been decided what corridors or options would be selected, therefore, the text will remain as presented in the EIS.

---

**Response to Comment #4:** The following paragraph has been added to Section 3.1.8: “IDNR has the authority to regulate wetlands under the Interagency Wetland Policy Act of 1989 (IWPA) for projects that receive funding or technical assistance from the state. The IWPA defines federal money that passes through a state agency as state funding. Isolated, farmed, and U.S. Army Corps of Engineers (USACE) jurisdictional wetlands are state jurisdictional wetlands under the IWPA. IDNR accepts the procedures outlined in the 1987 USACE Wetland Delineation Manual for delineating wetlands. The IWPA requires mitigation for all adverse impacts regardless of the size of the impacted area or the wetland quality.”

---

**Response to Comment #5:** The text has been revised as requested. In addition, Section 3.1.9 was revised as follows: "If listed species were discovered to occur..."

---

**Response to Comment #6:** DOE decided to show the upper bound for all impacts for all four sites because at this stage of the project it has not been decided what corridors or options would be selected, thus the text remains as presented in the EIS.

---

**Response to Comment #7:** Section 3.1.7 was revised to state that the pipeline would cross "up to five surface waters". It was decided to show upper bounds for all impacts for all four sites because at this stage of the project it has not been decided what corridors or options would be selected. This is consistent with the upper bound analysis used elsewhere in the EIS where different options were proposed for the same alternative.

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**M21. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8)*

---

**Response to Comment #8:** Text in Tables S-12 and 3-3 was revised as follows: “Streams affected: Cassell and Kickapoo creek flows reduced by diversion of effluent discharge water from Mattoon and possibly Charleston wastewater treatment plants to provide process water (3,000 gallons per minute [gpm] [11,356 liters per minute [lpm]). Proposed reservoir would provide flexibility to mitigate downstream flow impacts.” Although it is possible the storage of process water at the power plant may allow more effluent to be diverted to the streams during low flow conditions, there would be no regulatory or other impetus to do so. While the IDNR has provided a biological opinion on the future lower flow rates in the streams, in terms of surface water alone, it is accurate to simply state the flow would be reduced.

---

**Response to Comment #9:** The text in Section 4.2.2.1 has been revised as follows: “The nearest non-attainment and maintenance areas are located in St. Louis, MO-IL (72.3 miles [116.3 kilometers] away)....”

---

**Response to Comment #10:** This information will be taken into account as the planning process progresses and more specific residential property information is available. However, without information on which properties are optioned and which are currently in negotiations, DOE believes that it is appropriate to retain the numbers in the EIS in order to show the maximum effect that the FutureGen facility could have on the site.

---

**Response to Comment #11:** The text in Section 4.7.2 has been revised to match Table 4.7-1 “Cassell Creek is listed as impaired due to fish kills” (IEPA, 2006). Section 4.7.2 and Section 4.7.3 were also revised accordingly.

---

**Response to Comment #12:** Paragraph regarding extra-territorial area has been deleted in Section 4.11.3.1 and the following sentence was added at end of previous paragraph: “In addition, the May 15, 2007, rezoning of the 1.5-mile (2.4-kilometer) extra-territorial area to industrial use allows the proposed Power Plant site to be compatible with the zoning ordinance.”

---

**Response to Comment #13:** The text in Section 4.15.3.1 has been revised as follows: “North and west of the Mattoon city limits, the corridor lies on private property for 5.5 (8.9 kilometers) miles. Three property owners own the first 2 miles (3.2 kilometers) of ROW, which would require new easements in an area that appears to be primarily farm land. For the last 3.5 miles (5.6 kilometers) of the corridor, the pipeline would be placed on the ROW of CR 900N. The ROW is proscribed rather than dedicated, and therefore new easements will be required from the current land owner. Option contracts have been secured to purchase two of the three necessary easements from the property owners in the first two miles. Negotiations continue for the remaining easements.”

---

**Response to Comment #14:** The text in Section 4.11.3.2 has been revised as follows: “The only change to the existing ROW would be at CH 13 and the intersection of SR 121. The intersection would be rebuilt so that CH 13 would approach SR 121 at right angles. A turn lane would be constructed on SR 121. The Illinois Department of Transportation would be responsible for the proposed construction and related cost.”

---

**M21. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**  
*(The complete comment document submitted to DOE is shown in G8)*

---

**Response to Comment #15:**

DOE agrees the average county sales tax cited in the EIS for the Mattoon and Tuscola socioeconomics ROIs were high. The figures have been corrected. However, DOE believes the figures suggested in the comment were low. The revised figures reflect the average ROI county data as derived from the Mattoon and Tuscola EIVs.

The text has been revised in Section 4.19.2.2 from \$38.9 million to approximately \$10 million and Section 5.19.2.2 from \$11.3 million to approximately \$9 million.

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<b>Commentor (Alphabetical)</b>	<b>Commentor #</b>
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**T1. Cabot Corporation (Burnes, Kennett)**



**Kennett F. Burnes**  
Chairman, President and  
Chief Executive Officer

June 26, 2007

Mr. Mark McKoy  
NEPA Document Manager  
U.S. Department of Energy, National Technology Laboratory  
P.O. Box 880  
Morgantown, WV 26507-0880

Dear Mr. McKoy:

Cabot Corporation is pleased to offer this letter of support for the City of Tuscola in its bid to attract the FutureGen Initiative to Eastern Illinois.

Cabot has been an active member of the Tuscola business community for more than 50 years. During that time, Tuscola has provided a business climate, quality-of-life, and community values that have greatly contributed to the successful operation of our manufacturing facility. Our business and our employees have been able to succeed and thrive in Tuscola.

Tuscola also provides a well-developed infrastructure that allows convenient access to major cities via railways, highways and airports. The city's commitment to the development and maintenance of this infrastructure is essential for the transport of raw materials and machinery we require, and are necessary for the export of Cabot products worldwide. The city's well-maintained water and sewer systems, good schools, affordable housing, and parks and other recreational areas, contribute to a high standard of living for Cabot employees and their families. These and other amenities help Cabot to attract and retain the skilled labor force needed to maintain our competitive advantage.

If sited in Tuscola, The FutureGen Initiative can potentially provide an opportunity for the development of new electricity generation technology with positive environmental impacts that would benefit both residents and businesses. As one of the major employers in Tuscola area, Cabot looks forward to learning more about the FutureGen Initiative.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kennett F. Burnes'.

Kennett F. Burnes  
Chairman and CEO  
Cabot Corporation

Cabot Corporation | Two Seaport Lane | Suite 1300 | Boston, Massachusetts 02210-2019  
tel (617) 342 6200 | fax (617) 342 6209 | www.cabot-corp.com

#1

**T1. Cabot Corporation (Burnes, Kennett)**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

**T2. Tuscola Fire Department (Hettinger, Steve L.)**

**From:** Steve Hettinger [tfdchief@tuscola.org]

**Sent:** Monday, July 02, 2007 5:43 PM

**To:** FutureGen.EIS@netl.doe.gov

**Subject:** Comments, FutureGen Project

Dear Mr. McKoy:

My name is Steve Hettinger and I am the Chief of the Tuscola Fire Department. During the past months that we have been a finalist for FutureGen, numerous citizens in the Tuscola area have approached me. They have questioned whether TFD is prepared to handle emergencies at FutureGen, if it should come to our city. Part of their concern is that during the inevitable emergency, the environment, which of course includes them, may be impacted if TFD cannot handle the emergency. My answer has been yes, we are prepared and comfortable with our ability to meet the challenges of emergency response to FutureGen.

#1 For fifty years, the Tuscola Fire Department has partnered and collaborated with industry to handle their emergencies, and responded with them to emergencies in the area. Specifically, the industries to our west have been involved with processes not that different from FutureGen, and over the years, TFD has been successfully involved in mitigating many emergencies at those facilities. Additionally, those industries have offered training experience for TFD personnel at facilities like Texas A & M and Pueblo Colorado to insure that we are ready for their emergencies. Each year a number of TFD personnel take part in forty hours of training at these renowned training facilities, and many additional hours at the industrial facilities in Tuscola.

There have been challenges, but I believe we have met them, and industry has always been there to support us in doing so. If you ask them, I am confident that they will agree. I have been with TFD for thirty years, and have been a part of the development of emergency response to industry and emergency response operations. My Assistant Chief, George Wineland was the Fire Brigade and Safety Officer at one of the facilities to our west for thirty-five years. I believe we are ready to meet the challenge.

Thank you,  
Steve L. Hettinger  
Fire Chief  
Building/Electrical Inspector  
City of Tuscola  
214 N. Main  
Tuscola, IL 61953  
www.tuscola.org  
Office Phone: 217-253-2112  
Fax: 217-253-5026  
Cell: 217-369-2511

**T2. Tuscola Fire Department (Hettinger, Steve L.)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

T3. GE Service

# FutureGen Project

## Public Hearing

### Draft Environmental Impact Statement

Tuscola, Illinois

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

#### Comment Form on Draft EIS

(Please print clearly)

Must be received on or before July 16, 2007.

#1

THIS PROJECT WOULD BE AN ASSET TO  
THE AREA- WE SUPPORT IT 100% -

I would like to receive a copy of:

FINAL FutureGen EIS

Hard Copy

OR

CD/Summary

The Draft EIS is available via the internet at <http://www.eh.doe.gov/nepa/>.

**Comment forms may be mailed to:**

Mr. Mark L. McKoy  
NEPA Document Manager  
P.O. Box 880  
Morgantown, WV 26507-0880  
Attn: FutureGen Project EIS

**Comment forms may be faxed to:**

Mr. Mark L. McKoy  
(304) 285-4403 (Fax)

**Or sent by electronic mail to:**  
FutureGen.EIS@netl.doe.gov

MAIL TO: G.E. SERVICE  
P.O. Box 306  
URBANA, ILLINOIS 61803



June 2007

**T3. GE Service**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**T4. Landeck, Judy**

Dear Mr. McCoy

Our Sesquicentennial Celebration is now over and we are all very proud of the event. I wish all of you could have been here. We are now officially 150 years old! Last night at City Council we topped the celebration with a proclamation by Mayor Kleiss and a wonderful cake.

#1 | I am one of the co-authors of "Tuscola Strolling Through the Past." I hope you have seen a copy. I autographed one for Otis. He is one great guy - as you all are for all of your efforts. Tuscola would be a great sight for FutureGen - in fact the best sight. I trust you have heard and know all the reasons!

Hope to hear from you soon.  
Sincerely,

Judy Landeck

**T4. Landeck, Judy**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

**T5. Patterson, William**  
**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

TUSCOLA

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

I LIVE ON THE N.W. CORNER OF THE TUSCOLA SITE. I STILL HAVE CONCERNS WITH COAL DUST AND NOISE, EXCESSIVE TRAFFIC.

WE HEARD AT THE MEETING THAT THE CHEMICALS TO BE USED AT THE POWER PLANT WILL OR MAY CAUSE A LOW GROUND EOG. WILL IT CAUSE PITTING OR CORROSION ON METAL, AS DID CABOT & W.S.I. CHEMICALS. IN WHAT AMOUNTS WILL AMMONIA BE USED. WHAT ARE THE CHANCES OF CRACKED FOUNDATIONS DUE TO VIBERATIONS FROM UNLOADING COAL

#1

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME WILLIAM A. PATTERSON ORGANIZATION \_\_\_\_\_  
ADDRESS 751E CR 1050N CITY TUSCOLA STATE IL ZIP 61953  
E-MAIL ADDRESS WILLIAM.PATTERSON@NETCARE-IL.COM

---

## T5. Patterson, William

---

### Response to Comment #1:

The EIS addresses the point of noise associated with coal unloading at the Tuscola Site in Section 5.14.3.2. Noise is anticipated to be generated from unloading/loading activities such as the movement of containers, placement of coal feedstock on conveyor systems, and surficial contact of rail containers with other metallic equipment. Based on the estimated number of coal deliveries to the proposed power plant site, DOE predicted an hourly Leq of 69 dBA from unloading/loading activities at the rail yard using noise prediction equations provided in Table 5-6 of FTA's Noise and Vibration Assessment guidance document. This estimate assumes that the coal unloading facility would not be enclosed in a building. DOE anticipated little or no increase in the noise level at the three closest residences (SL-1 [the Patterson residence], SL-2, and SL-3) along CR 1050N because the coal unloading/loading area would likely be located near the southern boundary of the proposed site, which is approximately 0.5 mile from the closest residential receptors.

DOE did not evaluate the impacts of intermittent noise and vibrations that may be generated by rail car shakers if they are used to loosen coal material from the walls of the rail cars during unloading activity. The noise and vibration associated with rail car shakers would be considered if they are included in the final design.

It is not known at this time if the coal unloading facility would be enclosed in a building or not. As noted above, the EIS analysis assumes that it would not be enclosed. The particulate matter (PM) emissions estimated for the emissions envelope include dust from material handling including coal dust. As stated in Sections 4.2.3.2; 5.2.3.2; 6.2.3.2; and 7.2.3.2, PM emissions from coal unloading and handling are not expected to appreciably change air quality because emissions would be reduced by minimizing points of transfer of the material, enclosing conveyors and loading areas, and installing control devices, such as baghouses and wetting systems. The FutureGen Project is in the early stages of design and, although the major features of the project are known, the engineering design plans for the coal handling operation (i.e., equipment specifications) are still in the development phase.

It is anticipated that project-related traffic during construction and normal plant operations would cause ambient noise levels to increase at sensitive receptors located near the assigned transportation routes. As noted on the EIS summary Table S-12, noticeable traffic noise impacts (a 3 dBA or more change in the ambient noise level) were predicted to occur at receptors located along the CR 750E (up to 14 dBA) and CR 1050N (up to 7 dBA) roadway segments leading to the proposed power plant site. Noise mitigation measures, including evenly distributing project-related trips throughout the day, or scheduling more deliveries on rail, could be considered to limit the number of project-related trips, particularly heavy trucks, passing by these residential receptors during construction and normal plant operations. However, these potential mitigation measures would not be decided upon until a site is selected and the design is finalized.

#### **T5. Patterson, William**

##### **Response to Comment #1:**

EIS Section 5.14.3.2 addresses the potential impacts of ground-borne vibrations from coal unloading activity on the closest cluster of receptors near proposed Tuscola power plant site. Based on FTA's vibration impact assessment screening methodology, it was concluded that no vibration impacts are anticipated because none are located within the 200-foot distance screening threshold. The closest residential receptor (SL-8) that could possibly be affected by ground-borne vibrations generated by project-related rail deliveries is approximately 320 feet from the CSX rail line, along the western side of the City of Tuscola.

The following has been added to EIS Sections 4.2.3.2; 5.2.3.2; 6.2.3.2; and 7.2.3.2 under the discussion of Local Plume Visibility as follows:

“Evaporated water would be pure water, although water droplets carried with the exhaust air (called drift) would have the same concentration of impurities as the water entering and circulating through the tower. Water treatment additives could contain anti-corrosion, anti-scaling, anti-fouling and biocidal additives which can create emissions of VOCs, particulate matter, and toxic compounds. The drift is not expected to cause excessive pitting or corrosion of metal on nearby structures or equipment due to the relatively small amount of water released and the presence of trace amounts of anti-corrosion additives. Similarly, the treatment additives are not expected to cause noticeable adverse impacts to local biota due to the very small amounts released.”

“However, as a best management practice, the drift rate and associated deposition of solids could be reduced by employing baffle-like devices, called drift eliminators.”

The estimated amounts of ammonia used by the project are discussed in Section 2.5.6.4 and in the Materials and Waste Management sections of the EIS: Section 4.16.3.2, Table 4.16-6; Section 5.16.3.2, Table 5.16-6; Section 6.16.3.2, Table 6.16-6; and Section 7.16.3.2, Table 7.16-6.

---

T6. Patterson, Marilyn Sue

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

TUSCOLA

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

#1

Live on North West Corner I Concerns! Noise From  
TRAIN COAL CARS, DUST FROM COAL, IS THE TRAIN  
CAR UNLOADING GOING TO BE INSIDE A BUILDING?  
The heavy TRAFFIC THAT WILL BE COMING BY HERE,  
AND MISSING THE CORNER, ~~SOME~~ SEMI'S COMING  
AROUND THE CORNER, NOW ARE IN THE YARD.  
I AM STILL CONCERNED ABOUT WATER.  
WHAT ARE THE CHANCES OF CRACKED FOUNDATION  
DUE TO VIBERATIONS FROM UNLOADING COAL. (WE HAVE  
A BASEMENT.)

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME MARILYN SUE PATTERSON ORGANIZATION \_\_\_\_\_  
ADDRESS 751 E Co. Rd. 1050N CITY TUSCOLA STATE ILL. ZIP 61953  
E-MAIL ADDRESS \_\_\_\_\_

---

**T6. Patterson, Marilyn Sue**

---

**Response to Comment #1:**

The EIS addresses the point of noise associated with coal unloading at the Tuscola Site in Section 5.14.3.2. Noise is anticipated to be generated from unloading/loading activities such as the movement of containers, placement of coal feedstock on conveyor systems, and surficial contact of rail containers with other metallic equipment. Based on the estimated number of coal deliveries to the proposed power plant site, DOE predicted an hourly Leq of 69 dBA from unloading/loading activities at the rail yard using noise prediction equations provided in Table 5-6 of FTA's Noise and Vibration Assessment guidance document. This estimate assumes that the coal unloading facility would not be enclosed in a building. DOE anticipated little or no increase in the noise level at the three closest residences (SL-1 [the Patterson residence], SL-2, and SL-3) along CR 1050N because the coal unloading/loading area would likely be located near the southern boundary of the proposed site, which is approximately 0.5 mile from the closest residential receptors.

DOE did not evaluate the impacts of intermittent noise and vibrations that may be generated by rail car shakers if they are used to loosen coal material from the walls of the rail cars during unloading activity. The noise and vibration associated with rail car shakers would be considered if they are included in the final design.

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It is anticipated that project-related traffic during construction and normal plant operations would cause ambient noise levels to increase at sensitive receptors located near the assigned transportation routes. As noted *in* the EIS summary *Table S-12*, noticeable traffic noise impacts (a 3 dBA or more change in the ambient noise level) were predicted to occur at receptors located along the CR 750E (up to 14 dBA) and CR 1050N (up to 7 dBA) roadway segments leading to the proposed power plant site. Noise mitigation measures, including evenly distributing project-related trips throughout the day, scheduling more deliveries on rail, or purchasing the properties on the proposed site could be considered to limit the number of project-related trips, particularly heavy trucks, passing by these residential receptors during construction and normal plant operations. However, these potential mitigation measures would not be decided upon until a site is selected and the design is finalized.

EIS Section 5.14.3.2 addresses the potential impacts of ground-borne vibrations from coal unloading activity on the closest cluster of receptors near proposed Tuscola power plant site. Based on FTA's vibration impact assessment screening methodology, it was concluded that no vibration impacts are anticipated because none are located within the 200-foot distance screening threshold. The closest residential receptor (SL-8) that could possibly be

**T6. Patterson, Marilyn Sue**

---

affected by ground-borne vibrations generated by project-related rail deliveries is approximately 320 feet from the CSX rail line, along the western side of the City of Tuscola.

FutureGen would not draw groundwater from the power plant site, so water supplies should not be reduced in this area. The buildings and parking lots of the FutureGen facility would reduce infiltration of rain water locally, but recharge over the area extent of the shallow aquifers tends to support the idea that recharge is not likely to be noticeably diminished when a comparatively small part of the recharge area is rendered less permeable by buildings and parking lots. Contamination of shallow aquifers is a possibility with any power plant facility. FutureGen would be constructed with cement catch basins or pads beneath many facilities where contamination would be most likely to originate. Spill control plans would be developed and implemented to further reduce the chance of soil and groundwater contamination. If coal or ash are stored in open areas, consideration would be given to the placement of liners beneath these materials.

---

T7. BRH Properties (Robinson, Chris)

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

TUSCOLA

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

#1

WE LOOK FORWARD TO THE  
FUTUREGEN OPERATION IN TUSCOLA, ILLINOIS  
HOPE TO HAVE YOU HERE -

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME CHRIS ROBINSON ORGANIZATION BRH PROPERTIES  
ADDRESS P.O. Box 306 CITY URBANA STATE IL ZIP 61803  
E-MAIL ADDRESS

**T7. BRH Properties (Robinson, Chris)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

T8. Property Management (Hardwick, C. T.)

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

TUSCOLA

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

#1

I HOPE THIS TECHNOLOGY  
MAKES ITS WAY TO TUSCOLA SITE.  
I SURF WOULD PLEASE ME -

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS

HARD COPY  CD / SUMMARY

NAME C. T. HARDWICK ORGANIZATION PROPERTY MANAGEMENT

ADDRESS P.O. Box 306 CITY URBANA STATE IL ZIP 61803

E-MAIL ADDRESS \_\_\_\_\_

**T8. Property Management (Hardwick, C. T.)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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T9. McDaniel, Curt

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

TUSCOLA

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

#1

DEAR MARK - I WENT TO BOTH PUBLIC HEARINGS AND WAS VERY IMPRESSED WITH THE FUTURE GEN PROJECT. I HAVE LIVED IN TUSCOLA FOR 63 YEARS AND TUSCOLA WOULD BE THE PERFECT SITE FOR FUTURE GEN. WE HAVE ALL THE WATER THAT IS NEEDED, I WORKED FOR 23 YEARS AT THE CHEMICAL PLANT EQUSTAR, AND THEY WOULD BUY THE HYDROGEN. ALSO CABOT WOULD BUY THE HYDROGEN AND WE HAVE A GREAT WORK FORCE IN THE TUSCOLA AREA. ALL THINGS CONSIDERED, TUSCOLA WOULD BE THE BEST SITE FOR THIS FUTURE GEN PROJECT. THANK YOU  
Curt McDaniel

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME Curt McDaniel ORGANIZATION Small Business man & Semi Retired  
ADDRESS 509 Cherey St CITY Tuscola STATE IL ZIP 61953  
E-MAIL ADDRESS \_\_\_\_\_

**T9. McDaniel, Curt**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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T10. Edmiston, Catherine

July 14, 2007

Environmental Manager Mark McCoy  
U.S. Department of Energy  
National Energy Tech Lab  
P.O. Box 880  
244 Morgantown, W. Virginia 26507-0880

Dear Sir:

Enclosed is a list of questions I would like to have answered regarding the Public Hearing for FutureGen in Tuscola. I know people in that area who are concerned, and I attended the first hearing there.

Please mail the answers to Catherine Edmiston, 601 W. Adams St., Abingdon, Ill. 61410. Thank you,

Sincerely,



Catherine Edmiston  
Montgomery Co. Landowner

Phone (309) 462-2796  
<edmiston@abingdon.net>



**Montgomery Co. Landowner**  
*Citizens Against Longwall Mining*

Catherine Edmiston  
601 W. Adams St.  
Abingdon, IL 61410

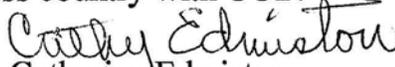
edmiston@abingdon.net  
(309) 462-2796

T10. Edmiston, Catherine

July 14, 2007

Questions to be answered about FutureGen:

- #1 1. "Everybody wants to see FutureGen come to Illinois." Because it is a coal-fired plant, that statement is debatable. Why have you not developed other sources of energy, other than coal, that do not pollute, and do permanent damage to the State of Illinois? These government grants could go to develop wind power, or hydro-electric power, or solar power!
- #2 2. Longwall mining will damage 205,000 acres of farmland in Montgomery County (Hillsboro-Litchfield area) and this is just "the tip of the iceberg". From our research, we have found that fresh water supplies can be destroyed, aquifers, wells and springs drained, and earthquake-like damage to farmland, timber, homes and buildings, roads, bridges and even cemeteries, which these ruthless companies have got permission to mine under, taking nearly 95 percent of coal, dropping the surface five feet with earthquake like damage. FutureGen will be contributing to the destruction of Illinois by using coal for their energy source. Also, what pollutants will still go into the atmosphere, even with "clean coal" use? FutureGen contributes to global warming?
- #3 3. The storing of CO2 underground has its hazards. If it escapes, in a cloud, it is an asphyxiant and can kill people, and animals in just a breath or two. I am not impressed with the State of Illinois taking over the liability! How careful would a corporation be, in sequestering it underground, when the company knows it isn't liable for any accidents? What citizen wants to pay his tax money out for liability insurance for a corporation?
- #4 4. How will CO2 stored underground in large amounts affect the water supplies, and aquifers? Temperatures get warmer as you go further underground? What difficulties will that cause in storing large amounts?
- #5 5. How will sequestration of CO2 affect land and property values on the surface?
- #6 6. Will FutureGen be piping in CO2 from other places to store? What are the hazards of running a pipeline across country with CO2?

  
Catherine Edmiston

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### T10. Edmiston, Catherine

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**Response to Comment #1:** DOE oversees numerous programs that are investigating and supporting a wide variety of renewable energy generation technologies, including wind, solar, and hydro. However, the particular goal of the FutureGen Program is to demonstrate an advanced power generation facility based on fossil fuels, specifically coal. Hence, technologies that would not be based on coal use are not within the scope of the FutureGen Project.

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**Response to Comment #2:** The effects of long-wall mining for coal are well known and well described in general. FutureGen does not aim to change mining techniques, and for the proposed project DOE has no decisions that would affect coal mining. FutureGen would test coal from various locations in an effort to demonstrate operations of its technologies on a variety of coal types and qualities. For purposes of the project, it is not envisioned that coal would be consumed from only one or even just a few locations. FutureGen is intended to facilitate the development of technologies that would allow the recognition of the President's goal of a zero emissions, coal-based power plant. While such a power plant is not yet within the realm of economic practicality, the FutureGen Project would have very low emissions of conventional pollutants. Reducing carbon dioxide emissions, the greenhouse gas of greatest concern from coal-fired power plants, is an ambitious goal of FutureGen, with a target of >90 percent captured and permanently sequestered in deep saline formations.

Other emissions, such as sulfur, NO<sub>x</sub>, particulate matter, mercury, slag, ash and even water emissions, are also targeted for significant reductions compared to state-of-the art technologies.

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**Response to Comment #3:** Carbon dioxide can be an asphyxiant when it displaces air. Therefore, DOE assessed the risks of leaks from the underground storage and the potential for harm, including asphyxiation. The risks of severe consequences from a leaking reservoir appear to be very low and are much lower than for the capture and pipeline transport of the CO<sub>2</sub>. Under the Clean Coal FutureGen for Illinois Act (Public Act 095-0018), the State of Illinois would assume ownership and liability at a specified point in the process (when the CO<sub>2</sub> is conveyed into the injection well), the liability would be limited in scope (e.g., it would not cover intentional mishandling of the CO<sub>2</sub> or non-compliance with applicable regulations), and the liability would be covered by any insurance purchased by the State, to the extent that insurance is available. Because the sequestration of CO<sub>2</sub> in saline aquifers represents a first-of-a-kind venture that benefits the public in general, it is not unreasonable to arrange for liability sharing for this project.

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**Response to Comment #4:** Carbon dioxide stored underground in the FutureGen Project is not likely to affect water supplies. Carbon dioxide stored underground primarily presents two potential hazards to water supplies (including aquifers used for drinking water): (1) leakage of the CO<sub>2</sub> upwards into underground sources of drinking water and surface waters, and (2) displacement of native fluids into underground sources of drinking water and surface waters. If CO<sub>2</sub> migrates up into water supplies, the water could become carbonated (like soda pop) and, therefore, would be more acidic. The increased acidity could dissolve more mineral matter into the water as well as make the water less habitable (a concern for surface water). If displaced native fluids (primarily the concern would be with salt water) migrate up into water supplies, the water supplies could be rendered unsuitable for their intended uses (e.g., it could become too salty for drinking water and for freshwater aquatic life) until the displaced fluids are flushed out (or move downstream). The conclusions in DOE's Risk

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**T10. Edmiston, Catherine**

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Assessment is that there is very little risk of CO<sub>2</sub> migrating up into underground sources of drinking water and surface waters. The risk is also very low for displaced native fluids moving up into underground sources of drinking water and surface waters. Potential consequences are further explained in the Risk Assessment and in the site-specific Environmental Information Volumes (see, e.g., FG Alliance 2006c or FG Alliance 2006d, Section 8.4, Receptors and Environmental Impact Thresholds). The current DOE view is that the risks and potential consequences of leakage and displaced fluids are likely to be outweighed by the risks and potential consequences of global climate change resulting from our society's failure to take action.

On average, earth temperatures do increase with depth. It is anticipated that the routine practice of measuring the temperature in the target reservoir would be honored for this project. The engineers would then assess the potential for adverse effects, either from thermal expansion of the CO<sub>2</sub> or from thermal shock to the well bore and reservoir rock as cooler CO<sub>2</sub> is injected into warmer rock. Typical reservoir temperatures observed in the oil and gas industry range up to around 300 degrees Fahrenheit. At the Mattoon and Tuscola sites, for example, the reservoir is predicted to have a temperature of about 130 degrees Fahrenheit. The CO<sub>2</sub> captured in the FutureGen power plant would also be at elevated temperatures at the time of capture. Recent analyses have estimated the temperature of CO<sub>2</sub> entering the pipeline at 95 degrees Fahrenheit. If it is piped to the sequestration well, the CO<sub>2</sub> would cool down, especially during times of cold weather. This would not be a concern at Mattoon, where the injection well is located at the power plant site. But, for Tuscola, where the pipeline would be 11 miles long, the CO<sub>2</sub> would arrive at the well head with temperatures ranging from around 65 degrees Fahrenheit in the winter months to perhaps 93 degrees Fahrenheit during the summer, if no insulation is installed around the pipeline (FG Alliance, 2006d).

The cooled CO<sub>2</sub> would then perhaps be injected into a warmer reservoir. As the CO<sub>2</sub> travels down the well bore, it is heated by the surrounding material (surrounding rock and well materials that conduct heat) and by the weight of the overlying column of CO<sub>2</sub>. As the CO<sub>2</sub> reached the top of the reservoir, it would have a temperature estimated to be in the range of 87 degrees to 109 degrees Fahrenheit (FG Alliance, 2006d). As a result, the well bore would cool down, the surround rock would cool down, and the reservoir where the CO<sub>2</sub> is being injected would cool down. As planning work progresses, the engineers would assess whether the drop in temperatures would cause damage to the well by thermal contraction of various components. They would also assess whether cooling on the rock surrounding the well, cooling of the reservoir rock, and cooling of the cap rock (seal) would cause new cracks to form or would enlarge existing cracks and fractures in these units. DOE and the Alliance would conduct these assessments as data (such as the reservoir bulk thermal conductivity, the rock's coefficient of thermal expansion, and the rock's tensile strength) are gathered during the detailed characterization phase, and the results should be reported along with the Supplement Analysis that would be prepared by DOE at the conclusion of the characterization phase. If it appears that a problem could occur, either insulation would be installed around the pipeline to reduce cooling of the CO<sub>2</sub>, or heaters would be installed in the pipeline near the well head to raise temperatures to safe levels. A safety shutoff might also be installed to prevent injection of CO<sub>2</sub> that is too cool following periods of pipeline shutdown or heater shutdown.

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**T10. Edmiston, Catherine**

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**Response to Comment #5:**

DOE does not know how the sequestration of CO<sub>2</sub> would specifically affect land and property value; however, land surface rights could be affected the same as occurs with oil and natural gas exploration and production. Subsurface mineral rights (or pore space rights) could become more valuable if geologic sequestration becomes a routine practice.

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**Response to Comment #6:**

Except at the Odessa Site, FutureGen would store only the CO<sub>2</sub> generated in the FutureGen power plant. The only exception would be an initial test injection of CO<sub>2</sub> trucked or piped from another source to verify the suitability of the intended target reservoir(s). At the Odessa Site, CO<sub>2</sub> from FutureGen may be co-mingled in a commercial pipeline with CO<sub>2</sub> from other sources before a quantity equal to that produced by FutureGen is sequestered in the target reservoirs. At the Odessa Site, the opportunity would exist to sequester more or different CO<sub>2</sub> than would be captured by FutureGen. Pipeline hazards are thoroughly reviewed in the Risk Assessment (available in electronic form on the FutureGen Project EIS CD and on the websites where the EIS can be downloaded).

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**T11. U.S. Representative Timothy Johnson (Jones, Matthew)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

0029

20 MATTHEW JONES: I'm not sure which direction I'm  
21 supposed to face here.

22 My name is Matthew Jones. Real brief. I am  
23 representing Congressman Tim Johnson who most of you all  
24 know. Congressman could not be here, obviously; they were

1 out in Washington, D.C. voting. But he is en route to come  
2 back home. Never the less, he wanted to me express to all  
3 of you that, obviously, we all know how important this  
4 project is. But more importantly, that, not only as  
5 Congressman Johnson but a lot of you local, state and  
6 federal officials have all been working together.

7 And that's one of the rare benefits of an opportunity  
8 like this is to actually see people working together. And  
9 I know, in this time of age, regardless if you're  
10 republican or democrat, it's nice, it's refreshing to see a  
11 project for the common good and everybody working  
12 together.

13 And, obviously, with all of that said, we want to  
14 bring it to Illinois. And I realize we're in the Tuscola  
15 site, but we represent both cities. Now, I'm not going to  
16 lie. I'm from Arthur, Illinois; and I'm from Douglas  
17 County. I have been for six generations. Well, not me  
18 personally, but my family. So I want to see it right here  
19 for the obvious reasons, the jobs, the environmental impact  
20 and, obviously, the energy.

21 But from Representative Congressman Johnson, we just  
22 want to bring it to Illinois; because it's, obviously,  
23 going to impact everyone directly or indirectly. And it's  
24 for the common good for everybody. So, I didn't have a big

0030

1 long speech prepared. I know I'm under the 5 minutes. So  
2 I hope that will be pleasing to everybody. But thank you  
3 very much for inviting us, and I will definitely relay that  
4 there was a large support here in the Tuscola site.

5 So thank you very much.

**T11. U.S. Representative Timothy Johnson (Jones, Matthew)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T12. Illinois Department of Commerce and Economic Opportunity (Ribley, Warren)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

10                   WARREN RIBLEY: Good evening. Mark, thank you.  
11    It's great to see this turnout as Mike Mudd indicated.  
12    Thank you, residents of Tuscola, Douglas County and  
13    surrounding counties. Great to see your interest in this  
14    project.

15                   My name is Warren Ribley. Not to be confused with  
16    Ripley of Ripley's Believe It or Not.

17                   I am Director of Operations for the Illinois  
18    Department of Commerce and Economic Opportunity. On behalf  
19    of Governor Rod Blagojevich and DCO Director Jack Lavin, it  
20    is my pleasure to welcome back the US Department of Energy,  
21    FutureGen Alliance and their teams to Illinois for another  
22    round of public hearings that represents the next critical  
23    step in this important selection process.

24                   We've been actively engaged for more than 4 years.

0031

1    As you can see, there's a high level of energy and  
2    excitement surrounding FutureGen and, clearly, its impact  
3    it would have not only on our state but our nation and,  
4    really, across the world.

5                   I want to thank Mayor Dan Kleiss and Brian Moody as  
6    well as all the attendees here tonight for your continued  
7    participation and enthusiasm about this project that's  
8    continued throughout the process.

9                   Again, I'd also like to recognize Bill Hoback,  
10   Director of the Office of Coal Development, DCO, and his  
11   team, who really have been our resident experts and  
12   advocates for FutureGen.

13                   FutureGen is, indeed, the future of energy; and we're  
14   here to tell you that Illinois is ready for FutureGen.

15                   We reach this point with quiet confidence and high  
16   anticipation; and we've benefited from the input of people  
17   throughout Illinois including planners, elected officials,  
18   business leaders, farmers, and some of the top scientific  
19   and engineering talent anywhere in the world.

20                   There may be no economic development project in the  
21   history of this state -- that's the truth -- that  
22   approaches the scope of FutureGen and its potential impact,  
23   not only on us here but, again, around the nation and the  
24   world. So think about that. It's pretty awesome.

#1

**T12. Illinois Department of Commerce and Economic Opportunity (Ribley, Warren)**

0032

1 A new Southern Illinois University study that the  
2 governor just recently released found that FutureGen would  
3 have actually a much larger economic impact than the 1,300  
4 construction jobs and the 150 permanent jobs that the  
5 Department of Energy has estimated would be created. The  
6 study found that, during the 4-year construction period,  
7 there would be more than \$1 billion in economic impact  
8 statewide to Illinois. And there would be more than 1,200  
9 spin-off jobs that would be created.

10 Once FutureGen is operational, the study shows it  
11 will generate a hundred thirty-five million dollars  
12 annually and total statewide economic output with \$85  
13 million estimated annual increase right here in Douglas and  
14 Coles County. And, additionally, it will create 300  
15 full-time jobs elsewhere statewide and spin-off.

16 And the local communities here in East Central  
17 Illinois and the hard-working people that live in Douglas  
18 and Coles County, you've really met every challenge to date  
19 to bring FutureGen here and should be applauded for that.

20 This region wants to show the world how to use coal  
21 cleanly, how to capture and store CO2. We've worked  
22 creatively and cooperatively on solutions to complex  
23 problems and nurtured each other as valued partners in this  
24 endeavor which will pay dividends to us and across the

#1 0033

1 United States and the world for decades to come.

2 We have said all along that FutureGen, that Illinois  
3 is the place for FutureGen based on the merits of these two  
4 site, alone. And we feel more confident about that with  
5 each passing day.

6 Some of the best minds in the state have helped us in  
7 reaching this stage. We've had top to bottom cooperation,  
8 as mentioned earlier, from not only all levels of  
9 government but also including the private sector.

10 We wouldn't be here today if we didn't absolutely  
11 have the best local partners in Brian Moody,  
12 Angela Griffin, from Coles County, and their respective  
13 FutureGen teams. They're all to be applauded.

14 However, as we head down the homestretch, I'd like to  
15 reiterate all the distinct advantages that Illinois offers  
16 FutureGen, starting with our geology.

17 Illinois is blessed with the geology to demonstrate  
18 this breakthrough technology as well and probably better  
19 than anywhere else in the United States and, in our  
20 estimation, including that of our competitors in Texas. We  
21 have deep Vict porous sandstone. I hope you have had a  
22 chance to see in some of the demonstrations that the safety  
23 margins of at least two cap rock seals that have never,  
24 ever been penetrated.

**T12. Illinois Department of Commerce and Economic Opportunity (Ribley, Warren)**

0034

1 Illinois, in addition, offers a platform from a  
2 geology standpoint that will maximize the transferability  
3 of the FutureGen technology to sites throughout the United  
4 States and the world. We've been examining and documenting  
5 this potential, with the help of the top scientists in the  
6 region, for more than 3 years. And we're very confident in  
7 those results.

8 Water is our next advantage. Both sites offer more  
9 than ample water for FutureGen needs. Pretty well  
10 demonstrated that here this week. And thank you for our  
11 rain. And to do so at a reasonable cost without negatively  
12 impacting current or future water supplies in our region.

13 Location. Among other advantages, our sites are  
14 almost ideally situated in relation to the nation's major  
15 coal fields, saving the Alliance millions of dollars in  
16 rail costs as well as further minimizing the carbon profile  
17 of the project of shipping the coal in.

18 Leadership. I will bring that up again. This  
19 project has garnered bipartisan support from elected  
20 officials in Illinois, in Congress as well as in  
21 Springfield; and we, as a state, particularly under  
22 Governor Blagojevich, have never lost faith in the  
23 long-term potential of Illinois coal.

24 Research capacity. We do have leading coal research

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0035

1 institutions supporting Illinois' bid for FutureGen,  
2 including Southern Illinois University and our partner  
3 state, Indiana, Purdue University, which are two of the top  
4 coal research centers in the nation.

5 We have the University of Illinois just a few miles  
6 to the north. It's a premier research university with a  
7 number of, four engineering, with the number four  
8 engineering program of any college in the country right  
9 here in our backyard. And, of course, a top state  
10 university, Eastern Illinois University, just down the  
11 road.

12 Investment. You've committed the investment.  
13 Illinois' investment package includes an unmatched \$17  
14 million grant to the FutureGen Alliance. In addition, we  
15 have committed the Illinois State Geological Survey and  
16 some of the nation's top scientists in their fields to  
17 oversee the long-term monitoring of the CO2 once it is  
18 captured and stored.

19 We also have history on our side. As we've  
20 emphasized the last round of the FutureGen hearings,  
21 Illinois is a coal state, not an oil and gas state. We're  
22 a coal state. We've demonstrated our belief in coal and  
23 investments of millions of dollars in the development of  
24 technology of clean coal.

**T12. Illinois Department of Commerce and Economic Opportunity (Ribley, Warren)**

0036

#1

1           We have, within the past several weeks, permitted,  
2           through the Illinois EPA, the first two coal gasification  
3           projects to be advanced anywhere in America in the last 20  
4           years. And we're very close to permitting and breaking  
5           ground on a gasification project in the far northwestern  
6           part of the state, in East Dubuque, that will make nitrogen  
7           fertilizer from coal, quite significantly, beginning  
8           producing for US consumption the first and, producing the  
9           low sulfur diesel fuel made from Illinois coal.  
10          Fundamentals for FutureGen are in place with the  
11          water. We have the geology. We have the location. We  
12          have the economics. We have the research. We have the  
13          political leadership, and we have the community support.  
14          With science on our side and all of these strategic  
15          assets, we are confident that the world's cleanest coal  
16          plant will be built in this state. We're all here today  
17          because we share in this vision and we believe in the  
18          possibilities of this facility to change the way we look at  
19          energy production.  
20          As we stated, FutureGen needs Illinois. Illinois  
21          needs FutureGen.  
22          Thank you very much.

**T12. Illinois Department of Commerce and Economic Opportunity (Ribley, Warren)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T13. Tuscola School System (Burgess, Joe)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

11 JOE BURGESS: Good evening. Joe Burgess,  
12 Superintendent of Schools. I also have the pleasure, over  
13 the last 3 years of also being part of the Tuscola Economic  
14 Development Board that, those of us from Tuscola commonly  
15 know as TEDI.

16 I think we owe a lot to Brian Moody for the work of  
17 the development that this project has come along with and  
18 thanks; and thank you, Brian.

19 (Applause.)

20 Special welcome to those of you who are visitors of  
21 our community. I hope you found it friendly and enjoyable  
22 but also informational.

23 Our school system, when we saw that we were going to  
24 be one of the finalists, took a very proactive action

0040

1 towards that. We know that, now that we're on, not only  
2 the national map, the world map, that Tuscola's potential  
3 for growth, regardless of whether FutureGen becomes part of  
4 our community or not, is great.

5 The planning stages are set. Our board of education  
6 is, has set that through planning meetings, talking about  
7 the impacts of growth and what that will do to our, not  
8 only to our community but to our school buildings and to  
9 our educational system.

10 With that, I'd like to thank the forefathers of our  
11 school system. All three of our buildings are easily added  
12 on to. Potential for growth and space is there. We would  
13 welcome the opportunity for those students, because those  
14 students will be getting a first-class education.

15 Those of you from the Department of Energy, I'm sure,  
16 are aware from your friends No Child Left Behind that you  
17 have in Washington, D.C. with the Department of Education.

18 Our elementary, this year, was recognized by  
19 Washington, D.C. as a Blue-Ribbon School. So we could  
20 offer your students that would be coming to Tuscola as a  
21 part of our system a First-class National Educational  
22 program.

23 Lastly, I would be remiss, as educational leader, not  
24 to well you that we would look forward to also the

0041

1 educational opportunities that FutureGen could potentially  
2 bring to our students. The technology. The science.  
3 Those are all things that we're very excited about. We  
4 would look forward to partnering with you, allowing our  
5 students and our staff to learn from you and, hopefully,  
6 you learn from us.

7 So welcome you to Tuscola. We hope you're part of  
8 our lives soon, and take care. Thank you.

#1

**T13. Tuscola School System (Burgess, Joe)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T14. Illinois Department of Natural Resources – Illinois State Water Survey (Knapp, Vernon)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

12                   VERNON KNAPP: My name is Vernon Knapp. I'm the  
13 Assistant Director for the Center of Watershed Science at  
14 the Illinois State Water Survey. The survey is a division  
15 of the Illinois Department of Natural Resources. I'm also  
16 the leading service monitor technologist for the Water  
17 Survey's Water Supply Planning Program.

18                   My involvement with the FutureGen in Illinois began  
19 over a year ago when I prepared the state's water supply  
20 assessment of its proposed sites. Also over the past year,  
21 I have provided technical feedback regarding Tuscola's site  
22 plan to build upon the existing water supply capabilities  
23 and also reduce their dependence on, dependence on the  
24 Mahomet aquifer as a supplemental water supply source.

0042

1                   Natural flows in the Kaskaskia River augmented by the  
2 continually growing amount of waste water discharge into  
3 the river by the Champaign/Urbana southwest treatment plant  
4 remained the predominant sources of water supply for the  
5 Lyondell Equistar water withdrawal.

6                   The possibility of increased use of the Mahomet  
7 aquifer is a concern for many because the aquifer is a  
8 water supply source for many communities in the region.

9                   The Lyondell Equistar Company and its predecessors  
10 have a long history of pumping water from the Mahomet  
11 aquifer dating back to the 1950's. The supply from the  
12 company's Mahomet aquifer belt can be substantial with  
13 individual well yields exceeding 1,500 to 2,000 gallons per  
14 minute.

15                   Although these wells can provide an abundant source  
16 of supply, there is a lessoning for their use, in part,  
17 because of a continuing distance of waste water effluence  
18 into the river.

19                   On-going studies by the Water Survey may lead to an  
20 even further reduction of Lyondell Equistar's need for the  
21 Mahomet aquifer. As part of our agency's water supply  
22 planning activities for the Mahomet aquifer we are  
23 conducting discharge measurements on the Kaskaskia River to  
24 more accurately quantify the amount of low flow in the

#1

**T14. Illinois Department of Natural Resources – Illinois State Water Survey (Knapp, Vernon)**

0043

1 river.

2 Based on this chart taken this spring and summer, we  
3 estimate the river has as much as 2-and-a-half times the  
4 amount of flow during low-flow conditions as previously  
5 estimated for determining supplemental water needs.

6 I've also reviewed the proposed water withdraw  
7 practices for supplying the FutureGen facility as prepared  
8 by Jim Crane, Douglas County Engineer. These proposed  
9 practices would be expected to further and substantially  
10 diminish the frequency of the Mahomet aquifer's use as a  
11 supplemental source.

12 There are two key components that would reduce the  
13 need for Mahomet aquifer water. The first is to reuse the  
14 treated waste waters from the Lyondell Equistar facility,  
15 replacing the existing discharge into the Kaskaskia River  
16 and, thereby, removing the need to augment low flows in the  
17 river for the purpose of waste water pollution.

18 The second component is the construction of  
19 additional, substantial reservoir storage at the site of  
20 the Kaskaskia River withdrawal. Such that, during the dry  
21 periods, the stored water can be used for supply instead of  
22 the need to augment flow in the river for withdrawal.

23 With the development of these two proposed components  
24 and the continually growing amount of waste water being

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1 discharged into the river, there is a high degree of  
2 confidence that supplemental water from the aquifer would  
3 be needed only for perhaps a few months during the most  
4 severe drought conditions.

5 We recognize that future operation of the Mahomet  
6 wells, in these severe drought conditions, could have  
7 impact on nearby existing and proposed wells. However for  
8 the short periods that the aquifer may be called upon, we  
9 have no reason to expect long-term, aquifer yield  
10 limitations.

11 Thank you.

**T14. Illinois Department of Natural Resources – Illinois State Water Survey (Knapp, Vernon)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T15. Carle Foundation Hospital (Cook, David)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

15                   DAVID COOK: Good evening. My name is  
16 David Cook, the Vice President of Carle Foundation  
17 Hospital.

18                   Our hospital stands ready to serve the health-care  
19 needs of FutureGen's construction crews and future  
20 employees. We wholeheartedly support your proposal to  
21 locate a plant in Central Illinois.

22                   Carle Foundation Hospital is the area's Level 1  
23 trauma center. We're a 305-bed facility located in Urbana,  
24 about 25 miles from here.

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1                   The hospital recently completed a \$65 million  
2 addition to accommodate significant growth in patient  
3 volumes and plan for additional growth. With over 400  
4 physicians on our medical staff, Carle Foundation Hospital  
5 offers services to patients needing higher levels of care,  
6 including intensive care, open-heart surgery, perinatal  
7 services.

8                   Other Carle Foundation Services include Champaign  
9 Surgery Center, Carle RX Express, Carle Therapy Services,  
10 Carle Home Services, Arrow Carle Ambulance and Air Life  
11 Helicopter Transport. We feel that, with all of these  
12 services in place, we can very clearly meet the needs of  
13 any expanded.

14                   We'd be honored to serve your health care needs and  
15 look forward to a bright future together here in Central  
16 Illinois.

17                   Thank you.

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**T15. Carle Foundation Hospital (Cook, David)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T16. Arrow Carle Ambulance, Air Life, Air Medical Transport and Carle Regional EMS Systems  
(Sapp, Larry)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

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21 LARRY SAPP: Good evening. My name is a  
22 Larry Sapp. I'm also with Carle Hospital, but I represent  
23 some different departments. I represent the Director of  
24 Arrow Carle Ambulance, Air Life, Air Medical Transport and

1 Carle's Regional EMS systems.

2 On behalf of these departments and Carle Foundation  
3 Hospital, we fully support FutureGen locating in Illinois.  
4 Arrow ambulance, air life, and Carle EMS have a long  
5 standing, collaborative relationship with Douglas County,  
6 the City of Tuscola, the surrounding communities and  
7 townships.

8 Douglas County's foresight, led by representatives  
9 from Tuscola, has developed an aggressive system, service  
10 and education and prevention in the EMS industry. Arrow  
11 Carle Ambulance offers advanced life support ambulance  
12 services through a network of eleven ambulances  
13 strategically deployed from locations throughout Champaign  
14 County and northern Douglas County.

15 Air Life, within minutes, can provide critical care  
16 and air transport services to the patients in our region.  
17 Derived through agreement, an agreement with Archer Medical  
18 and Air Methods, Air Life is also located at the Carle  
19 Foundation Hospital.

20 Our EMS Department at Carle Foundation Hospital  
21 provides educational opportunities and system membership to  
22 many public and private organizations including large  
23 industries such as FutureGen. Each one of these  
24 departments, as well as the entire Carle Foundation, look

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1 forward to welcoming FutureGen into our area and into  
2 Illinois.

3 Thank you. And we look forward to the opportunity to  
4 serve you.

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**T16. Arrow Carle Ambulance, Air Life, Air Medical Transport and Carle Regional EMS Systems  
(Sapp, Larry)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T17. Carle Foundation Hospital (Guffey, Anita)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

8 ANITA GUFFEY: I think I'm the last one from  
9 Carle. But thank you for listening to us.  
10 My name is Anita Guffey. And I'm the Director of  
11 Emergency Preparedness for Carle Foundation Hospital. And  
12 I, on behalf of Carle Foundation Hospital, would like to  
13 reiterate our support for the gen, the FutureGen Project  
14 moving into Illinois. Carle's participation at Illinois  
15 Department of Public Health is a lead hospital for this  
16 entire region which includes 22 counties. And we're  
17 charged with leading the area in disaster emergency  
18 preparedness.

19 While we never hope to have to deal with any kind of  
20 natural or man-made disaster, we are prepared. Carle  
21 Foundation Hospital has stockpiled supplies and equipment  
22 that we keep in trailers, and we're available to respond  
23 anywhere in the region to help in the need of a crisis or  
24 disaster.

1 We can provide care, medical care to victims anywhere  
2 within Region 6. Our trailers are equipped to set up a  
3 field hospital anywhere they may be needed.

4 So we also have a mobile decontamination trailer  
5 that's kept at Carle and is available 24/7 that can respond  
6 anywhere needed in this area with a team.

7 So we work very closely with local, state, and  
8 federal authorities in all aspects of emergency planning,  
9 mitigation, preparedness, response and recovery. So Carle  
10 Foundation Hospital and Emergency Preparedness Department  
11 is eager, very eager to form a good working relationship  
12 with the FutureGen Project as you move into Illinois.

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**T17. Carle Foundation Hospital (Guffey, Anita)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T18. Looby, William**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

17 WILLIAM LOOBY: It's a long walk from the back.  
18 I just, basically want to bring up for everyone here  
19 what I think, and I haven't heard yet, but our greatest  
20 resource in this state, I believe our work force. Our  
21 organization represents nearly a million members in this  
22 state and tens of thousands in the East Central Illinois  
23 region. Highly skilled, highly trained work force that's  
24 quite used to and quite motivated on getting projects,

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1 bringing projects in on time and under budget.

2 The other thing, along those lines, being very  
3 succinct here, is that our review of the, of the EIS, we  
4 believe there's some inconsistencies in the wage data from  
5 the Texas sites. And we just wanted to, we'll be following  
6 that up with, with written comments. But we believe that  
7 should be more or at least a second review or more thorough  
8 review of that.

9 But, again, thank you for coming; and thank you for  
10 letting me speak too. So thank you.

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**T18. Looby, William**

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**Response to Comment #1:**

Wage rates included in the EIS have been reviewed and are accurate. The Davis-Bacon Wage Determination rates were used and are issued by the Department of Labor under the Davis-Bacon and related Acts. The Wage and Hour Division of the U.S. Department of Labor determines prevailing wage rates to be paid on federally funded or assisted construction projects. Therefore, the text will remain as presented in the EIS.

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**T19. Environmental Law and Policy Center (Matchett, Barry)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

15 BARRY MATCHETT: Good evening. Thank you for  
16 allowing me to speak. I'm Barry Matchett. I'm with the  
17 Environmental Law and Policy Center. We're a Chicago-based  
18 organization that works throughout the Midwest. And we are  
19 an organization that very frequently is opposed to coal.  
20 I think, today, we have lawsuits against four coal  
21 plants around the Midwest. But not this plant. We are  
22 supportive of FutureGen. We are supportive of both  
23 Illinois sites. We are supportive for three very specific  
24 reasons.

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1 First, FutureGen represents the opportunity for our  
2 country and for our state to utilize Illinois coal and to  
3 utilize this research. We have a vast reserve.

4 Right now, the Illinois coal plants burn about 85  
5 percent western coal. That doesn't seem right to us as  
6 citizens of Illinois. It certainly doesn't seem right to  
7 us from an economic perspective. And we can use the  
8 technology that FutureGen will utilize to burn Illinois  
9 coal in an environmentally responsible way. And we are  
10 enthusiastic supporters of that.

11 Number 2, and the thing that seems to be the point of  
12 most of the conversations this evening. It sequesters the  
13 CO2, the carbon dioxide output from coal plants.

14 There's no debate. Carbon dioxide is causing global  
15 warming. There's a solution to this situation, so that the  
16 catastrophic, apocalyptic role of the event at some port  
17 will happen, can be averted. This is the solution. We can  
18 sequester CO2 that's used, that's created when you burn  
19 coal. And we are enthusiastic supporters of this  
20 FutureGen. And using Illinois' specific geology is the  
21 solution. And we are keen on seeing that happen here in  
22 Illinois.

23 And Number 3 -- And I thought the point that you  
24 brought up, sir, was, Mr. Oliver, was particularly

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1 salient. This, as a technology transfer opportunity for an  
2 American technology to be exported to our friends in the  
3 developing world, China and India, in particular, who have  
4 massive populations, which are all seeking our way of life  
5 and our electric needs and they're seeking to do it by  
6 using coal, needing us to succeed. We need to succeed for  
7 them, and they need to succeed by using the stuff that we  
8 do here in Illinois.

9 We need to have this project here. We need to have  
10 it work so that the Chinese, as they move from where they  
11 are today to where they will be in 2020 and they're burning  
12 a ton of coal, are sequestering carbon, that they're not  
13 part of the warming problem, they're part of the solution  
14 because we gave them the technology. We sold them the  
15 technology. And that's reason to support this project and  
16 the reason the Environmental Law and Policy Center is a  
17 strong supporter of this project.

18 So I appreciate the opportunity to speak with the  
19 panel; and thank you this evening.

**T19. Environmental Law and Policy Center (Matchett, Barry)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T20. Tuscola Stone Company (Shoemaker, Alan)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

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23 ALAN SHOEMAKER: Hello. I'm Alan Shoemaker,  
24 General Manager of Tuscola Stone Company.

1 On behalf of our Tuscola Stone Company, I would like  
2 to thank you for your consideration of our community for  
3 your project.

4 Should you select our location, we will stand by and  
5 support your project and your construction needs. Your  
6 proposed site is located just 4 miles from the deepest  
7 quarry of the State of Illinois. We have been in business  
8 and serving this area for over 35 years with 16 full-time  
9 jobs.

10 Our rock reserve is over 300 feet deep. We produce  
11 all types of construction aggregates for our community and  
12 our agricultural limestone for our farmers.

13 We believe it would be an honor to participate in a  
14 project that involves a science that could change the world  
15 to provide energy. We fully support FutureGen. Like every  
16 good project, it begins with a solid plan. A solid plan  
17 must be supported with a solid foundation. It should be  
18 nice to know that materials for your foundation can be  
19 supplied from just four miles away.

20 Thank you very much.

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**T20. Tuscola Stone Company (Shoemaker, Alan)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T21. Cabot Corporation (Kleiss, Dan)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

0053 24 DAN KLEISS: Good evening and welcome. I am  
1 Dan Kleiss. I'm the Manager of Human Resources for Cabot  
2 Corporation, Tuscola facility. On behalf of our chairman,  
3 I'd like to read a letter that he has written.  
4 Dear Mr. McKoy: Cabot Corporation is pleased to  
5 offer this letter of support for the City of Tuscola and  
6 its bid to attract the FutureGen initiative to Eastern  
7 Illinois.  
8 Cabot has been an active member of the Tuscola  
9 business community for more than 50 years. During that  
10 time, Tuscola has provided business climate, quality of  
11 life and community values that have greatly contributed to  
12 the successful operation of our manufacturing facility.  
13 Our business and our employees have been able to succeed  
14 and thrive at Tuscola.  
15 Tuscola also provides a well-developed infrastructure  
16 that allows convenient access to major cities via railways,  
17 highways and airports. The city's commitment to the  
18 development and maintenance of this infrastructure is  
19 essential for the transport of raw materials and machinery  
20 we require and are necessary for the export of Cabot  
21 products worldwide.  
22 The city's well-maintained water and sewer systems,  
23 good schools, affordable housing and parks and other  
24 recreational areas contribute to a high standard of living  
0054 1 for Cabot employees and their families. These and other  
2 amenities help Cabot to attract and retain the skilled  
3 labor work force needed to maintain our competitive  
4 advantage.  
5 If sited in Tuscola, the FutureGen initiative can  
6 potentially provide an opportunity for the development of  
7 new electricity generation technology with positive and  
8 environmental impacts that would benefit both residents and  
9 businesses.  
10 As one of the major employers of the Tuscola area,  
11 Cabot looks forward to learning more about the FutureGen  
12 initiative.  
13 Sincerely, Kenneth F. Burns, Chairman and CEO, Cabot  
14 Corporation, Boston, Massachusetts.  
15 Thank you very much.

**T21. Cabot Corporation (Kleiss, Dan)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T22. Clinton, Reggie**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

19 REGGIE CLINTON: Good evening and thank you for  
20 the opportunity to speak. Arcola are the neighbors to the  
21 south of Tuscola here. And I want to let the board and the  
22 group doing the study realize that we have officially, the  
23 Board of Education, has gone on record as being in support  
24 of this project.

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1 We feel, not only the benefits of the, this would  
2 bring to our area. Mr. Burgess touched on it earlier. The  
3 Tuscola schools and all the local school districts around  
4 here are able to provide a quality education for the  
5 families and the workers that come here.

6 The other aspect of education I think we missed is  
7 not only what we can provide to the workers and families  
8 but what the workers and families and FutureGen could offer  
9 to our local schools, universities, and community colleges  
10 in the area.

11 One unique thing that I want to mention, that I drove  
12 up here -- I'm from Arcola to the south so that those in  
13 the audience will understand this example -- but FutureGen  
14 recognizes and represents cutting-edge technology,  
15 economically, ecologically friendly. What better picture  
16 to be a PR statement for that, that on one end of the  
17 spectrum you've got FutureGen plant out here and, on the  
18 other end of the spectrum, you have the community of the  
19 simple life people, the Amish community, coexisting,  
20 friendly, together, in that process. I think it's a unique  
21 opportunity that this part of the state offers.

22 We would welcome, and we do welcome FutureGen when  
23 you do locate in Illinois. Thank you.

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**T22. Clinton, Reggie**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**T23. Tuscola Economic Development, Inc. (Moody, Brian)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

4 BRIAN MOODY: Well, good evening everyone. I  
5 was running around like a busy bee ahead of time and didn't  
6 sign up on the speakers list so I got at the beginning, so  
7 my comments might sound a little strange. Because I was  
8 going to thank you all in advance. So I guess I'm thanking  
9 you at the end now.

10 I want to welcome you all, again, back to the  
11 community on behalf of TEDI, the Douglas County Engineer  
12 Jim Crane, and the Douglas County Task Force for  
13 FutureGen.

14 Our local team really wishes to offer our  
15 congratulations and offer our thanks to the team from DOE,  
16 from FutureGen, from the associated companies and  
17 consultants on the putting the Draft EIS. We really  
18 appreciate both the professional and personal sacrifices  
19 that so many people in this room made to get this document  
20 done, this, to really make this analysis possible. And we  
21 are quite proud of you for doing that, as we are of  
22 ourselves.

23 Our overall review has found that the EIS is  
24 consistent with the information that we provided from the

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1 local task force, and we feel it's a very solid  
2 characterization of our site here in Douglas County. If  
3 you haven't seen it, which I hope you have seen it, it's  
4 truly an impressive document.

5 We also want to make sure we thank the various  
6 members of our local task force, the various government  
7 agencies, the citizens and our local industry partners,  
8 many of whom are here tonight. Without all these folks, we  
9 just would not have been able to provide the information  
10 that was necessary for the environmental impact volume and  
11 then, now, for the Draft EIS. So we owe a great debt to  
12 those folks.

13 To the audience tonight -- I really want to  
14 emphasize, and the reason I wanted to get my name a little  
15 higher on the list -- this is really your night. This is  
16 really your opportunity to comment about FutureGen. We've  
17 been out talking about this project for, forever it seems  
18 sometimes. We hope you've learn a great deal about the  
19 project. We've tried to get that information out to the  
20 best of our ability. But this is really your chance to ask  
21 questions, regardless of, of the talk about positive or  
22 negative and the competition that goes on between the four  
23 sites.

24 It's important for the, for this project, as a whole,

**T23. Tuscola Economic Development, Inc. (Moody, Brian)**

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1 that these comments get made so these folks can look at  
2 these issues and make sure we are considering everything  
3 that might be impacted in the area. That's very important  
4 to us and to me personally. We've done this in an effort  
5 to obtain your true thoughts, your comments and your  
6 concerns. And this way, again, the DOE and the FutureGen  
7 Alliance can address a lot of these concerns.

8 I'm going to say it one more time. We sincerely want  
9 your comments on the Environmental Impact Statement. There  
10 are so many details and so many levels of analysis, and  
11 it's easy for all of us who have worked on this to let  
12 little details slip through the cracks. And so much of  
13 going through the draft versions and all the back and forth  
14 is finding those things and making sure that we have looked  
15 at them thoroughly. So I want to make sure you do make  
16 those comments.

17 Again, I want to thank everyone throughout this  
18 process. We've had exceptional community support, a lot of  
19 people have spent a lot of late nights on a lot of  
20 different projects to get all this work put together.  
21 We've really appreciated it.

22 Thank you, again, for the opportunity to share our  
23 community with you and for your questions today and in the  
24 past. Thank you very much.

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**T23. Tuscola Economic Development, Inc. (Moody, Brian)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T24. CSX Transportation (Livingston, Tom)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

8 TOM LIVINGSTON: Thank you. Good evening. My  
9 name is Tom Livingston, from CSX Transportation. I'm  
10 joined by Scott Walters, from CSX Transportation, who runs  
11 our coal division for the northern part of the country.  
12 CSX is the largest eastern US freight railroad. We  
13 are pleased to wholeheartedly support the Tuscola site. It  
14 was accurately said earlier that, that Illinois is a coal  
15 state. That is very true. But it is also a rail state.  
16 And they are linked by history and by industry.  
17 Illinois and Tuscola knows how to do coal. They know  
18 how to do rail. There is no more environmentally friendly  
19 way to haul this nation's freights than by rail. It takes  
20 about a gallon of gas to haul a ton of freight 400 miles.  
21 So we are convinced that there is the least learning  
22 curve for Tuscola than any of the sites. CSX operates  
23 along 23,000 miles of track, and we see an awful lot of  
24 towns. But we are proud of our association with Tuscola  
1 and the organizers here who have the people, energy, and  
2 the talent to join the 17,000 rail employees in the State  
3 of Illinois to make this work and to make it work  
4 successfully.  
5 I also want to echo the partnership with  
6 Representative Rose and the Congressional delegation and  
7 the State of Illinois.  
8 So we know that Tuscola, from a rail perspective,  
9 gives FutureGen the greatest chance for success, in our  
10 minds, as operators of rail and critical transport for this  
11 project. Thank you.

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**T24. CSX Transportation (Livingston, Tom)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T25. Assistant Chief, Tuscola Fire Department (Wineland, George)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

16 GEORGE WINELAND: I am George Wineland. That's  
17 W-I-N-D-L-A-N-D.

18 I would like to talk briefly in regards to the impact  
19 study. Believe me, I did read it three different times.  
20 It's like reading the Federal Register. More of you can  
21 laugh at that than some.

22 First of all, if I may, my involvement with the  
23 project is from a number of standpoints. I, first of all,  
24 am the Assistant Fire Chief for the Tuscola Fire

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1 Department. I'm responsible for, as the safety officer and  
2 also as the coordinator for a twelve-man, hazardous  
3 material response group.

4 And how did that come about? I had 35 years with the  
5 chemical plant just to the west as a safety requirement for  
6 34 years; and 33 of those years I lived at the plant,  
7 physically lived at the plant. My home was there.

8 So I know the impact of understanding and the  
9 concerns involved in regards to the environmental and the  
10 personal impact. As being the vice-chairman of the LEPC,  
11 which is dictated by the State of Illinois under the Right  
12 to Know Act and also as Cochairman of the Douglas County  
13 Emergency Management Association, we have looked through  
14 the impact study with quite a bit of detail.

15 I certainly want to appreciate this evening. I had  
16 spoke to a number of people around at the different  
17 projects and questioned in regards to a few of the  
18 statements that was made within the impact study.

19 First of all, the amount of exposure to the various  
20 chemicals at one point in the study, they made mention that  
21 it is similar to a petrochemical operation. Well, we, as  
22 Tuscola, have had a lot of experience dealing with chemical  
23 plants.

24 In regards to, a lot of the things I was really

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**T25. Assistant Chief, Tuscola Fire Department (Wineland, George)**

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1 concerned, I'm a native of Tuscola. I am not a native of  
2 Tuscola, I'm sorry, but of Illinois. I'm kind of a  
3 transplant. I came out of the industry, the operation in  
4 Peoria, Illinois; and we came down here in 1957 to take  
5 over the fire protection and the emergency response  
6 activities for the plant. We have seen many of these  
7 chemicals, processes, that certainly, that is well  
8 described in the study. It's quite detailed.

9 And being a native of Illinois, I have one question.  
10 I have never seen the Kirkland's snake. You went through  
11 so much depth of detail in the habitat that surrounds our  
12 area is ideal for the Kirkland's snake. I have never seen  
13 one of those. The Indiana bat, I have seen.

14 But we have spent considerable amount of time,  
15 through Joe Victor, as the chairman and coordinator for the  
16 Tuscola Emergency Management, in studying the response  
17 activities, according to your description within the study,  
18 that we feel very strongly that we have the capabilities  
19 that, in case of an emergency, we will be able to respond  
20 for, for any type of activity that may arise.

21 I believe, by reading the information, that looking  
22 at all of the different aspects of the operation itself,  
23 all of these are very proven processes throughout the  
24 country or throughout the world. The thing that FutureGen,

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1 I'm understanding, has done has collectively put all of  
2 this together, these processes here in the Tuscola area.

3 As being associated with the chemical plant and the  
4 concerns that they had initially with available water, one  
5 of the reasons I came to Tuscola to hire in at the USI, at  
6 that time, was due to the fact that we were in competitors  
7 with National Distillers in producing alcohol products.  
8 They had a new process; and I wondered as I, many people  
9 have asked today, well, first of all, where is Tuscola.  
10 And I found the same answer that I have given a number of  
11 times. It's 25, 30 miles south of the University of  
12 Illinois. But when I came down, I appeared, when we looked  
13 at the resources and the distribution, and I certainly  
14 appreciate the comments from CS and X -- at that time, when  
15 we came in here, it was B and O was the distribution system  
16 -- that is capable of transporting the products that were  
17 manufactured.

18 But the thing that really hit me is the river that  
19 was flowing into our reservoir and, at that time, the water  
20 system we were providing Apollo water over at Tuscola, as  
21 well as Arcola and our industry. But that river only  
22 starts 28 miles north of here, which was amazing to me how  
23 we could use that vast amount of water and we did. At that  
24 time, we put in 5 artesian wells into the aquifer at

**T25. Assistant Chief, Tuscola Fire Department (Wineland, George)**

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1 Bondville; and, periodically, during drought season, we had  
2 to pump in. But the drainage and the output of waste water  
3 products certainly supplemented what our needs were, and we  
4 had that retention.

5 We, through the Emergency Response, I believe we have  
6 the capability of providing a safe, working environment.  
7 I'm sure that the company, when building the operation,  
8 will be in compliance with the OSHA requirements, the  
9 Department of Labor through the State of Illinois and also  
10 through the National Fire Protection Association, to  
11 develop their facility.

12 Again, I want to personally thank the gentlemen and  
13 all of the ladies that I had the opportunity to speak to;  
14 and they have refreshed a lot of the information that we  
15 had some questions on.

16 Thank you very much.

**T25. Assistant Chief, Tuscola Fire Department (Wineland, George)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T26. Ambitec Engineering (Yoakum, James)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

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21 JAMES YOAKUM: James Yoakum, Y-O-A-K-U-M.  
22 James Yoakum, I'm Project Manager from Ambitec  
23 Engineering, a local support person for the large  
24 engineering procurement stress management firm here in

1 Illinois.

2 I've been involved in numerous, industrial  
3 construction projects and operations across both East  
4 Central Illinois and across the nation. I also grew up in  
5 Southern Indiana and was the son of a coal miner. So I  
6 understand the importance of Midwest coal and the  
7 differences between good coal and bad coal and needing to  
8 find a good application for, for the coal we have here. So  
9 I'm very excited about this project.

10 Mainly, as a local technical resource and a resident  
11 of Tuscola, I'm excited about this opportunity and what's  
12 at stake. We have outstanding local, technical resources,  
13 contractors and future employees to support all phases of  
14 the FutureGen Project. We're glad you're here. We hope  
15 you stay here.

16 Thank you.

**T26. Ambitec Engineering (Yoakum, James)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T27. Kennedy, John**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

21 JOHN KENNEDY: Good evening. I'm John Kennedy.  
22 I'm a manufacturing manager and an intent engineering  
23 personnel at one of our local facilities.  
24 I just want to state that, in these days in this  
0066  
1 county and in this world, energy is a real commodity. And  
2 there's a lot of not in my backyard attitudes in the  
3 country, in the world, today. And I guess the one thing I  
4 want to state is that you're not going to find that here  
5 with this project in Tuscola.  
6 You know, if it was a nuclear plant, there would be  
7 opposition. No doubt. If it was a oil refinery, there  
8 would be opposition; no question. But from the things that  
9 I've seen, the literature that I've read, there's a lot of  
10 positives for this program. And I think that you'll find  
11 that, as a community, we're going to pull together. We  
12 have pulled together. We're going to be active, and we're  
13 going to help bring this to our town.  
14 It's a positive thing. I don't see negatives. And I  
15 think it's something that we can all get on board and  
16 support.  
17 Thank you very much.

#1

**T27. Kennedy, John**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**T28. Hanner, Dennis**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

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23 DENNIS HANNER: My name is Dennis Hanner, and  
24 I'm a local resident of this area. I grew up here. My

1 parents raised me and my siblings. I have raised my  
2 children here. My grandchildren, part of them, are being  
3 raised here. And I hope my great grandchildren are.

4 As I look at this project and I've attended the  
5 meetings that we've had in the past, there's been questions  
6 I had.

7 One was the water. Every time an article appears in  
8 the newspaper, I've taken time to read it to find out what  
9 it says and what it's talking about. The water question  
10 has been answered in my mind. The natural habitat question  
11 has been answered in my mind. The safety of the plant has  
12 been answered in my mind.

13 The noise level. Some people ask that. Is there  
14 going to be a problem with the noise. Well, as the crow  
15 flies, we live about a mile from Lyondell. They make  
16 noise, but it is not a problem for our life.

17 I guess the best way of saying it is, I feel  
18 comfortable with the problems with the possibility of  
19 FutureGen being located here. To me, it is a great thing;  
20 and it's, I just feel good about it. I guess that's the  
21 best way of saying it.

22 Thank you.

#1

**T28. Hanner, Dennis**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**T29. Robertson, Ann**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

3 ANN ROBERTSON: My name is Ann Robertson, and  
4 I'm a resident of Tuscola. And the young man who mentioned  
5 that he had been here for six generations, I'm a little  
6 older than he is. I have, I'm five generations in East  
7 Central Illinois and six generations for Southern  
8 Illinois. So this project is very near to my heart.

9 And I, and I just want to say how pleased I am that  
10 you're here. It's been wonderful to sit here in this  
11 audience and see the wonderful community and the  
12 recognition of the resources that we have here. Because we  
13 do live in a beautiful place. And even though I was raised  
14 in this area, I married an immigrant, and we gallivanted  
15 around the country for about 20 years and lived in other  
16 countries. So I've had the opportunity to see some other  
17 places, and we came back here.

18 And you missed the drought. We had about 3 weeks of  
19 drought here. So the gentleman who said we had abundant  
20 water, a few weeks ago, we wouldn't have said that; and we  
21 would have been a little worried about our crops here.

22 But we do have a lot of resources. Unfortunately,  
23 though, those of you who know me from church know that I  
24 sit in the back pew; and I hardly ever come up to the front

0069

#1

1 of the, of the congregation unless it's to take communion  
2 or something.

3 So this is hard for me to be up here and talk about  
4 this. And I have to raise some issues. And I do have a  
5 few things that I want to share with you, partly from a  
6 book, because I'm a writer/resource person. I'm not a  
7 public speaker.

8 This is a book called Big Coal. This has been  
9 donated to the Tuscola Public Library. And Chapter 9  
10 addresses the Illinois coal industry and talks about  
11 FutureGen, specifically. So, I want to encourage you to  
12 check it out from the library or buy it from your local  
13 book store. Okay.

14 Now, because my eyes are not as good as what they  
15 used to be, I'm going to have to read a few quotes from  
16 this book, just to kind of share with you. So just bear  
17 with me here while I find my place.

18 This book, by the way, was not written by a tree  
19 hugger. We lived in California, and so we were exposed to  
20 the folks that hug the old growth trees. And when I saw my  
21 first one, I realized why they did it. They are beautiful  
22 trees.

23 But this is not one of those people. He's a very  
24 well-respected journalist who has researched coal, the coal

**T29. Robertson, Ann**

0070

1 industry in depth.  
2 And on Page 212 to 213, he talks specifically about  
3 FutureGen or 'NeverGen,' as it's affectionately known to  
4 some people in the industry. He believes and his research  
5 suggests that it will turn out to be just another expensive  
6 government boondoggle. It would be foolish to bet on  
7 FutureGen as a solution to America's energies problems. He  
8 concedes that there are certainly some research potential  
9 in FutureGen.

10 However, it's, he also says that it's hard to fine  
11 anyone without a vested interest in the project who really  
12 believes that FutureGen is anything but an expensive,  
13 political decoy to make it look like the coal industry is  
14 doing something big and important while, in fact, it is  
15 doing very little.

16 Not my words. His words. Based on research.  
17 Mr. Goodell gives examples in several areas of the  
18 book that coal companies have a pattern of using decoys  
19 including language like: Clean coal technology.

20 And this buys time for the coal industry so they can  
21 continue to conduct business as usual and cash in before  
22 the economic hurricane of global warming hits.

23 The truth is that coal mining is anything but clean.  
24 And my mother's farm in Southern Illinois, right now, is

#1

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1 being threatened by longwall coal mining.

2 Now, one of the things, and I know you're good people  
3 and you have done a wonderful job. We're very happy to  
4 have you here. Okay. But one of the things that irritates  
5 me about FutureGen and the coalition is what a wonderful  
6 opportunity to make the coal companies face up to the  
7 environmentally devastating practices that they are  
8 currently using in coal. And you have not addressed those  
9 issues. And these issues need to be addressed.

10 Anyone here in Illinois can go to Southern Illinois,  
11 and you can see where farmland has been devastated because  
12 of coal mining. There are independent farmers and groups  
13 that have combined in almost a David and Goliath battle to  
14 fight the coal companies and protect their farmland.

15 Now, they aren't against coal mining. They are  
16 against the type of mining methods, right now, that are  
17 destroying their land and the water supplies. So we need  
18 to face up to these realities.

19 I did not get copyright to print out some of the  
20 photographs that are on various web sites now that show  
21 what longwall mining look like, or I would have brought  
22 them with me here tonight. But I encourage you to go and  
23 take a look at some of those web sites or visit over by  
24 Litchfield and some of the other areas in Southern

**T29. Robertson, Ann**

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1 Illinois.  
2 So, on page 251, the author, here, goes and says, the  
3 most dangerous thing about our continued dependence on coal  
4 is not what it does to our lungs or mountains -- and I'd  
5 like to add our fields and water here -- or even our  
6 climate, but what it does to our minds. It preserves the  
7 illusion that we don't have to change our thinking.

8 It is important to see that the barriers to change  
9 are not technological but political. And I guess this why  
10 I'm sharing with you today.

11 20 or 30 years ago, FutureGen may have been a great  
12 project. But right now, in fact, I talked with an  
13 environmental policy expert in the Department of Defense  
14 this afternoon; and he believes that by the time FutureGen  
15 is built, if it's built -- by the way the DOD has bought  
16 into solar technology, not coal technology -- he believes  
17 that it will be a dinosaur. And it's moving us in the  
18 wrong direction. We have to focus on sustainable energy.

19 So what does that mean for Tuscola and some of the  
20 other communities that have embraced this and, certainly,  
21 for our state that would benefit so much from some economic  
22 change and some jobs and putting some extra folks to work  
23 here with the wonderful talents that we have. Because we  
24 do. We have all the talent here that you would ever need

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1 to do this project. And we have all the support and  
2 education here that you would ever need to do this project.

3 But what if we changed the project? What if we made  
4 it truly sustainable energy? There are a growing number of  
5 scientists that believe that the money spent right now on  
6 coal technology is wasted money, that, in fact, that same  
7 money, spent on solar technology, wind technology, or  
8 biomass would be far better used and a far better support  
9 of our taxpayer dollars.

10 So I'm sharing this with you today, not because I'm  
11 trying to be argumentative; because I'm not. I, in fact, I  
12 tend to be somebody who just wants to encourage and  
13 support; and I'm not a cheerleader, exactly; but you know,  
14 I do want to, to be supportive. But I can't be supportive  
15 of this. You know, I have to be truthful about the issues  
16 that exist.

17 But I do want to provide you with more information.  
18 And what I have done is put together some web sites of  
19 various information regarding sustainable technology and  
20 other choices that we could make rather than moving in this  
21 direction that would truly put us on the map as the future  
22 community.

23 Now, when I was at the coffee shop, they had green  
24 paper; so, of course, I had to put it on green paper. But

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1 I'm going to put it over there on the table; and, if anyone  
2 is really interested in seeing an alternative or looking at  
3 some alternatives, it will be over there.

4 Thank you very much.

**T29. Robertson, Ann**

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**Response to Comment #1:**

The effects of long-wall mining for coal are well known and well described in general. FutureGen does not aim to change mining techniques, and for the proposed project DOE has no decisions that would affect coal mining, as coal mining techniques are not within the scope of the FutureGen Project. Additionally, DOE oversees numerous projects on a wide variety of renewable energy generation technologies, including wind, solar, and hydro. However, the particular goal of the FutureGen Project is to demonstrate an advanced power generation facility based on fossil fuels, specifically coal.

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**T30. Illinois State House of Representatives (Rose, Chapin)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

3 CHAPIN ROSE: Thank you. And I apologize for  
4 being late. We were in this overtime session. We have to  
5 be back at 9 a.m. tomorrow. But I hope that the fact that  
6 I'm here to tell you how important I view this project.

7 And with that, I want to begin; and I don't want to  
8 bore the folks who were in Mattoon the other night, but  
9 welcome. Welcome to Illinois. Welcome to Tuscola this  
10 time. I absolutely hope that you have enjoyed your visit.  
11 I know that this is a wonderful community, a wonderful  
12 place to live. And I just heard Mr. Ribley tell you a  
13 little bit about why we think Illinois should be the new  
14 home of FutureGen.

15 I want to highlight, just for a second, a few  
16 things. The geology is here. The geology is here. We  
17 have the cap rock seals. They have not been perforated,  
18 unlike our competitor's state.

19 The technology is here. The University of Illinois  
20 is 20 minutes to the north. Eastern Illinois is 20 minutes  
21 to the south. And SIU and their coal development  
22 laboratory is not too far beyond that.

23 Finally, and I think most importantly, the coal is  
24 here. As I understand this project, it's designed

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1 specifically to find an economic use for the high sulphur,  
2 so-called bad coal. That bad coal is strewn all about the  
3 State of Illinois. All about Kentucky. All about  
4 Indiana. And, you know, we've been outreaching to our  
5 neighbors and our neighboring states to bring them on board  
6 in order to bring this project home.

7 Something else I want to just talk about. And I  
8 think Matt Jones from Tim Johnson's office touched on, is  
9 the unprecedented scope of the cooperation this has brought  
10 on. The governor's office, Governor Blagojevich's office;  
11 the DCO; Director Lavin, who was at the Mattoon meeting;  
12 Mr. Ribley; Tim Johnson; John Shimkus; our congressional  
13 delegations; our local folks. You know the Mayor of  
14 Tuscola is over here, Mayor Kleiss. The Mayor of Mattoon.  
15 I have, in my 5 years of office, never seen anything like  
16 this. Never seen anything like this.

17 On the floor of the House of Representatives today,  
18 I, a Republican, had a conversation with the Democratic  
19 Speaker of the House about FutureGen. This is  
20 unprecedented in its scope, the cooperation to bring this  
21 project to the State of Illinois.

22 I want to close my remarks, again, by welcoming you  
23 and Chairman Mudd and the members of the panel. We  
24 appreciate you being here. I hope that your stay was

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1 enjoyable. If there's anything we can do to make it more  
2 so, please let us know. My office is certainly at your  
3 disposal.

4 And, finally, I just want to reiterate. The  
5 technology is here. The geology is here. The coal is  
6 here. We want FutureGen here in Illinois. So thank you  
7 very much, and I hope you enjoy the rest of your stay

**T30. Illinois State House of Representatives (Rose, Chapin)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**T31. Schumann, Robert**

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

TUSCOLA

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

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#1

Robert is 1/4 participant in  
The Schpaemann family Trust 10 acres  
of trust is being held in option for the  
CO2 sequestration site for the Tuscola plant

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  
 HARD COPY  CD / SUMMARY  
NAME Robert Schumann ORGANIZATION  
ADDRESS 1333 MARTINGALS CITY Eugene STATE OR ZIP 97401  
E-MAIL ADDRESS

**T31. Schumann, Robert**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**T32. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

Groundwater impacts.

“At Tuscola, under low-flow periods, the Kaskaskia River water that would serve as the plant’s process water could be augmented with water drawn from the Mahomet Aquifer.”

- #1 “Lyondell-Equistar Chemicals currently draws its raw water supply from an existing intake structure along the Kaskaskia River, and supplements its water supply during low-flow conditions by pumping water from wells near Bondville, Illinois, which are screened in the Mahomet aquifer. This supplemental water is conveyed to the intake structure at Lyondell-Equistar Chemicals via the Kaskaskia River.”

It should be noted that an error was recently discovered in the Kaskaskia River stream gauge at Tuscola. New measurements indicate that water flows in the Kaskaskia River have been significantly larger than previously reported – as much as 2.5 times larger. The Illinois State Water Survey is conducting further measurements to complete a new calibration curve for the stream gauge. As a result, it is anticipated that augmenting the river’s flow with water drawn from the Mahomet Aquifer will be required even less frequently than predicted.

Noise from train operations.

- #2 Noise levels for the Tuscola Site during coal unloading would increase by less than 3 dBA at the three closest residential receptors and by up to 12 dBA at 12 other residential receptors within approximately 1 mile (1.6 kilometers) of the site boundary.

The numbers in this statement are reversed. The larger 12dBA increase would be at the closest receptors and the <3dBA increase at the others. Also here and in Sections 4.14 and 5.14, it should be noted that noise impacts at the closest receptors can be mitigated by 5-10 dBA if earthen berms are constructed along the site perimeter. Planting of trees also mitigate noise levels somewhat.

Description of surface water crossings by utility corridors.:

- #3 “the proposed CO2 pipeline at the Tuscola Site would cross seven surface waters,”  
Section 5.7.3.1 of the draft EIS, page 5.17-11, says, “The proposed CO2 pipeline would cross four surface water bodies: one unnamed tributary to the Tuscola No. 4 drainage ditch, and three unnamed tributaries to the Kaskaskia River.” Also, the study of wetland areas associated with the Tuscola site conducted by Hey and Associates found that the CO2 pipeline would cross only one wetland as stated in Section 5.8.3.1 on page 5.8-8. These statements are contradictory. We believe **one** surface water is the correct number.

**T32. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

Tuscola groundwater impacts

**Operations:**

Process water source; treated wastewater primary source, ultimate source is the Kaskaskia River.

Shortterm

impacts from supplemental use of groundwater. Aquifer: Mahomet (supplemental only), Aquifer capacity: 16 to 17 million gallons per day (61 to 64 million liters per day)

#4 The primary source is an industrial reservoir filled with water from the Kaskaskia River. While the river flow may include quantities of treated waste water and some treated waste water may be returned to the reservoir, the river is the main water source.

Also, the aquifer capacity, stated for the Tuscola site as 16 to 17 million gallons per day (MGD), is too low to be the yield for the entire Mahomet aquifer. The potential yield from the Mahomet and overlying aquifers was estimated to be 445 MGD (Visocky and Schicht, 1969). The 16 to 17 MGD figure may be the total pumping capacity of the wellfield used by the Tuscola chemical company that pumps groundwater from the Mahomet aquifer and discharges to the Kaskaskia River. A well capacity of 12,000 gallons/min converts to 16+ MGD.

Existing Air Quality

#5 “The nearest non-attainment areas are located in Indianapolis, Indiana (152 miles [244.6 kilometers] away) and Vigo County, Indiana (71 miles [114.3 kilometers] away).”

This location is correct; however the distance appears to be in error. IEPA had originally provided information indicating that the distance to the nearest nonattainment area (O<sub>3</sub>) is 86.3 miles not 152 miles.

Cities within ROI

#6 “Tuscola is not within 50 miles (80.5 kilometers) of any of the 10 largest cities in Illinois. The closest of the 10 largest cities to Tuscola is Springfield to the west.”

While technically correct, the twin cities of Champaign and Urbana, when considered as a single metropolitan area, would be the sixth largest in the state, and is only 24 miles north of Tuscola.

Thickness of optional reservoir

#7 “At the Tuscola Site, the St. Peter is estimated to be over 200 feet (61 meters) thick with good lateral continuity and permeability.”

The correct figure is 100 feet. The St. Peter at Mattoon is known to be 200ft thick, but the value for Tuscola is in doubt, but is estimated at 100ft. Other references to this thickness in the EIS correctly use the 100ft. figure.

**T32. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

Powerplant site surface geology

“The surficial geology of the power plant site includes glacial deposits that are likely 40 to 250 feet (12.2 to 76.2 meters) thick.”

While the thickness of the surficial deposits may have this large range in thickness within a 5 to 10 mile radius of the Tuscola site, at the site itself, the thickness is about 180 to perhaps about 220 or a little more. This is based on several pieces of information. There is a tributary bedrock valley mapped on the statewide bedrock topography map. In addition, the site is on the east flank of the Arcola moraine, a late Wisconsin feature of the Lake Michigan lobe. The glacial sediment in the moraine is a few 10’s of feet thicker than surrounding plain. The ISGS drilled two test holes on the south side of the site with the GeoProbe last year and were stopped by resistance to drilling at about 42 feet. A paleosol was encountered at this depth, developed in older glacial deposits. (There are two paleosols developed in older glacial deposits at the nearby Tuscola quarry, one at about 20 feet, and one at about 35 feet).

There are few water-well records and engineering boring records that penetrate the glacial deposits and encounter rock. None are at the site, but ones near the site indicate a thickness of about 200 feet. At the town of Tuscola, records indicate a thickness of about 120 to 150 feet, and at the nearby Tuscola quarry it is just 40 feet thick.

#8 We suggest replacing this statement with the following”

“The surficial geology of the power plant site includes glacial deposits that are about 200 feet thick. The site is underlain by a tributary to the Pesotum bedrock valley segment of the Mahomet bedrock valley system which has an elevation as low as 450 feet at the site. Within a 5-mile radius of the Tuscola site, the thickness of unconsolidated deposits ranges from less than 50 feet to more than 200 feet. At the Tuscola Quarry, 4 miles east of the Tuscola site, the thickness of unconsolidated deposits is about 40 feet.”

Sources of information:

Herzog, B.L., B.J. Stiff, C.A. Chenoweth, K.L. Warner, J.B. Sievering, C. Avery, 1994  
Illinois State Geological Survey, Champaign, Illinois  
ISGS GIS Database  
GISDB\_BEDGEO.IL\_Bedrock\_Topography\_1994\_Ln

Illinois State Geological Survey, 1994  
Illinois State Geological Survey, Champaign, Illinois  
ISGS GIS Database  
GISDB\_QTGEO.IL\_Drift\_Thickness

Hansel, K., Berg, R. C., Phillips, A.C., and Gutowski, V.G, 1991, Glacial sediments, landforms, paleosols, and a 20,000-year-old forest bed in east-central Illinois: Geological Society of American North-Central Section 33rd Annual Meeting, April 1999, Illinois State Geological Survey, Guidebook 26, 31p.

**T32. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

Nearby wells

“The Tuscola Site subsurface ROI is surrounded by operating and abandoned petroleum exploration and production wells, with several hundred within 5 miles (8.0 kilometers) of the proposed injection site, and likely approaching 100 within 2 miles (3.2 kilometers).”

- #9** According to ILOIL (<http://runoff.isgs.uiuc.edu/website/iloil/viewer.htm>), there are 197 operating and abandoned oil and gas wells within a two mile radius of the Tuscola injection site. Of the 197 wells, 9 are active gas storage wells operated by NGPL in the Cooks Mills Consolidated field in the Cypress sandstone, 5 are active oil wells in the Rosiclare, McClosky, and St Louis at Cooks Mills, 90 are plugged Rosiclare oil wells at Cooks Mills, 37 are plugged Rosiclare oil wells in the Chesterville East field about 1.5 to 2.0 miles N-NW of the injection site, and 56 are plugged dry holes. All the dry holes had Mississippian targets, except 3 drilled to Devonian, and 3 to the Trenton.

Seismic activity

- #10** “The most recent seismic event, on December 6, 2006, was a 2.7 magnitude earthquake centered 101 miles (162.5 kilometers) from the midpoint between the power plant and sequestration site.”

The 2006 date is incorrect. Chapter 4 references this same event as occurring in 2005.

Impacted aquifers

- #11** “Because neither the specific aquifer to be used for the water supply nor well locations have yet been selected, the analysis addresses a number of aquifers that could be used.”

The process water supply source description and the analysis that follows this statement clearly indicate that the Mahomet aquifer is the only aquifer that might be impacted (indirectly) by the water supply from the Kaskaskia River.

CO2 Plume Radius

- #12** “Reservoir modeling indicates that the largest plume radius would be approximately 1.2 miles (1.9 kilometers) over 50 years of injection at a rate of 1.1 million tons (1 MMT) per year.”

The radius here is incorrect. In all other references to the Tuscola plume radius the number given is 1.1 miles (1.8 kilometers).

**T32. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

Historic preservation at powerplant site.

#13

“IHPA concurrence with the results and recommendations contained in the archaeological survey report is pending.”

On January 30, 2007, IHPA concurrence was received stating that no significant historic, architectural, and archaeological resources are located in the proposed project area. This letter is attached in Appendix A of the EIS.

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**T32. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

**Response to Comment #1:**

This information will be taken into account as the design process progresses; therefore, the text will remain as presented in the EIS. Comment noted and will be included in the Administrative Record of the EIS.

**Response to Comment #2:**

Noise levels for the Tuscola Site during coal unloading would increase by less than 3 dBA at the three closest residential receptors and at four other residences within 1 mile (1.6 kilometers) of the site boundary. Text in Table 3-13 was revised as follows: “Operations: Sound enclosures, barrier walls, earthen berms, or dampening devices could be used whenever possible. In addition, alternate site configurations could be considered in order to position noise-producing equipment away from the impacted receptors (Mattoon and Tuscola).”

**Response to Comment #3:**

The EIS provides separate discussions of surface water resources (i.e., streams/draws) and wetlands. Therefore, the statements in the EIS regarding impacts to surface water crossings and wetland crossings at the Tuscola Site are not contradictory. The one wetland in the CO<sub>2</sub> alignment (confirmed by Hey and Associates) is classified as a PUB (Palustrine pond, Unconsolidated Bottom) and has been added to the Surface Water discussion. The EIS, however, has not been revised to include stream discussions in the wetland sections. The following text revisions have been made: Table S-12 and Table 3-3 - the pipeline stream crossings for Tuscola have been changed from “7” to “4” (this number was incorrectly presented in the EIS impact tables). Text in Section 3.1.7 for Tuscola has been revised from “seven” to “five” surface waters. This revision corrects the stream crossings to four, and also includes the PUB surface water wetland, totaling five surface water crossings. In addition, text in Section 5.7.3.1 under the CO<sub>2</sub> pipeline has been revised as follows:

“The proposed CO<sub>2</sub> pipeline would cross five surface water bodies: one wetland (pond), one unnamed tributary to the Tuscola No. 4 drainage ditch, and three unnamed tributaries to the Kaskaskia River.”

**Response to Comment #4:**

Table 3-3 and S-12 were revised to say: “Aquifer capacity: 445 million gallons per day (1.7 billion liters per day) for the Mahomet and overlying aquifers (Visocky and Schicht, 1969).” A footnote was added to say: “Figures represent estimated additional aquifer capacity, not total capacity. Lyondell-Equistar well field currently has a capacity of 16 to 17 million gallons per day (61 to 64 million liters per day).” The primary source of process water is an industrial reservoir filled with water from the Kaskaskia River. The 16-17 million gallons per day estimate is for the well field belonging to the chemical company, and it is located near Bondville, approximately 20 - 25 miles north of the site. The water from this well field is used to supplement natural flows in the Kaskaskia River and is conveyed to the plant by the river. The 445 million gallons per day figure from Visocky & Schicht is for the entire Mahomet aquifer over its entire area, which includes Champaign-Urbana.

**Response to Comment #5:**

DOE confirmed the distances from Tuscola to the cities listed in the EIS using Google Maps. The text will remain as presented in the EIS. Comment noted and will be included in the Administrative Record of the EIS.

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**T32. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

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**Response to Comment #6:** DOE confirmed the distances from Tuscola to the cities listed in the EIS using Google Maps. The text will remain as presented in the EIS. Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #7:** The text in Section 5.4.2.1 was revised as follows: “At the Tuscola Site, the St. Peter is estimated to be over 100 feet (30 meters) thick with good lateral continuity and permeability.”

---

**Response to Comment #8:** The Commentor’s more specific estimate is encompassed by the range that is stated in the EIS. Because there is no certainty that the range in the EIS is incorrect, the text will remain as presented in the EIS. Comment noted and will be included in the Administrative Record of the EIS.

---

**Response to Comment #9:** The text in *Section 5.4.3.2* has been revised from “approaching 100 within 2 miles (3.2 kilometers)” to “between 100 and 200 within 2 miles (3.2 kilometers).” Physically counting the number of wells on the listed website (GIS interactive map) showed 187-197 wells in the sections within a 2 mile distance depending on exact site location, but only 146-156 wells were within a 2-mile (3.2-kilometer) radius circle. These numbers vary slightly based on location of the sequestration site in the section but are still significantly higher than the stated 100 wells in the EIS for the 2 mile radius. To further clarify information provided in the comment, the Trenton is limestone strata of Ordovician age that in some locations has been altered to a dolostone, increasing its porosity. This strata is well above the Mt. Simon target reservoir.

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**Response to Comment #10:** The date in Section 5.4.2.2 was revised to December 6, 2005.

---

**Response to Comment #11:** The following text was deleted from Section 5.6.1.2: “Because neither the specific aquifer to be used for the water supply nor well locations have yet been selected, the analysis addresses a number of aquifers that could be used.”

---

**Response to Comment #12:** Text in Section 5.6.3.2 was revised as follows: “Reservoir modeling indicates that the largest plume radius would be approximately 1.1 miles (1.8 kilometers) over 50 years of injection at a rate of 1.1 million tons (1 MMT) per year.

---

**Response to Comment #13:** The text in Section 5.10.3.1 was revised as follows: “IHPA concurrence with the results and recommendations contained in the archaeological survey report is pending.” has been deleted and replaced with “On January 30, 2007 IHPA concurrence was received stating that no significant historic, architectural, and archaeological resources are located in the proposed project area (see Appendix A).”

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**IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

Wetlands

- #1** Each wetland listed for Mattoon and Tuscola in These tables as well as any other references in the text should have the following reference. \*Field verified by wetland delineations conducted August 2006.

Unobstructed views of the powerplant.

“Two residential properties directly adjacent to the proposed power plant site, two residences within 0.25 mile (0.4 kilometer), and approximately 20 residences within a 1-mile (1.6-kilometer) radius of the site would have unobstructed views of the facility.”

“Three residences directly adjacent to the site and seven residences within 0.5 mile (0.8 kilometer) of the site would have unobstructed views of the power plant.”

- #2** The Illinois sites are capable of generating ample available soil (due to reservoir construction) to construct earthen berms, and earthen berms are logical additions to various perimeter locations to screen otherwise unobstructed views of the power plant. Tree planting is also capable of significantly screening the views. For example, for the Mattoon site, depending on the location of the plant, a 16-foot high berm has the potential to screen most of the structures of the power plant from the adjacent residences, and trees will further enhance the screen.

Table 3-14, possible BMPs, does not mention berms as a method to mitigate potential impacts to aesthetics and noise. Berms and vegetation are effective mitigation tools that should be listed in the table.

Description of Mt. Simon Formation

“The thickness of the Mt. Simon formation is considerably uncertain because the formation was deposited on an eroded, high-relief surface, and thicknesses have been observed to vary by hundreds of feet over small distances.”

- #3** This is an incorrect statement about the thickness of the Mt. Simon. While this statement may be true for the western part of the basin, it is not correct for the central part where the two proposed FutureGen sites are located. The Mt. Simon is thin on top of eroded, high-relief surfaces also know as, Precambrian highs, because it was never deposited on these features. However, regional mapping suggest that the Mattoon and Tuscola sites are not in areas with Precambrian highs since these high areas usually occur on the western and southern part of the Illinois Basin. It is highly probable that the Mt. Simon should be at least 1300 feet thick at both sites. In addition, recent seismic reflection data across the two injection sites does not show any Precambrian highs.

**IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

Description of Eau Clair seal.

“While the Eau Claire seal is well documented as a good seal for natural gas storage at other locations, if it has more siltstone than shale at the Mattoon or Tuscola sites, the seal is not likely to be as effective as if it is predominantly shale.”

#4

This is a misleading implication. It is highly unlikely that the Eau Claire is siltier at Mattoon and/or Tuscola given the depositional nature of sediments which get finer as they move distally from their source. Given what we know of the Eau Claire at Manlove Gas Storage field and the direction of the sediment source from that location, Tuscola and Mattoon, which are down dip from Manlove, should be more shaley, not potentially silty. The available well control in the Illinois Basin suggests that the Eau Claire has higher siltstone content to the north of the two proposed sites; therefore, it is extremely probable that the Eau Claire will have thicker and higher clay content at the prospective site than wells to the north. All of the geologic data suggests that the Eau Claire seal at Mattoon and Tuscola will be as good as or better than the same interval at the natural gas storage projects at other locations.

Relation of primary seal to active or transmissive faults

“The Illinois Department of Natural Resources (IDNR) has mapped no significant faults within approximately 50 miles (81 kilometers) of Mattoon (ISGS, 1997).”

“As previously discussed, significant faulting and fracturing is likely to be present along and near the steep western flank of the Tuscola Anticline located about 3 to 4 miles (4.8 to 6.4 kilometers) east of the Tuscola Sequestration Site.”

#5

While the first statement is correct, the Tuscola Anticline would be within 50 miles of the Mattoon site as well. A fairer, more accurate statement for both locations might be:

“The Tuscola Anticline is located about 3 to 4 miles (4.8 to 6.4 kilometers) east of the Tuscola Sequestration Site {approximately 24 miles north-northeast of the Mattoon Sequestration site}. This setting of a steep flank of an anticline may contain some faults and fractures, but to date none have been found or mapped in the area of review by the Illinois Department of Natural Resources (IDNR).

**IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

Modeling of Fault Leakage Scenarios

“The results of the numerical modeling of the fault leakage scenario for the proposed Mattoon Site indicate that, for permeabilities of 1 md and higher, the amount of CO<sub>2</sub> leakage through the fault would be relatively small, as measured by the CO<sub>2</sub> flux rates, extent of the plume, and CO<sub>2</sub> gas pressure at the base of the overlying Maquoketa formation. If the fault were 321 feet (97.8 meters) long and had a permeability of 50 md, the steady-state flux rate would be about 173 tons (157 metric tons) of CO<sub>2</sub> per year, or 0.006 percent of the 2.8 million tons (2.5 MMT) per year injection rate. The maximum plume extent occurred for the higher permeability faults and was 1.4 miles (2.3 kilometers) at year 60. The plume extent for the 1 and 0.01 md cases was essentially zero. Significant permeation of the Eau Claire shales is unlikely to occur at fault permeabilities less than 1 md (FG Alliance, 2006a).”

“The results of the numerical modeling of the fault leakage scenario for the Tuscola Site indicate that, for permeabilities of 1 md and higher, the amount of CO<sub>2</sub> leakage through the fault is at least 2 percent of the total amount injected, as measured by the CO<sub>2</sub> flux rates, extent of the plume, and CO<sub>2</sub> gas pressure at the base of the overlying Maquoketa formation. If the fault was 321 feet (97.8 meters) long and had a permeability of 50 md, the steady-state flux rate for the first 60 years would be about 1.1 million tons (1 MMT) of CO<sub>2</sub> or 2 percent of the 55 million ton (50 MMT) per year injection rate. The maximum plume extent occurred for the higher permeability faults and was 2.5 miles (4 kilometers) at year 100 and was still expanding. The plume extent for the 1 and 0.01 md cases was essentially zero. Significant permeation of the Eau Claire shales is unlikely to occur at fault permeabilities less than 1 md (FG Alliance, 2006b).”

#6

The major difference is that the Mattoon site says that results of numeric modeling suggest leakage would be “relatively small (p. 4.4-11).” For Tuscola, the conclusion is that “at least 2 percent of the total amount of injected” CO<sub>2</sub> could leak.

For the Mattoon and Tuscola sites the EIS leakage models have similar thicknesses of porous intervals, similar permeabilities, and place a 321 foot long fault with a 50 md permeability through the cap. **BUT:**

With both sites nearly the same and the same theoretical modeled fault, how can there be 1.1 million tons of leakage out of 55 million tons injected for the Tuscola site but only 173 tons of leakage out of 2.8 millions tons injected per year at the Mattoon site? - 2 percent versus 0.006 percent?

**Mattoon** – The EIS has a steady-state flux rate of 173 tons of CO<sub>2</sub> per year for the 2.8 million tons injected per year.

**Tuscola** – The EIS has a steady-state flux rate for the first 60 years of 1.1 million tons or 2 percent of the 55 million ton per year injection rate.

Is the steady-state flux rate of 173 tons per year for the Mattoon site also for the first 60 years?? Is the Tuscola leakage 1.1 million tons over 60 years? If so then the leakage is 0.65 percent per year.

**IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

They also look at different lengths of times for the maximum plume extent:

**Mattoon** – for the higher permeability faults 1.4 miles at year 60

**Tuscola** – for the higher permeability faults 2.5 miles at year 100 and was still expanding.

Why are the maximum plume extents not compared for the same time periods?

#7 The comparison of sites can only be reasonably accomplished if the information from the models is shown with steady-state flux rates for the same time periods and the same injection rates. Since both sites have similar thicknesses of porous intervals and permeabilities, it seems the differences in the modeled results can only result from errors in the assumptions

The assumptions used to model the fault leakage scenarios for the two sites are very different. Both sites are supposed to have a maximum of 2.8 million tons injected PER YEAR – not 55 million ton(s) per year at Tuscola and 2.8 millions tons injected per year at Mattoon. The 55 million ton figure is the total amount injected over the plant lifetime, not an annual rate, and is an obvious error.

Does the modeled leakage result from faults with the same permeabilities since 4 different permeabilities were used in the modeling? Is the extent of the plumes based on the same permeability faults?

The Tuscola modeling needs to be redone with the same assumptions as for Mattoon.

Aquifer designations

“The aquifers that lay beneath the injection site would not fit EPA’s definition (EPA, 2006) of an Underground Source of Drinking Water (USDW), which includes any aquifer or part of an aquifer that:

- #8
- Supplies any public water system, or contains a sufficient quantity of groundwater to supply a public water system and currently supplies drinking water for human consumption or contains fewer than 10,000 milligrams per liter of total dissolved solids (TDS); and
  - Is not an exempted aquifer.

Following EPA’s definition above, the shallow aquifers near the sequestration site cannot be classified as USDW because they do not supply any public water system or have the quantity of water to do so.”

The statement that the aquifers beneath the injection sites would not fit EPA’s definition of an underground source of drinking water (USDW) may not be correct. An aquifer only needs to contain a sufficient quantity of groundwater to supply a PWS and currently supplies a PWS, or contains less than 10,000 mg/l TDS.

**IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

A PWS, as defined by EPA, must serve 15 connections or 25 people for at least 60 days per year. Figuring 25 people at 75 gal/person/day = 1875 gal/day divided by 1440 minutes/ day = 1.3 gallons/minute. Therefore, an aquifer only needs to supply 1.3 gal/minute for 60 days a year to have "sufficient quantity". This equates to 112,500 gallons per year.

- #8 Without a demonstration that the aquifer(s) in question can not supply this amount or contains greater than 10,000 mg/l TDS we would consider them to be USDWs. Generally, throughout Illinois the 10,000 mg/l TDS is the controlling factor for what is and what isn't a USDW for purposes of the UIC Program.

Since this project will be designed and built following the Class I construction standards and will clearly be injecting well below the lowest USDW this shouldn't be a major issue.

Wetland mitigation

- #9 "IDNR has the authority to regulate jurisdictional wetlands through Section 404 and the IWPA."

Remove the above sentence. It restates the last paragraph of the previous page and its reference to Section 404 could be confusing. Replace with: "Impacts to any of the wetlands identified in the wetland delineation will require mitigation under the IWPA."

Wetland Mitigation

- #10 "The amount of mitigation required for the proposed power plant site and other project components (e.g., utility corridors) is not known at this time. Ratios have been established by the USACE regarding mitigation. For example, a 2:1 ratio would require 2.0 acres (0.8 hectares) of wetland creation for every acre (0.4 hectare) of wetland loss. Typical mitigation ratios for unavoidable impacts to wetlands would be 1:1 for open water and emergent wetlands, 1.5:1 for shrub wetlands, and up to 2:1 for forested wetlands. The appropriate type and ratio of mitigation would be determined through the Section 404 permitting process."

This paragraph should include a sentence about IWPA requirements such as: "Mitigation required by IWPA could be as high as a 5.5:1 ratio, but is unlikely to be any higher than a 4.0:1 ratio."

---

**IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

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**Response to Comment #1:** The following footnote has been added to Tables S-12 and 3-3: “Wetland acreage (hectares) are based on field verified wetland delineations conducted in August 2006.”

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**Response to Comment #2:** Possible mitigation measures are presented in Table S-16 and Table 3-13, where “landscaping” would include such things as constructed berms and screens produced by planted trees. As the design process progresses, consideration of various mitigation measures will be further defined; therefore, the text will remain as presented in the EIS.

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**Response to Comment #3:** The text in Section 3.2.2.3 has been revised as follows: “The primary reservoir uncertainty at the Mattoon and Tuscola sites is the volume of effective porosity and the permeability of the various rock layers. This uncertainty is primarily driven, in part, by the distance of the site (36 miles [58 kilometers] and 56 miles [90 kilometers], respectively) from the nearest well with subsurface data in the Mt. Simon formation.”

---

**Response to Comment #4:** The text states that if (conditional) the Eau Claire had more siltstone than shale at the sequestration sites, it would be less effective as a seal; therefore, the text will remain as presented in the EIS. Site specific testing during the characterization phase would resolve any uncertainty.

---

**Response to Comment #5:** Text in Section 5.4.2.1 has been revised as follows to indicate that possible faults and fractures in the Tuscola Anticline have not been found or mapped to date by Illinois Department of Natural Resources: “This setting of a steep flank of an anticline may contain some faults and fractures, but to date none have been found or mapped in the area of review by the Illinois Department of Natural Resources (FG Alliance, 2006b).”

---

**Response to Comment #6:** There is a typographical error in Section 8.3.3 of the EIV. The model results were corrected in the EIS. The leakage rates for Mattoon and Tuscola were calculated using similar model parameters (including permeability). The 157 MT/yr should be 15,700 MT/yr, which is exactly 0.6 percent of the 2.5 MMT/yr injection rate, which is correctly stated in the text. At Mattoon for the same fault leakage scenario, 1.02 MMT of CO<sub>2</sub> enters the Ironton-Gatesville sandstones after 60 years or 2 percent of the 50 MMT total injected. These values are very similar as would be expected and principally reflect the impacts of differences in CO<sub>2</sub> properties for the shallower reservoir depth at the Tuscola Site. The fault leakage scenarios for both Tuscola and Mattoon were evaluated over a 60-year period.

The text in Section 5.4 (Tuscola) was revised as follows: “If the fault were 321 feet (97.8 meters) long and had a permeability of 50 md, the steady-state flux rate for the first 60 years would be about 1.1 million tons (1 MMT) of CO<sub>2</sub> or 2 percent of the total 55 million tons (50 MMT) injected.” The text in Section 4.4 (Mattoon) was revised as follows: “If the fault were 321 feet (97.8 meters) long and had a permeability of 50 md, the steady-state flux rate would be about 17,300 tons (15,700 metric tons) of CO<sub>2</sub> per year, or after 60 years, approximately 0.80 MMT or 1.6 percent of the 50 MMT total injected.”

---

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**IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

---

**Response to Comment #7:**

There is a typographical error in Section 8.3.3 of the EIV. The model results were corrected in the EIS. The leakage rates for Mattoon and Tuscola were calculated using similar model parameters (including permeability). The 157 MT/yr should be 15,700 MT/yr, which is exactly 0.6 percent of the 2.5 MMT/yr injection rate, which is correctly stated in the text. At Mattoon for the same fault leakage scenario, 1.02 MMT of CO<sub>2</sub> would enter the Ironton-Gatesville sandstones after 60 years or 2 percent of the 50 MMT total injected. These values are very similar as would be expected and principally reflect the impacts of differences in CO<sub>2</sub> properties for the shallower reservoir depth at the Tuscola Site. The fault leakage scenarios for both Tuscola and Mattoon were evaluated over a 60 year period.

The text in Section 4.4 (Mattoon) was revised as follows: “If the fault were 321 feet (97.8 meters) long and had a permeability of 50 md, the steady-state flux rate would be about 17,300 tons (15,700 metric tons) of CO<sub>2</sub> per year, or after 60 years, approximately 0.9 million tons (0.80 MMT) or 1.6 percent of the 55 million tons (50 MMT) total injected.”

The text in Section 5.4 (Tuscola) was revised as follows: “If the fault were 321 feet (97.8 meters) long and had a permeability of 50 md, the steady-state flux rate for the first 60 years would be about 1.1 million tons (1 MMT) of CO<sub>2</sub> or 2 percent of the total 55 million tons (50 MMT) injected.”

---

**Response to Comment #8:**

The paragraph has been reworded to state: “The deep saline aquifers proposed for sequestration would not fit EPA’s definition (EPA, 2006b) of an Underground Source of Drinking Water (USDW), which includes any aquifer or part of an aquifer that:

- Supplies any public water system,
- Contains a sufficient quantity of groundwater to supply a public water system and currently supplies drinking water for human consumption or contains fewer than 10,000 milligrams per liter of total dissolved solids (TDS); and
- Is not an exempted aquifer.

Following EPA’s definition above, the shallow aquifers near the sequestration site may be classified as USDW. However, the deep saline aquifer targeted for CO<sub>2</sub> sequestration would not qualify as a USDW because of their very high total dissolved solids concentrations.”

---

**IL1. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**  
*(The complete comment document submitted to DOE is shown in G8.)*

---

**Response to Comment #9:**

Concur with the redundancy. The following sentences were deleted from Sections 4.8.2.1 and 5.8.2.1 “IDNR has the authority to regulate jurisdictional wetlands through Section 404 and the IWPA. IDNR also has peripheral authority through the Illinois Rivers, Lakes and Streams Act.” Replacement sentence not added as impacts are not discussed in affected environment section.

---

**Response to Comment #10:**

The following was added to Sections 4.8.3.1 and 5.8.3.1: “Mitigation required by IWPA could be as high as a 5.5:1 ratio, but is unlikely to be any higher than a 4.0:1 ratio. Tables 3-13 and 3-14 in Section 3.4 provide potential mitigation measures and best management practices to avoid, minimize, and offset impacts to wetlands.”

---

IL2. Red Barn Vet Service (March, Linda)

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

TUSCOLA

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

#1

I SUPPORT THE FUTURE GEN PROJECT  
IN OUR AREA - LOOK FORWARD TO  
HAVING YOU HERE -

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME LINDA MARCH ORGANIZATION RED BARN VET SERVICE  
ADDRESS 854 CR 2100 E CITY SIDNEY STATE IL ZIP 61877  
E-MAIL ADDRESS \_\_\_\_\_

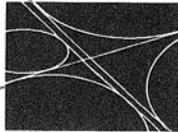
**IL2. Red Barn Vet Service (March, Linda)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**IL3. City of Effingham (Lange, John J.)**



*Crossroads of Opportunity*

June 26, 2007

Mr. Mark McKoy  
NEPA Document Manager  
U.S. Department of Energy  
National Energy Technology Laboratory  
P.O. Box 880  
Morgantown, WV 26507-0880

Attention: FutureGen Project EIS

Dear Mr. McKoy:

The City of Effingham was one of the candidates in the final site selection process for the FutureGen project. The Effingham site was ranked number five and was not part of the final evaluation; however, we appreciated the opportunity to participate in the original selection process.

We now would like to support our other local central Illinois communities of Mattoon and Tuscola in their efforts. Please consider this letter as formal support of the project in the June 26, 2007 public hearing in Mattoon and the June 28, 2007 public hearing in Tuscola.

Sincerely,

CITY OF EFFINGHAM

*John J. Lange*  
John J. Lange  
Mayor

JJL:jm  
cc: Mayor Charles E. White, Mattoon  
Mayor Daniel J. Kleiss, Tuscola  
file

**Effingham**  
ILLINOIS

**CITY HALL**  
201 East Jefferson  
P.O. Box 648  
Effingham, Illinois  
62401-0648

**Mayor**  
John J. Lange  
Public Affairs

**Commissioners**  
Alan Harris  
Accounts & Finances

Karen Flach  
Public Property

Merv Gillenwater  
Public Health & Safety

Larry Micenheimer  
Streets & Public  
Improvements

Building Official  
217-342-5300  
Fax 217.342.5391

City Clerk  
217-342-5301  
Fax 217.347.2675

City Treasurer  
217-342-5302  
Fax 217.342.5311

Engineering  
217-342-5303  
Fax 217.342.5391

Mayor's Office  
217-342-5304  
Fax 217.342.2746

Water/Sewer  
217-342-2366  
Fax 217.342.5356

www.effinghamil.com

#1

**IL3. City of Effingham (Lange, John J.)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

IL4. Tuttle, Albert D.

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

MATTOON

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

#1

LACKING TECHNICAL EXPERTISE ALL FOUR CONSIDERED SITES APPEAR TO BE ACCEPTABLE, HOWEVER, MY PERSONAL OPINION IS THAT AN ILLINOIS SITE SHOULD BE SELECTED FOR FUTUREGEN. HOWEVER, THE NATION'S ENERGY NEEDS SHOULD NOT RELY ON ONE TECHNOLOGY. THEREFORE TEXAS COULD BE CONSIDERED FOR A SOLAR GEN PROJECT, OKLAHOMA COULD BE CONSIDERED FOR A WIND GEN PROJECT, AND THE FLOW OF WATER IN THE MAJOR RIVERS COULD BE USED TO GENERATE ELECTRICITY.

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME	<b>7 Mr. Albert D. Tuttle</b>	ORGANIZATION	
ADDRESS	5795 Lema Rd	CITY	STATE ZIP
E-MAIL ADDRESS	Mattoon, IL 61938-8561		

**IL4. Tuttle, Albert D.**

---

**Response to Comment #1:**

DOE oversees numerous programs that are investigating and supporting a wide variety of renewable energy generation technologies, including wind, solar, and hydro. However, the particular goal of the FutureGen Project is to demonstrate an advanced power generation facility based on fossil fuels, specifically coal. Hence, technologies that would not be based on coal use are not within the scope of the FutureGen Project.

---

IL5. Hughes, Polly

July 9, 2007

Mr. Mark L. McKoy  
Environmental Manager  
US Dept. of Energy  
National Energy  
Technology Laboratory  
P.O. Box 880  
Morgantown, WV 26507

Dear Mr. McKoy:

#1 | As a resident of Mattoon, Illinois, I strongly support the construction of FutureGen at the Mattoon or the Tuscola site. As an employee of an organization that works for the development of skilled workforce in the East Central Illinois region, I am very interested and excited about the potential growth and opportunity that FutureGen can bring to our area.

Sincerely,



Polly Hughes  
Mattoon, IL 61938

**IL5. Hughes, Polly**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

IL6. Nuding, Elaine

July 9, 2007

Mr. Mark L. McKoy  
Environmental Manager  
U S Dept. Of Energy  
National Energy  
Technology Laboratory  
P. O. Box 880  
Morgantown, WV 26507

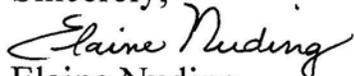
Dear Mr. McKoy,

#1

I strongly support the construction of FutureGen at the Mattoon or Tuscola site. I am an employee of an organization that works for the development of skilled workforce in the East Central Illinois region.

FutureGen will bring much growth and opportunity to our area.

Sincerely,



Elaine Nuding  
Effingham, IL 62401

**IL6. Nuding, Elaine**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

**IL7. French, Tamra**

July 9, 2007

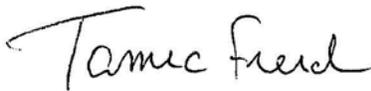
Mr. Mark L. McKoy  
Environmental Manager  
US Dept. of Energy  
National Energy  
Technology Laboratory  
P.O. Box 880  
Morgantown, WV 26507

Dear Mr. McKoy:

#1

As a resident of Central Illinois, I strongly support the construction of FutureGen at the Mattoon or the Tuscola site. As a government employee in the East Central Illinois region, I am very interested and excited about the potential growth and opportunity that FutureGen can bring to our area.

Sincerely,



Tamra French  
Paris, IL

**IL7. French, Tamra**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

**IL8. Crossroads Workforce Center (Stephenson, Bob)**

Visit us on the web at: [www.lwa23.net](http://www.lwa23.net)

 CROSSROADS

**IETC**

ILLINOIS EMPLOYMENT  
& TRAINING CENTER

Centralia  
224 N Elm  
Centralia, IL 62801  
618-532-4741  
Fax: 618-532-0013

Effingham  
1901 S. 4th Street  
Suite 203  
Effingham, IL 62401  
217-342-4382  
Fax: 217-347-2100

Mattoon  
305 Richmond Ave. East  
Mattoon, IL 61938  
217-235-2222  
Fax: 217-235-2228

Olney  
216 East Main  
Olney, IL 62450  
618-392-7777  
Fax: 618-392-7015

Salem  
206 W. Main  
PO Box 934  
Salem, IL 62881  
618-548-9001  
Fax: 618-548-9007

Charleston  
304 8th Street  
PO Box 634  
Charleston, IL 61920  
217-345-3501  
Fax: 217-345-3509



#1

**July 10, 2007**

**Mark L. McKoy, Environ. Mgr.  
US Dept. of Energy  
National Energy Technology Lab  
P.O. Box 880  
Morgantown, WV 26507**

**Dear Mr. McKoy:**

As a resident of east central Illinois, I strongly support the construction of FutureGen at the Mattoon or the Tuscola site. I am an employee of the Crossroads Workforce Investment Board which works for the development of skilled workforce in the East Central Illinois region and I am very interested and excited about the potential growth and opportunity that FutureGen can bring to our area.

***Bob Stephenson***

**Business Services Representative  
Crossroads Workforce Center (formerly IETC)  
216 E. Main – Olney, IL 62450**

**FACES of  
OPPORTUNITY**

**Business & Employer Services  
Community & Career Resource Centers**



**IL8. Crossroads Workforce Center (Stephenson, Bob)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

IL9. Hickox, Don

July 9, 2007

Mr. Mark L. McKoy  
Environmental Manager  
US Dept. of Energy  
National Energy  
Technology Laboratory  
P.O. Box 880  
Morgantown, WV 26507

Dear Mr. McKoy:

#1

As a resident of Newton, Illinois, I strongly support the construction of FutureGen at the Mattoon or the Tuscola site. As a board member of an organization that works for the development of skilled workforce in the East Central Illinois region, I am very interested and excited about the potential growth and opportunity that FutureGen can bring to our area.

Sincerely,

A handwritten signature in black ink that reads "Don" followed by a stylized, elongated signature mark.

Don Hickox  
Newton, Illinois 62448

**IL9. Hickox, Don**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

IL10. Effingham County Board (Waldhoff, Leonard)  
**EFFINGHAM COUNTY BOARD**

County Building • 101 North Fourth Street, Suite 301  
Effingham, IL 62401  
(217) 342-4990

July 11, 2007

**County Board  
Chairman**  
Carolyn Willenburg

**County Board  
Vice Chairman**  
Bob Shields

**County Board  
Members**

Don Althoff  
Terry Croft  
Don Cunningham  
Mark Percival  
Larry Vahling  
Charles Voelker  
Leonard Waldhoff

**Committees**

**Tax & Finance**  
★ Larry Vahling  
Terry Croft  
Don Cunningham  
Leonard Waldhoff

**Public Buildings  
& Grounds**

★ Leonard Waldhoff  
Don Althoff  
Larry Vahling  
Charles Voelker

**Transportation**

★ Bob Shields  
Larry Vahling  
Charles Voelker

**Legislative**

★ Terry Croft  
Leonard Waldhoff  
Bob Shields

**Technology/GIS**

★ Larry Vahling  
Don Althoff  
Mark Percival

**Health Services**

★ Charles Voelker  
Mark Percival  
Don Cunningham

**Reports**

★ Mark Percival  
Don Cunningham  
Terry Croft

**Insurance**

★ Terry Croft  
Don Althoff  
Mark Percival

**Public Safety**

★ Don Althoff  
Don Cunningham  
Bob Shields

**Airport**

★ Don Althoff  
Mark Percival

★ indicates  
Committee Chair

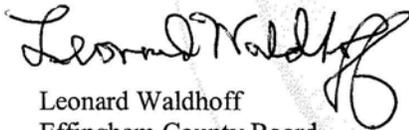
Mr Mark L McKoy  
Environmental Manager  
US Dept of Energy  
Technology Laboratory  
PO Box 880  
Morgantown, WV 26507

Dear Mr McKoy:

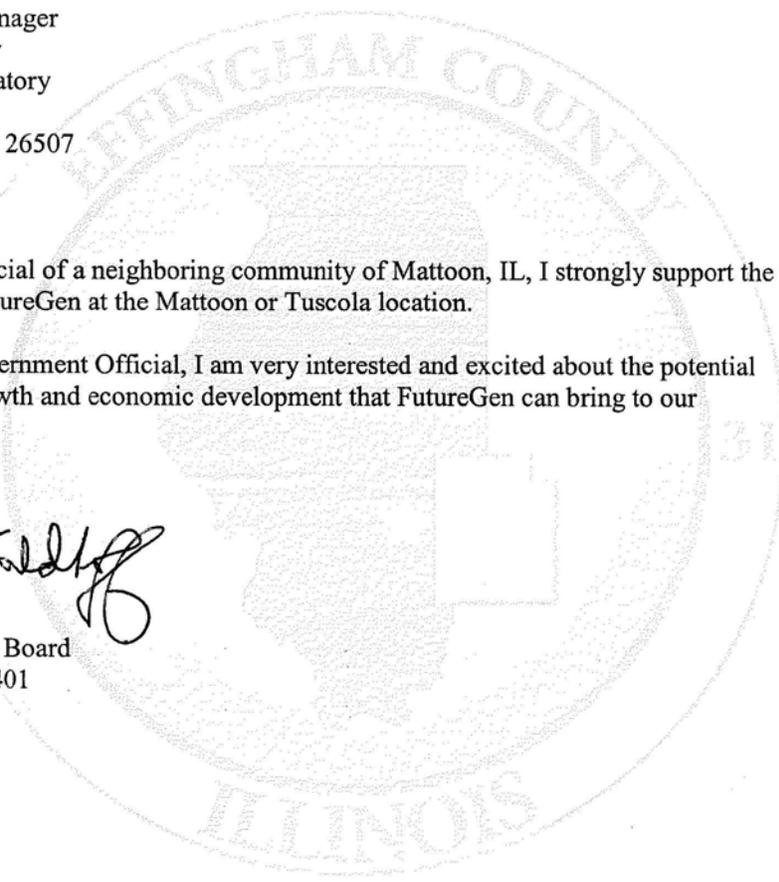
As an Elected Official of a neighboring community of Mattoon, IL, I strongly support the construction of FutureGen at the Mattoon or Tuscola location.

As an Elected Government Official, I am very interested and excited about the potential opportunity of growth and economic development that FutureGen can bring to our region.

Sincerely,



Leonard Waldhoff  
Effingham County Board  
Effingham, IL 62401



#1

**IL10. Effingham County Board (Waldhoff, Leonard)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

IL11. Corley, Glenna J.

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

TUSCOLA

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

#1

The proximity of the FutureGen site to "dense" population areas in Illinois relative to the sites in Texas give me numerous concerns. Especially:  
① Air Pollution from accidental spills of chemicals used or stored on site, unplanned restarts & flaring events affecting a 2 mile radius.  
② Noise & vibration from coal train traffic & shakers, dust from coal, sulfur & slag piles.  
③ Traffic impact - both train & vehicular on the entire area - especially if superimposed on the addition of a proposed nearby ethanol plant.

Will money promised by the state of Illinois really be available as claimed?

Your May 2007 draft statement was extremely well done. Thank you!

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME GLENN J. CORLEY ORGANIZATION \_\_\_\_\_

ADDRESS 760E CR 1150 N CITY TUSCOLA STATE IL ZIP 61953

E-MAIL ADDRESS \_\_\_\_\_

---

**IL11. Corley, Glenna J.**

---

**Response to Comment #1:**

DOE is reviewing potential impacts from air emissions, noise, vibrations, increased traffic, and many other possible effects as part of DOE's responsibilities to consider impacts before DOE commits completely to the project and to give fair consideration to the alternatives, including alternative sites. Furthermore, DOE will consider the expressed concerns of members of the public when DOE makes decisions on whether to go forward with the project, which alternatives to use, and which mitigation measures may be required.

1. DOE concurs that the Illinois sites are more "densely" populated than the Texas sites; however, the radius of air emissions impacts from the facility is comparable for all sites. The EIS is meant to look at several resource areas in assessing environmental impact for the site selection. DOE will consider these issues and its decision will be presented in the Record of Decision. Because of the types and quantity of chemicals that would be stored on-site, air pollution from accidental spills would be negligible. Odor from the aqueous ammonia may be released within the boundary of the site and is discussed in Sections 4.2; 5.2; 6.2; and 7.2 of the EIS. Other discussions related to accidental releases are provided in Sections 4.17; 5.17; 6.17; and 7.17.

2. DOE performed a comparative analysis to assess the potential effects of noise and vibration from construction and operation of the FutureGen Project on receptors within the vicinity of the proposed sites. The results of the analysis are presented in Section 3.1.14 and summarized in Table 3-3. The results of the comparative analysis are also presented in the EIS Summary in Table S-12.

The potential impacts of noise from the rail cars transporting coal to and from the Tuscola Site are evaluated in Section 5.14.3.2 of the EIS. Using the Federal Transit Administration (FTA) noise and vibration impact assessment guidelines and methodologies, DOE estimated  $L_{max}$  values ranging from 76 to 88 dBA would cause intermittent ambient noise level increases as the coal freight train passes through the City of Tuscola. Freight train noise would be generated by the movement of the locomotive, rail cars, whistles/horns, and track switches/crossovers along the CSX rail line. A comparison of the number of rail trips projected for coal deliveries during plant operations with the existing condition show that no more than one additional rail trip would be generated on a daily basis. The incremental change in the noise environment was considered to be minimal as there is currently an average of 7 trains per day passing through the CSX rail line.

The EIS addresses the point of noise associated with coal unloading at the Tuscola Site in Section 5.14.3.2. Noise is anticipated to be generated from unloading/loading activities such as the movement of containers, placement of coal feedstock on conveyor systems, and surficial contact of rail containers with other metallic equipment. Based on the estimated number of coal deliveries to the proposed power plant site, DOE predicted an hourly  $L_{eq}$  of 69 dBA from unloading/loading activities at the rail yard using noise prediction equations provided in Table 5-6 of FTA's Noise and Vibration Assessment guidance document.

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**IL11. Corley, Glenna J.**

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This estimate assumes that the coal unloading facility would not be enclosed in a building. DOE anticipated little or no increase in the noise level at the three closest residences (SL-1, SL-2, and SL-3) along CR 1050N because the coal unloading/loading area would likely be located near the southern boundary of the proposed site, which is approximately 0.5 mile from the closest residential receptors. DOE did not evaluate the impacts of intermittent noise and vibrations that may be generated by rail car shakers if they are used to loosen coal material from the walls of the rail cars during unloading activity. The noise and vibration associated with rail car shakers would be considered if they are included in the final design.

3. Table 3-6 of the EIS lists 14 projects, including 5 potential ethanol plants, that DOE considered in its evaluation of cumulative project effects. The analysis presented in Section 3.3.4.1 indicates most of the other projects would be constructed before the FutureGen Project, which would reduce the potential overlap in construction traffic. However, DOE concludes that over the long term, the projects would increase both rail shipments and truck shipments on local highways. The cumulative effect on rail traffic would depend upon the number of plants actually built, the method of fuel shipment, and the length of trains. DOE concludes, for example, that if all the grain and produced fuel from the proposed ethanol and bio-diesel plants were transported by train, it could require up to 25 100-car trains each week. The FutureGen Project would add about five 100-car trains per week.

4. DOE cannot warrant what a State government will or will not do, promise notwithstanding. Comment noted and will be included in the Administrative Record of the EIS.

---

IL12. Lawrence County Board (Gillespie, Charles E.)

# COUNTY OF LAWRENCE

The County Courthouse  
1100 State Street  
Lawrenceville, IL 62439  
Lawrence County

---

Phone: 618/943-3369 Fax: 618/943-4434 E-Mail: [coordinal@yahoo.com](mailto:coordinal@yahoo.com)

---

July 12, 2007

Mr. Mark L. McKoy  
Environmental Manager  
US Department of Energy  
National Energy  
Technology Laboratory  
P. O. Box 880  
Morgantown, WV 26507

Dear Mr. McKoy:

#1 | As Chairman of the Lawrence County Board, Lawrenceville, Illinois, I am very interested that FutureGen be located in Mattoon or Tuscola, Illinois. This area of our State has many high-skilled technology trained workers available for this kind of employment.

The County of Lawrence, Lawrenceville, Illinois is approximately 85 miles from either site and we are very supportive of FutureGen being located in Mattoon or Tuscola.

Sincerely,



Charles E. Gillespie,  
Chairman

CEG:sm

cc: Polly Hughes

**IL12. Lawrence County Board (Gillespie, Charles E.)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**IL13. Scott, Barbara Attebery**

Mark McCoy, Environmental Manager  
United States Department of Energy  
Technology Laboratory -P.O. Box 880  
Morgantown , West Virginia 26507 - 0880

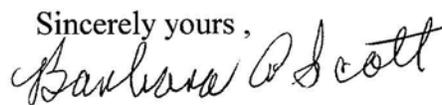
7-15-2007

Dear Mr. McCoy ;

#1 I am a property owner in Douglas County with the property being close to the Kaskaskia River and about a mile from a proposed pipeline at one of the sites ...My concerns with Future Gen has to do with 1) the proposed storage of liquid carbon dioxide underground under great pressure 2) the water use and what is done with waste water and it,s effect on the Mahomet Aquifer and on the water supply in that whole area. I have property in Champaign and in Ford County ,also . The latter are planning to run a water line into Gibson City for an ethanol plant .Champaign and the surrounding towns (including my Douglas County property )use water from  
#2 the Aquifer.  
With plans for several other ethanol plants in the area of Champaign County I am wondering what will happen to our water supply.

#3 I have farmland in Montgomery County ,also, where we have been listening to coal companies touting Longwall Coal mining. I have seen the devastation and unpredictable results of this type of mining on the land and water supplies as well as buildings .drainage systems and farm land. , etc. This FutureGen is one big experiment . And if that carbon dioxide finds a way to seep up out of the ground it will kill all it touches. FutureGen plans to use coal - a fuel that will be mined by a method that may damage farmland in 2/3 of this rich food producing state in the breadbasket of the nation. Coal cannot be replenished once it is gone.

#4 In our frenzy for energy we are forgetting our grandchildre n and greatgrandchildren who one day may have fuel for their cars but not enough food to eat.. Wind,solar and water are nonpolluting sources of power. Let us look very carefully at what some companies are doing for big money and the tactics they use to get it. Will my children and grandchildren benefit from the careful farming techniques my father and grandfathers used in Montgomery County? Will they be able to see the original prairie plants on the strip of abandoned railway right of way that I planned for them to see? Will they enjoy the people , the green pasture , still water and the clip clop of horses feet in Douglas County that I have loved ? Only time and involvement of a concerned citizenry will provide the answer..

Sincerely yours ,  
  
Barbara Attebery Scott PhD

---

**IL13. Scott, Barbara Attebery**

---

**Response to Comment #1:**

DOE commissioned a Risk Assessment to learn more about the risks and potential consequences of leaks of CO<sub>2</sub> and other gases that would be stored underground. *Adverse* risks have not been identified for any of the sites. Old wells that may penetrate the target reservoirs and overlying primary seals must be investigated further, especially at the Texas sites if either of these is selected. Water use, especially cumulative impacts from FutureGen and other water consumers that may come to the area of concern in the future, may be considered further regardless of which site is selected. The primary water use of FutureGen will be for cooling water. Essentially all of the water drawn for cooling will be lost to evaporation to the atmosphere. Waste water would not be injected into the Mahomet Aquifer or released into the recharge zone for this aquifer (or put where it could affect any other aquifer).

FutureGen aims to have “zero liquid discharge,” which means that process water would not be released in liquid form. The only release of process water will occur as water vapor. Wastewater from sanitary systems may be treated and released as is typical for an industrial facility and would not be injected into the Mahomet Aquifer or released into the recharge zone for this aquifer.

---

**Response to Comment #2:**

For the Tuscola Site, DOE has been considering whether there would be cumulative impacts from FutureGen’s water consumption combined with the water consumption of other future water consumers that may take water from the Mahomet Aquifer in the vicinity of Champaign, Illinois. Currently, it appears that increasing discharges of municipal waste water from a Champaign-area waste water treatment plant (this water flows into the Kaskaskia River) will reduce the need for FutureGen to take water directly from the Mahomet Aquifer near Champaign, Illinois. FutureGen would increasingly use the waste water, instead of fresh groundwater. Because of this, DOE does not foresee an adverse impact on the Mahomet Aquifer in the long-term, but this issue would be reviewed again in a Supplement Analysis if Tuscola is selected.

---

**Response to Comment #3:**

DOE analyzed the risk and the potential consequences of leaking CO<sub>2</sub> from the sequestration reservoir and found that gas releases were considered extremely unlikely (having a probability ranging from 1 every 1,000 to 10,000 years). Gas releases (seepage to the surface) are extremely unlikely due to the depth of injection and the presence of many hundreds of feet of confining layers (caprock) overlying the storage formation. The only scenario that was found that could cause adverse health effects was a slow continuous leak through a deep well. Because wells in the region of influence intersecting the storage formation would be sealed to prevent such leaks, this situation would be unlikely to occur.

The impacts of coal mining in general, the future geographic distribution of coal mining in general, and the specific impacts of FutureGen on coal mining are beyond the scope of this EIS. The FutureGen Project does aim to demonstrate the capture and geologic sequestration of CO<sub>2</sub> emissions from the combustion of coal in a power plant. Some of the same or similar technologies might be used to capture and sequester CO<sub>2</sub> emissions from the combustion of oil, natural gas, municipal garbage, or biomass in a power plant. FutureGen aims to demonstrate and to support research and development to reduce our nation’s and the world’s emissions of CO<sub>2</sub>, which is widely thought to contribute to global climate change.

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**IL13. Scott, Barbara Attebery**

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**Response to Comment #4:**

Usage of wind, solar and water resources also creates various types of environmental impacts, and the usage of wind and water resources has encountered substantial opposition on environmental grounds. DOE advocates a balanced and judicious usage of all resources along with conservation of resources and improved efficiency of resource usage on both the production and consumption sides. Please view all of the DOE websites (including those of all the DOE laboratories) for an overview of DOE's efforts.

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Brazos Valley Council of Governments (Wilkerson, Tom)	J3
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Darden, Robert	J2
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Grant, Linda	J15
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<b>Commentor (Alphabetical)</b>	<b>Commentor #</b>
Leon County Judge (Ryder, Byron)	J7
Limestone Commissioner (Kirgan, William P.)	J14
Limestone County Sheriff (Wilson, Dennis D.)	J5
Limestone Power Plant (Mechler, Gary J.)	J12
Mayor, City of Fairfield (Hill, Roy)	J13
Milberger, Lionel	J11
Office of the Governor – Texas (Francis, Denise S.)	J20
Willis and Allen Construction (Allen, Jerry A.)	J4

/

**J1. Darden, Mary Landon**

**From:** Mary Darden [Mary\_Darden@baylor.edu]  
**Sent:** Wednesday, June 20, 2007 2:38 PM  
**To:** FutureGen.EIS@netl.doe.gov  
**Cc:** Robert\_Darden@Baylor.edu  
**Subject:** Comment for hearing

**Importance:** High

Dear Mr. McKoy, et.al:

#1 | I am hereby registering my official opposition to any proposed coal-related plants in the state of Texas. We need to be replacing coal plants with energy-generating options that are clean (like wind power) in an attempt to bring our air back into acceptable parameters. Please accept this email as my statement at the hearing this Thursday evening in Buffalo, Texas.

Sincerely,

Dr. Mary Landon Darden  
118 N. 30<sup>th</sup> Street  
Waco, Texas 76710  
254-752-1468  
Mary\_Darden@Baylor.edu

---

**J1. Darden, Mary Landon**

**Response to Comment #1:**

Air emissions of coal-fueled power plants and a discussion of estimated emissions of FutureGen are discussed throughout the EIS, in Section S.7.5.2; Section S.9; Table S-12; Section 2.5.6.1; Section 3.1.2; Table 3-3; and Section 6.2. Additionally, federal and state regulatory and permitting requirements are discussed in Section C.1.2.

DOE oversees numerous projects that are investigating and supporting a wide variety of renewable energy generation technologies, including many based on renewable sources wind, solar, and hydro.

---

**J2. Darden, Robert**

**From:** dooreditor [dooreditor@earthlink.net]

**Sent:** Wednesday, June 20, 2007 2:27 PM

**To:** FutureGen.EIS@netl.doe.gov

**Cc:** Mary Darden

**Subject:** Proposed Jewett Plant

#1 Please be advised that we are very much opposed to your company's proposed presence in Central Texas. Much of Texas is already in EPA non-attainment status. Yet another plant -- particularly an experimental plant of this nature, one with no guarantees to its effectiveness -- would be an environmental disaster.

I belong to a large coalition of organizations that will strenuously oppose this plant if you attempt to locate it in Jewett, using whatever legal and economic means are available to us.

Robert Darden  
P.O. Box 1444  
Waco, TX 76703-1444

**J2. Darden, Robert**

---

**Response to Comment #1:**

Air emissions of coal-fueled power plants are discussed throughout this EIS in Section S.7.5.2; Section S.9; Table S-12; Section 2.5.6.1; Section 3.1.2; Table 3-3; and Section 6.2. Additionally, federal and state regulatory and permitting requirements are discussed in Section C.1.2.

---

**J3. Brazos Valley Council of Governments (Wilkerson, Tom)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

15 MR. WILKERSON: Tom Wilkerson, Brazos Valley  
16 Council of Governments. Mark, thank you for you and your team  
17 and -- and all the contractors, we appreciate the great job  
18 that you have done.

19 All the COGs in Texas are designated by the  
20 governor to be the state-appointed contact for state level  
21 review and comments on projects like this. So if this were a  
22 state project we would have been charged with that process. So  
23 within the COG staff we have the ability to review documents,  
24 all 2,000 pages, for the purpose of commenting and -- and  
25 making sure that it's a benefit to our community. We thank you

Page 27

1 for the opportunity to do that on this project and we support  
2 FutureGen coming to the Brazos Valley -- I mean The Heart of  
3 Brazos.

4 The -- we gave everyone the opportunity to sign  
5 in today a document of support. Instead of having 400 people  
6 come and tell you how much they support, we listed -- gave them  
7 the opportunity to sign. So I would like to read this and  
8 there is 70 plus signatures on this that will then be turned in  
9 as a part of the official record.

10 As a unified voice The Heart of the Brazos  
11 residents would like to express our support for the FutureGen  
12 Project and The Heart of the Brazos proposal. This comment is  
13 being submitted by Tom Wilkerson, the Brazos Valley Council  
14 Government, Post Office Drawer 4128, Bryan, Texas, 77805. By  
15 signing this document of support we are expressing our support  
16 through one submitted comment. We believe that selecting The  
17 Heart of the Brazos site will continue to benefit the project  
18 through the years due to the location, resources, industrial  
19 support and experienced workforce. FutureGen is welcome to our  
20 region. Thank you very much.

#1

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

**J4. Willis and Allen Construction (Allen, Jerry A.)**

***FutureGen Project***

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

JEWETT

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

#1

*Good Presentation of the project at the meeting  
in Buffalo.  
Hope you can check Jewett*

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME *Jerry A. Allen, P.E.* ORGANIZATION *Willis & Allen Construction*  
ADDRESS *RT 2 Box 66* CITY *Teague* STATE *TX* ZIP *75860*  
E-MAIL ADDRESS *jalden@windstream.net*

**J4. Willis and Allen Construction (Allen, Jerry A.)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

J5. Limestone County Sheriff (Wilson, Dennis D.)

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

JEWETT

PLEASE PRINT CLEARLY. IF MAILED, PLEASE HAVE THIS CARD POST-MARKED ON OR BEFORE JULY 16, 2007.

#1

I Am IN Full Support of Future Gen Project being located at the Jewett Texas site. This site meets ALL the requirements for this new project. We feel we have the best of everything to offer to support this project. I know we can offer the best work force as well as supporting people in this endeavor. We live in a very beautiful area of Texas with lots to offer! I also know that citizens in Limestone Freestone & Leon support Future Gen. The Brazos Valley Cog & H.O.T. Cog are also supporting this project to its fullest! Thank you for selecting our Jewett site.

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME Dennis D. Wilson ORGANIZATION Limestone County Sheriff  
ADDRESS 1221 E. Yenger St. CITY Groesbeck STATE TX ZIP 76642  
E-MAIL ADDRESS d.wilson@co.limestone.tx.us

**J5. Limestone County Sheriff (Wilson, Dennis D.)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**J6. Commissioner, Texas Railroad Commission (Williams, Michael)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

19 MR. WILLIAMS: Mark, thank you. On behalf of  
20 Governor Perry, myself, as well as the FutureGen Texas team,  
21 let me welcome you to an area in your home quite frankly. You  
22 know, I've spent most of the afternoon, morning and afternoon  
23 with Governor Perry in Houston and I would be remiss if I did  
24 not say thank you to The Heart of Brazos team, Tom, you and  
25 your folks, for all of the hard work you put in to helping the

Page 23

1 state capture this project, and I'd also be remiss if I did not  
2 say thank you, Tom, to you and Mark, and of course Jerry, for  
3 what you've been doing with us and working with us.

4 I only have one substantive comment as it  
5 relates to the NEPA process and to the EIS because I'm going to  
6 leave it to -- to perhaps others to make our official comment,  
7 and that is quite frankly to say what I've said before is that  
8 we commend the fact that the project, that the -- the analysis  
9 was thorough, was concise, and we appreciate the sort of  
10 relationship that we've had with you working through this.

11 Jerry, you had mentioned, as I get ready to  
12 leave, you mentioned that you came to this area nine months  
13 ago?

15 MR. WILLIAMS: In August, you came back today,  
16 and I think there's something about the third time being a  
17 charm. So I look forward to you coming back to Texas on the  
18 day after the decision is made, because as we said in the  
19 video, in the DVD, you bring FutureGen to Texas, we'll do you  
20 right. Y'all take care now.

#1

**J6. Commissioner, Texas Railroad Commission (Williams, Michael)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**J7. Leon County Judge (Ryder, Byron)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

#1

2 MR. RYDER: Byron Ryder, Leon County Judge. I  
3 just want to tell you, first of all thank you for being here,  
4 it's a great support. We couldn't do this without you and it's  
5 taken all these people in this room to get this to this point.  
6 There's people behind the scenes doing things, but because of  
7 your enthusiasm and your push on us we have gone this far, and  
8 I think just a little bit more push and we're going to have  
9 them here for the third time like we talked about. But we  
10 definitely want them here for the third time. I do believe  
11 that. Don't we, is that right? You know, there's been three  
12 real important people, other than all the volunteers, but we've  
13 had Nucor Steel, Westmoreland Coal, NRG, those people have  
14 supported this 100 percent. They have been behind us, they've  
15 given us all the support we need, they've given information we  
16 need, and we need to give them a hand. I would appreciate it  
17 right now.

18 And as for the DOE, they have done an  
19 outstanding job with this environmental statement. They are  
20 very -- have done a good, they've been very thorough, have  
21 treated us very well I feel like in the -- in the statement,  
22 and we commend very much to -- to -- maybe this particular  
23 statement will be the winning statement, not maybe, it will be  
24 the winning statement. And we need, we want them here, and  
25 we'd like to welcome you back any time. Thank y'all very

Page 25

1 much.

**J7. Leon County Judge (Ryder, Byron)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**J8. Burkeen, Daniel**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

4 MR. BURKEEN: I'm Daniel Burkeen, Limestone  
5 County Judge, and I'll try to be brief. I want to join in  
6 Judge Ryder's comments that he made appreciating those folks,  
7 and I also want to thank Judge Ryder for all the work he's  
8 done. He's been very actively involved in this project here in  
9 Leon County and in the area, so we appreciate all that he's  
10 done.

11 We're excited about this project over in  
12 Limestone County. We've got the NRG power plant there, we've  
13 got a very good working relationship with NRG. We've had a  
14 coal powered plant there for a long time in Limestone County.  
15 We've got a good working relationship with them. They've been  
16 a very vital part of our community. We're looking forward to  
17 FutureGen. The environmental processes involved in FutureGen  
18 are exciting. They're an exciting part of the future worldwide  
19 and we're excited to have this prototype plant I'm hoping will  
20 be right here in our area. We're excited about it and  
21 appreciate the so many that have been involved in this  
22 process. Thank you.

#1

**J8. Burkeen, Daniel**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**J9. Jackson Jr., Ivan**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

25 MR. JACKSON: First of all I'd like to say I am

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1 very excited about -- about FutureGen coming here. Near zero  
2 emissions. As a rancher myself, we have a very -- a rather  
3 large ranch in northern Limestone County and also as the area  
4 chairman for Ducks Unlimited, Mexia Ducks Unlimited. We're  
5 also one of the largest conservation -- we are the largest  
6 conservation group in the world. Our chapter in Mexia is one  
7 of the largest in the nation, we're in the top 50 right now.  
8 There's over 13,000 chapters. We're very excited about the low  
9 emissions. I want to thank y'all for the thorough impact  
10 statement you've provided, and we're just very excited to go  
11 ahead with the project and look forward to y'all coming back to  
12 Limestone County real soon. Thank y'all.

#1

**J9. Jackson Jr., Ivan**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**J10. Benedict, Kevin**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

23 MR. BENEDICT: My name is Kevin Benedict. I'm  
24 an independent businessman from Freestone County. I also  
25 represent Freestone County in all of its economic development

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1 endeavors.

2 I too would like to thank the Department of  
3 Energy and all the subcontractors not only for providing such a  
4 voluminous document but doing it in record time. As you can  
5 see, we're all excited about the project. We're excited about  
6 the possibilities of -- of -- of FutureGen coming to Texas and  
7 to do it in record time and as thoroughly as it has been done  
8 is commendable and we appreciate your hard work in that  
9 regard. Thank you.

#1

**J10. Benedict, Kevin**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**J11. Milberger, Lionel J.**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

12 MR. MILBERGER: Okay. Can you hear me? My name  
13 is Lionel Milberger. We currently live in Wimberly, Texas, and  
14 I want to thank you for allowing me to speak to you this  
15 evening.

16 First of all, I want to thank the Department of  
17 Energy. I want to thank the Department of Energy for your  
18 efforts in helping to provide affordable and clean energy to  
19 the ordinary citizen that lives on the land. You're to be  
20 complimented for that effort and I think our tax money is  
21 wisely spent therein. Now, but what I would like to do is to  
22 inform you of numerous already existing emission sources that  
23 exist in the area and -- and to express a few concerns that I  
24 have.

25 Now first of all, we own a home also in

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1 Robertson County, an adjoining county, and in that county there  
2 are numerous emission sources that I hope you probably already  
3 have, but if you haven't I'd like you to reconsider the large  
4 number of emissions that are present in that county and there  
5 are probably similar ones present nearby also. But, for  
6 instance, there is eight or nine emu gas plants and numerous  
7 blackhole dehydration sites. There are hundreds of sour gas  
8 wells with treating equipment at the site including the  
9 scavengers. All of this submits to the air. Now I want to --  
10 I want to -- although I have concerns for a lot of those things  
11 other than air emissions, but the time is short, I only got  
12 five minutes so I'm going to restrict my comments to only the  
13 air emissions.

14 There's many compression stations, phase  
15 separators, there are miles and miles of pipeline. There is  
16 two or three lignite coal fired power plants. Some already  
17 operational in that county, one recently just permitted. There  
18 are many injection wells. Injection wells I'd like to talk  
19 about because of the sequestration but time is not going to  
20 allow me to do that. Now, there are many heaters and blowers  
21 and hundreds of chicken houses.

22 Now, all -- all of this equipment is emitting  
23 large emissions to the air and these emissions include acid gas  
24 and they include various other materials such as noxin and CoC,  
25 and I can appreciate and I do appreciate the fact that this

#1

**J11. Milberger, Lionel J.**

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1 plant is said to be low in emissions, but when added to these  
2 already existing sources I want that to be considered.

3 Now, there are also V-tech emissions emitted at  
4 these sites and on top of that there's huge quantities of  
5 carbon dioxide. Now carbon dioxide's a big issue, it's a big  
6 issue with this plant, and there are some proper things that  
7 are being talked about to handle that carbon dioxide, but  
8 carbon dioxide is being already emitted in huge quantities in  
9 Robertson County from the gas treatment sites. About 5 to some  
10 15 percent of that natural gas is carbon dioxide. All of that  
11 is removed and spewed to the air.

12 Now, and in that county there are -- there's --  
13 there's a desire in that county for emission sources and there  
14 probably will be new and more to come as this project is done  
15 if it's done here.

16 Now, now I want to talk a little bit about what  
17 we have here in Texas because air emissions in my mind is a big  
18 deal partly because of the sources that I've already mentioned  
19 and yours will add to it somewhat. The T.C.E.Q. does not  
20 control emissions from oil and gas well sites. I'm glad to  
21 know there's a Railroad Commission member here. Now, T.C.E.  
22 does not control the following types of pollution. They don't  
23 control visual pollution, noise pollution, light pollution and  
24 increased traffic. Now, the T.C.E.Q. also has some  
25 shortcomings. For instance, I want to point out to the

#1

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1 audience, that the single most important gas in the atmosphere  
2 for humans to be viable, of course, is oxygen. Now the  
3 T.C.E.Q. does not regulate, control, or maintain the quantity  
4 of oxygen in the air. Now furthermore, T.C.E. does not control  
5 emissions to the air of other materials, specifically included  
6 is methane, Ca4. Also included is ethane, hydrogen, nitrogen,  
7 water vapors. Water vapors don't sound very bad, don't have  
8 time to talk about it today but it's important. And on top of  
9 that it's not even mentioned as far as controlling the carbon  
10 dioxide, this is T.C.E.Q.. Now, it's believed, hopefully from  
11 sources that emit large quantities of carbon dioxide, since it  
12 is heavier than air by about 1.5 times, one-and-a-half times,  
13 it can quickly move to the ground and reduce the oxygen content  
14 in the air for local residents.

15 Now, the Railroad Commission, the Railroad  
16 Commission, also in Texas, a very important agency, but it does  
17 not limit, prohibit, or control the emissions to the air of any  
18 material except for material that has a commercial value, and  
19 the operators determine whether it has a commercial value. So  
20 so far as air emissions are concerned, from here again Texas, I  
21 want to point out that I think we're somewhat lacking and you  
22 should take that into consideration and I would urge you to do  
23 that.

24 So if during planning, drilling, operating and  
25 maintaining this facility you come to me and say it is in full

**J11. Milberger, Lionel J.**

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#1

1 compliance with all T.C.E.Q. and the Railroad Commission rules  
2 and requirements, I will not be impressed. I want to thank you  
3 for the opportunity to make this statement and if you have any  
4 questions I'll be happy to try to answer them, and I thank you  
5 very much.

6 MR. McKOY: Thank you. We definitely do need to  
7 consider all sources of air emissions and it is something that  
8 I think we can look into much further. The next commenter is  
9 Gary J. Mech -- Mechler, NRG-Texas.

**J11. Milberger, Lionel J.**

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**Response to Comment #1:**

Existing air quality and the impacts of the FutureGen Project on air quality and its conformance with state and federal criteria for the Jewett Site are provided in Section 6.2. As stated in Appendix C, Part C.1.2, the FutureGen Project would be required to obtain a Prevention of Significant Deterioration (PSD) construction permit and Title V operating permit. The State of Texas (through the Texas Council of Environmental Quality) has the authority to issue these air permits. Goals of the PSD process include ensuring that clean air resources are preserved during economic growth and the protection of human health and welfare for adverse effects of air pollution. This process takes into account existing and planned emission sources. Sources modeled to predict the incremental increase in criteria pollutants include the proposed project and other large sources of air emissions. DOE will consult with TCEQ regarding information available on existing and planned local emission sources. Existing smaller sources of air pollutants are generally assumed to be a part of the measured regional background concentrations of criteria pollutants. It is important to note that DOE used conservative assumptions for air emissions to represent the upper bound of the range of possible impacts (see Appendix E-Air Modeling Protocol). Using these conservative assumptions, the air modeling for the Jewett Site showed that the FutureGen Project would not exceed the Class II PSD allowable increments. The Texas Railroad Commission would not have jurisdiction over the air permitting for the project, but would have safety jurisdiction for project-related pipelines (such as natural gas and CO<sub>2</sub> pipelines).

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**J12. Limestone Power Plant (Mechler, Gary J.)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

10 MR. MECHLER: Thank you. I'm Gary Mechler. I'm  
11 the general manager of Limestone Power Plant. I'd just like to  
12 comment that our existing plant through the permitting, the  
13 construction, the operation of the plant over the last many  
14 years, over twenty years, that the local community here has  
15 been extremely supportive of our plant, our employees, and I'd  
16 like to thank you for that. It's been a -- I've been here at  
17 the plant for two years and I've just been very impressed with  
18 the -- with the support of the community for our plant.

19 As you know, NRG is going to offer to donate 400  
20 acres of reclaimed mine property for the plant. It's an area  
21 where the lignite's already been mined, it's reclaimed. You've  
22 seen the pictures on the video, it's a beautiful site. We look  
23 forward to the plant coming there. We've also offered to -- to  
24 help the Alliance. We've been working with the Alliance to  
25 provide various services that can help, that can help the

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1 FutureGen site come to this area, and we look forward to that.

2 As he earlier said, we'd like to thank the DOE,  
3 the contractors for the preparation of the Environmental Impact  
4 Statement. We think it's thorough, we think it's accurate, and  
5 we just look forward to the -- to the FutureGen site coming  
6 here to Jewett. Thank you very much.

#1

**J12. Limestone Power Plant (Mechler, Gary J.)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**J13. Mayor, City of Fairfield (Hill, Roy)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

#1

4 MR. HILL: I'm Roy Hill. I'm the mayor of  
5 Fairfield, Texas, and we support the FutureGen Project. I -- I  
6 know I'm joined by our County Judge, Linda Grant who's sitting  
7 out there and I'm looking at her and she's nodding yes so  
8 that's a good thing. We support you. We think you're doing a  
9 wonderful thing. We want to see affordable and reliable power  
10 in Texas and we want to see a cleaner environment. We applaud  
11 you guys in what y'all are attempting to do. You have our full  
12 support and the only other thing is that we want Jewett to get  
13 the site.

**J13. Mayor, City of Fairfield (Hill, Roy)**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**J14. Limestone Commissioner (Kirgan, William P.)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

#1

17 MR. KIRGAN:: I am William P. Kirgan, Limestone  
18 Commissioner, Precinct 2. I want to say to FutureGen on behalf  
19 of my County Judge, Daniel Burkeen, we welcome you, FutureGen.  
20 And I'm that noisy guy that asked him that question about the  
21 mercury and he highly satisfied my answer -- my question.  
22 Thank you.

**J14. Limestone Commissioner (Kirgan, William P.)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**J15. Grant, Linda**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

#1

1 MS. GRANT: My name is Linda Grant and I'm the  
2 Freestone County Judge. Our county is very excited about this  
3 project. We're excited about the technology. We know that our  
4 area has the resources, that we're going to have some type of  
5 energy generation in this area, and we believe that this  
6 technology will help us in the future to have the cleanest  
7 technology that we can in place. So we welcome you and look  
8 forward to having this project come to our area. Thank you.

**J15. Grant, Linda**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**J16. City of Mexia (Brenner, Juanita)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

#1

19 MS. BRENNER: I'm Juanita Brenner. I actually  
20 hail from Houston County, but I do have service area of  
21 thirteen counties in the general area of home health, and I  
22 have Assisted Living in Mexia, Texas, so I'm speaking on behalf  
23 of Mexia, Texas, at this time. I think FutureGen is a  
24 wonderful thing that will help service the energy needs of our  
25 state and also that if it will reduce emissions from the coal I

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1 think that is a wonderful thing. I'm thinking about all the  
2 people that have C.O.P.D., congestive heart failure, and a lot  
3 of other things that happen to people. So I'm here on behalf  
4 of the medical community because if this will help all these  
5 people live a better life, I think that we should be for it,  
6 and thank you FutureGen and the DOE.

**J16. City of Mexia (Brenner, Juanita)**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**J17. Abernathy, Jan**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

#1

22 MS. ABERNATHY: I'm Jan Abernathy. I live in  
23 Limestone County, I own a business in Leon County, a  
24 construction services company, a lot of you know me, and I  
25 think we're really looking forward to this. I employ a lot of

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1 people in the area and everyone I know is for it and we're  
2 really excited. Thank y'all for coming.

**J17. Abernathy, Jan**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**J18. Brazos Valley Seven County Regional Workforce Development Board (Ryder, Diane)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

#1

5 MS. RYDER: My name is Diane Ryder. I think  
6 many of you know that I wear many hats in the area. I am  
7 chairman of our Brazos Valley Seven County Regional Workforce  
8 Development Board, and I would just like to say that over the  
9 past year we have already been working to put in place programs  
10 to train the work staff that this plant will require in the  
11 construction phase as well as in the developmental phases of  
12 it, and I just wanted you to know that the whole seven counties  
13 that I represent are very much in favor of this project and  
14 we're looking forward to it coming to our location.

**J18. Brazos Valley Seven County Regional Workforce Development Board (Ryder, Diane)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**J19. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

- #1 | The description incorrectly states that the proposed Jewett plant site is bordered by U.S. Highway 79 (US 79). Please revise the paragraph to indicate the plant site is bordered only by Farm-to-Market (FM) Road 39.
- #2 | In Table S-3, the description indicates that the proposed Jewett injection site is located approximately 16 miles east of Fairfield in Freestone County. Please revise the description to also include the proposed injection site on the TDCJ property in Anderson County.
- #3 | In Table S-12, regarding Physiography and Soils - Up to 73 acres within the Jewett power plant site are reportedly to be disturbed for transportation corridor infrastructure construction. This is almost 5 times more than at any other site and over 40 times higher than at the Odessa site. Please provide an explanation why this site is different from the other candidate sites or revise the estimate.
- #4 | In Table S-12, regarding Biological Resources – The DEIS indicates that up to 63 miles of “high quality deer and turkey hunting ground” would be lost to utility corridor construction at the Jewett site. Please revise the description to clarify that pipeline construction is common in this area and would result in little or no long-term impact on hunting resources.
- #5 | Table S-14 includes proposed power plants that are no longer being considered. Please remove references to Big Brown 3, Tradinghouse 3 & 4, and Lake Creek 3 power plants.
- #6 | Potential Cumulative Impacts for Alternative Sites (Jewett) – The DEIS states that Texas is continuing to work on the restoration of the Trinity River. While this is true, the segments of the Trinity River near the proposed Jewett plant and sequestration sites are not currently listed as impaired for any water quality standards. Please revise the description to clarify that this portion of the Trinity River is not impaired.
- #7 | Under Table 2-3, the “Feature Heading: Sequestration site....”, the DEIS fails to identify the secondary seal provided by the Midway Group. Please correct sentences to read: “Both the Woodbine and Travis Peak formations lie beneath a primary seal, the Eagle Ford Shale, which has a thickness of 400 feet (122 meters) and shales of the Midway Group secondary seal, which has a thickness of 700 feet (215 meters).... There are also over 0.4 mile (0.6 kilometer) of low permeability carbonates and shales, including the Midway Group secondary seal, above the Eagle Ford that create additional protection for shallow drinking water aquifers.”
- #8 | The description incorrectly states that the proposed Jewett plant site is bordered by U.S. Highway 79 (US 79). Please revise the paragraph to indicate the plant site is bordered only by Farm-to-Market (FM) Road 39.
- #9 | In Table 2-3, regarding Jewett Site Descriptions – Same comments as identified in SUMMARY, Table S-3.
- #10 | Physiography and Soils – The DEIS suggests that up to 73 acres within the Jewett power plant site are reportedly to be disturbed for transportation corridor infrastructure construction. This is almost 5 times more than at any other site and over 40 times higher than at the Odessa site. Please provide an explanation why this site is different from the other candidate sites or revise the estimate.
- #11 | Table 3-7 includes proposed power plants that are no longer being considered. Please remove references to Big Brown 3, Tradinghouse 3 & 4, and Lake Creek 3 power plants.

**J19. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

- #12 **TCEQ - Potential Cumulative Impacts for Alternative Sites (Jewett)** – The characterization of the potential for new sources near the proposed Jewett power plant site implies a greater level of certainty than may actually exist. Please revise the DEIS to read, “As listed in Table 3-7, there are five coal-fueled power plants within a 50-mile (80.5-kilometer) radius of the proposed Jewett Power Plant Site in various stages of planning and permitting. In addition, the NRG Limestone Electric Generating Station plans to add a lignite-fired boiler and 800-MW electric generating unit. Based on planning data, all of these plants could begin operation before the completion of the FutureGen Project.”
- #13 **TCEQ - Potential Cumulative Impacts for Alternative Sites (Jewett)** – The DEIS suggests that a cumulative air quality impact analysis would largely be driven by the combined emissions of the proposed facilities listed in Table 3-12 (proposed coal fired power plants near Jewett). If a full impacts analysis is required, it will be pollutant specific, and the Area of Impact (AOI) will be defined from the project modeling. The emission inventory for the cumulative modeling analysis may include additional sources other than just the proposed coal fired power plant listed in Table 3-12. Please revise the description to indicate that the project modeling analysis will evaluate all sources of applicable pollutants within the AOI.
- #14 Table 3-12 includes data for proposed power plant that are no longer being considered. Please remove references to Big Brown 3, Tradinghouse 3 & 4, and Lake Creek 3 power plants.
- #15 **TCEQ - Potential Cumulative Impacts for Alternative Sites (Jewett)** – The DEIS incorrectly implies that the emissions from new sources will necessarily result in adverse air quality impacts. Permit requirements should effectively prevent adverse air quality impacts from new sources. Please revise the description to read, “Table 3-12 summarizes the air emissions estimated for these proposed power plants. Should the projects go forward, they would release tens of thousands of tons of criteria pollutants into the atmosphere.”
- #16 **TCEQ - Potential Cumulative Impacts for Alternative Sites (Jewett)** – The DEIS suggests that ambient concentrations of PM<sub>2.5</sub> are much closer to the NAAQS. There is no ambient monitoring data in the Jewett area to support this statement. The Draft EIS misuses the “high ambient concentrations” taken from the urban background monitors (Houston) and states that the PM<sub>2.5</sub> NAAQS would be approached at the proposed FutureGen sites. Please revise the description to read, “Cumulative air emission from proposed facilities in the region would likely cause the PM<sub>2.5</sub> concentrations to increase.
- #17 **TCEQ - Potential Cumulative Impacts for Alternative Sites (Jewett)** – The DEIS incorrectly implies that the emissions from other proposed sources are expected to consume remaining PSD increments. Please revise the description to read, “While the FutureGen Project would emit pollutants, the levels would be very small, and future air quality degradation in the region would be dominated by the other proposed power plants. The State has evaluated these projects and has determined that emissions increases in the ROI would not cause or contribute to a condition of air pollution.
- #18 **TCEQ - In Table E-8 regarding Air Modeling Protocol** – The appendix lists the Jewett Land Use Characterization by season. The “winter” table is incomplete (only lists sectors 1,2,5,6 out of a total of 12 sectors). Please revise this table to include all sectors or explain the discrepancy.
- #19 **TCEQ - Air Modeling Protocol** – The DEIS lists “The nearest ambient monitors to the site and the pollutants monitored at these locations ...” and indicates that “The stations selected are in proximity to the Jewett site.” It further includes Table E-11 which “presents the representative yet conservative background for these criteria pollutants for the proposed Jewett site.” Please consider the following recommended monitoring locations as more representative alternatives for the Jewett site: Kaufman (SO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) - 80 mi.- would probably be the most representative and could replace Dallas North; Fayette County (SO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) - 100 mi - would be good second choice and probably should be used instead of Aldine; Tyler Airport (NO<sub>x</sub> and O<sub>3</sub>) would also be acceptable; Alabama Coushatta (O<sub>3</sub>) - 90 mi. - but it has limited use do to the limited number of parameters measured.

**J19. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

- #20** | **TCEQ** - In Table E-11 regarding Air Modeling Protocol – The appendix lists background ambient air quality for Jewett which is not consistent with the corresponding table in Volume 2, Table 6.2-2. Please revise this information to be consistent or explain the discrepancies.
- #21** | The DEIS incorrectly cites table references. Please correct second sentence to read “Key features of the Jewett Site are listed in Table 6.1-1.”
- #22** | The DEIS incorrectly cites table and figure references. Please correct last sentence to read “Following Table 6.1-1, Figures 6.1-1, 6.1-2, and 6.1-3 illustrate...”
- #23** | Table 6.1-1, under “Feature Heading: Sequestration site....”, fails to identify the secondary seal provided by the Midway Group. Please correct sentences to read: “Both the Woodbine and Travis Peak formations lie beneath a primary seal, the Eagle Ford Shale, which has a thickness of 400 feet (122 meters) and shales of the Midway Group secondary seal, which has a thickness of 700 feet (215 meters).....There are also over 0.4 mile (0.6 kilometer) of low permeability carbonates and shales, including the Midway Group secondary seal, above the Eagle Ford that create additional protection for shallow drinking water aquifers.”
- #24** | The description incorrectly states that the proposed Jewett plant site is bordered by U.S. Highway 79 (US 79). Please revise the paragraph to indicate the plant site is bordered only by Farm-to-Market (FM) Road 39.
- #25** | In Table 6.1-1 regarding Jewett Site Features – Same comments as shown for Summary, Table S-3.
- #26** | **TCEQ** - Operational Impacts – The DEIS notes an amount of annual mercury predicted by AERMOD to be deposited and within a certain distance from the project site. However, given the units presented, this seems to be the annual ground-level concentration predicted by AERMOD. Please revise these statements to reflect “ground-level concentrations” rather than “deposition.”
- #27** | The DEIS incorrectly indicates that the average annual precipitation at the Jewett site is “about 15 inches.” Please revise the average annual precipitation to approximately 43 inches to more accurately reflect meteorological conditions in the area.
- #28** | In Table 6.3-1 regarding Seasonal Weather Data – The weather precipitation data in the table is incorrectly labeled. Please revise the table to clarify that this reflects “Average Monthly Precipitation” rather than “Precipitation.”
- #29** | Figure 6.4-1, has been constructed using only those wells that were assigned API numbers by the Railroad Commission of Texas (RCT). BEG identified an additional category of oil and gas wells in the RCT database that have location coordinates, but which have not been assigned an API number. There are 11 non API-numbered wells (shapefile name: Wells\_RRC\_AreaofInterest\_HOB, shp) located within the 50-Year (1.7 mile) radius circles around the three Jewett Site injection wells. Hence there are a total of 46 wells within the defined ROI.  
  
Please note that figure 6.4-1 uses the number 35 for wells within the Jewett ROI, whereas all text in the EIS uses the number 57 for wells within the Jewett ROI. In both cases, the number of wells should be 38 for the Woodbine ROI and 46 for the combined Woodbine and Travis Peak ROI. Please locate this data entry error throughout the document and correct.
- #30** | The plume radius indicated in the legend of Figure 6.4-1 is inconsistent with Section 6.4.1.1 Region of Influence, where the ROI for subsurface is defined as: Numerical modeling indicates that the plume radius associated with injecting 2.8 million tons (2.5 MMT) per year for 20 years would be 1.7 miles (2.7 kilometers)...., Please correct the legend to read: “Jewett Sequestration Site 20-Yr plume at 2.5 MMT/year (1.7 Mile radius)”

**J19. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

- #31 Figure 6.4-2, incorrectly characterizes the Midway Group. The 700 ft (215 meter) thick Midway Group is actually all marine shale except for 10-30 foot thick sands in the top 50-100 feet. Please show that this unit should be depicted as shale in the stratigraphic column shown in Figure 6.4-2.
- #32 Figure 6.4-2, fails to indicate that the Midway Group is a distinctly defined secondary seal or ultimate seal overlying the injection horizons and Eagle Ford primary seal. Please add blue shading on the right hand side of the figure corresponding to the Midway Group to show this as a seal.
- #33 Figure 6.4-2 indicates that the drinking water aquifer extends down to depths of approximately 1,300 feet, which corresponds to the base of the Wilcox strata. The drinking water aquifer does not extend down in to strata of the Midway Group. Please correct this inconsistency.
- #34 In Figure 6.4-2, under Explanation, incorrectly indicates that the information on the geologic column is mostly based on seismic profile of the Northern Injection Site. Please correct the “note” to read: “Note: Geologic column mostly based on a geophysical log of Well 42161316290000”
- #35 The DEIS fails to identify the secondary seal provided by the Midway Group. Under the section heading: “Geological Resources in the Jewett Area,” please correct the third paragraph to read: “The primary sequestration reservoir at the site is the Woodbine formation, which is overlain by the Eagle Ford shale primary seal occurring at a depth of approximately 0.8 mile (1.3 kilometers) below the ground surface. The Woodbine is also overlain by the Midway Group secondary seal occurring at a depth of approximately 0.25 mile (0.4 kilometer) below ground surface.”
- #36 Under section heading: “Geological Resources in the Jewett Area,” third paragraph, please correct sentence to read: “It is reported that up to 46 known wells penetrate the Eagle Ford Shale that lie within the footprint of the 20-year 2.8 million tons (2.5 MMT) per year plume (radius of 1.7 miles [2.7 kilometers]) (FG Alliance, 2006c).”
- #37 The DEIS fails to identify the secondary seal provided by the Midway Group. Under section heading Seals, Penetrations, and Faults, subsection heading Primary Seal, please correct sentence to read: “The primary caprock seal for the Jewett Sequestration Site is the Eagle Ford Shale.”
- #38 The DEIS incorrectly identifies the number of known wells that penetrate the primary seal. Under section heading Seals, Penetrations, and Faults, subsection heading Secondary Seals, second paragraph, please correct second sentence to read, “Thirty-eight wells that penetrate the primary seal are located within the maximum plume footprint of the two Woodbine CO<sub>2</sub> injection wells”
- #39 The DEIS fails to identify the secondary seal provided by the Midway Group. Under section heading Seals, Penetrations, and Faults, subsection heading Secondary Seals, third paragraph, please add sentence to end of paragraph: “ The ultimate seal at the Jewett Sequestration Site is provided by shales of the Midway Group secondary seal, which is 700 feet (215 meters) thick and lies below the base of the freshwater aquifer.”
- #40 The DEIS incorrectly identifies the number of known wells that penetrate the primary seal. Under section “Operational Impacts, subheading Sequestration Site,” please correct last paragraph to read: “Forty-six wells are reported to penetrate the primary seal, the Eagle Ford Shale within the 20-Yr, 2.5 MMT per year ROI.” Also, please delete the reference because number is incorrect in the FG Alliance (2006) document.
- #41 Physiography and Soils, Transportation Corridors – The DEIS indicates that “Approximately 48 to 73 acres (19 to 30 hectares) of soil would be impacted by proposed road construction and improvements” at the Jewett site. Please provide an explanation why this site is different from the other candidate sites or revise the estimate.

**J19. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

**#42** In Table 2-1 regarding Summary of Surface and Subsurface Features of Four Candidate Sites – The Surface Water Resources information incorrectly identifies the lake near the Jewett site as “Lake Limonite.” Please revise the description to correctly name the lake as Lake Limestone, rather than Lake Limonite.

---

**Response to Comment #1:** Reference to U.S. Highway 79 in Section S.4.2.3 was deleted.

---

**Response to Comment #2:** Table S-3 was revised to include the proposed injection site on TDCJ property.

---

**Response to Comment #3:** This was an error in the text. Section S.9, Table S-12 and Table 3-3 were revised as follows: “Existing railroad and road corridors are in place, therefore there would be no soil disturbance through construction of infrastructure within the power plant site.” Section 6.5.3.1, Transportation Corridors - The previous text was deleted and replaced with the following: “The proposed site consists of existing road and railroad corridors, therefore no new corridors would need to be constructed and soil would not be directly impacted.” Section 3.1.5 - The text was revised as follows: “Jewett - up to 358 acres (145 hectares) of land area for utility corridors and no soil disturbance of land area for transportation corridors.”

---

**Response to Comment #4:** Table S-12 was revised to say that up to 63 miles of high quality deer and turkey hunting ground, which is common in the area, would be “temporarily impacted during pipeline construction.”

---

**Response to Comment #5:** References to Big Brown 3, Tradinghouse 3 & 4, and Lake Creek 3 power plants were removed from Table S-14.

---

**Response to Comment #6:** While the river may not be listed as impaired by the State for this section, it is still important to acknowledge the restoration of the Trinity River on a regional scale. Furthermore, there are active stream monitoring stations upstream and downstream of the river from the proposed injection site under the Trinity River Restoration Project. The closest segment (#804 Trinity River Above Livingston) is located in a watershed where metals and fecal coliform were identified as contaminants of concern in a 2000 Texas Natural Resource Conservation Commission report (<http://www.trinityra.org/BasinPlan/Summarypdf/Executive%20Summary.pdf>). Therefore, the text will remain as presented in the EIS.

---

**Response to Comment #7:** The Midway Group, which is illustrated in Figure 6.4-2, is not specially called out as a “secondary seal” in the EIV. However, both the EIV and the EIS acknowledge the additional (secondary) protection provided by the over 0.4 mile (0.6 kilometer) of low permeability carbonates and shales above the Eagle Ford. This includes the Midway Group. Therefore, the text will remain as presented in the EIS. Comment noted and will be included in the Administrative Record of the EIS.

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**J19. FutureGen Texas Team (Walden, Steven – Walden Consulting)**  
*(The complete comment document submitted to DOE is shown in G10.)*

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**Response to Comment #8:** Reference to U.S. Highway 79 in Section 2.4.3 was deleted.

---

**Response to Comment #9:** Table 2-3 was revised to include the proposed injection site on TDCJ property.

---

**Response to Comment #10:** This was an error in the text. Section S.9, Table S-12, and Table 3-3 were revised as follows: “Existing railroad and road corridors are in place, therefore there would be no soil disturbance through construction of infrastructure within the power plant site.” Section 6.5.3.1, Transportation Corridors - The previous text was deleted and replaced with the following: “The proposed site consists of existing road and railroad corridors, therefore no new corridors would need to be constructed and soil would not be directly impacted.” Section 3.1.5 - The text was revised as follows: “Jewett - up to 358 acres (145 hectares) of land area for utility corridors and no soil disturbance of land area for transportation corridors.”

---

**Response to Comment #11:** References to Big Brown 3, Tradinghouse 3 & 4, and Lake Creek 3 power plants were removed from Table 3-7.

---

**Response to Comment #12:** Section 3.3.4.2 was revised as requested, and Table 3-12 was revised to delete: “projects Big Brown, Lake Creek and Tradinghouse Units 3 and 4.”

---

**Response to Comment #13:** Text in Section 3.3.4.2 was revised from: “As new sources, these proposed facilities would be expected to consume PSD increments and may affect emission levels allowed from other new sources, including the FutureGen Project.” to “These proposed power plants (already in the permitting stage) and all other proposed sources of air pollutants would be expected to consume PSD increments and may affect emission levels allowed for projects permitted at a later time, including the FutureGen Project.”

The following sentence has been deleted: “These conditions would need to be thoroughly considered in the permitting process for the FutureGen Project and other future facilities that may be sited in the area.”

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**Response to Comment #14:** References to Big Brown 3, Tradinghouse 3 & 4, and Lake Creek 3 power plants were removed from Table 3-12.

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**Response to Comment #15:** Section 3.3.4.2 was revised to reflect that many of the proposed power plants have been withdrawn, and Table 3-12 was revised to delete projects Big Brown, Lake Creek and Tradinghouse Units 3 and 4. However, it is still reasonable to assume that the proposed air emissions of these large power plant projects could have an adverse impact on air quality, even if a regulatory threshold would not be exceeded and the true extent of adverse impacts is unknown.

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**J19. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

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**Response to Comment #16:** Text in Section 3.3.4.2 has been revised as follows: “Ambient concentrations of PM<sub>2.5</sub> may be much closer to the NAAQS (based on the closest PM monitoring station which is located near Houston, a more urban area).”

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**Response to Comment #17:** Paragraph in Section 3.3.4.2 has been revised as follows to reflect that many of the proposed power plants have been withdrawn: “These proposed power plants (already in the permitting stage) and all other proposed sources of air pollutants would be expected to consume PSD increments and may affect emission levels allowed for projects permitted at a later time, including the FutureGen Project.” However, it is still reasonable to assume that the proposed air emissions of these large power plant projects could have an adverse impact on air quality, even if a regulatory threshold would not be exceeded and the true extent of adverse impacts is unknown.

DOE has no information from TCEQ that would indicate that the proposed air emission sources near Jewett would not cause or contribute to air pollution. Furthermore, until FutureGen reaches the PSD permitting stage, projects with air emissions implemented before FutureGen could consume PSD increments that may affect future projects.

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**Response to Comment #18:** Sectors 3, 4, 7, and 8 through 12 have been added to the “winter” section of Table E-8.

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**Response to Comment #19:** The issue of representative ambient air monitoring was discussed in detail with the site proponent and DOE used information from data that were present. Since there are no actual monitoring stations within the ROI of the site, it would be making more assumptions as to the representativeness of any monitoring station that would be chosen. As part of the air permitting process, it would be more appropriate to consider monitoring at the site, if it is selected. The text will remain as presented in the EIS. Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #20:** Table 6.2-2 was revised to be consistent with Table E-11.

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**Response to Comment #21:** Table references in Section 6.1.3 were revised as requested.

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**Response to Comment #22:** Table and figure references in Section 6.1.3 were revised as requested.

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**J19. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

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**Response to Comment #23:** The Midway Group, which is illustrated in Figure 6.4-2, is not specifically called out as a “secondary seal” in the EIV. However, both the EIV and the EIS acknowledge the additional (secondary) protection provided by the over 0.4 mile (0.6 kilometer) of low permeability carbonates and shales above the Eagle Ford. This includes the Midway Group. The text will remain as presented in the EIS. Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #24:** Reference to U.S. Highway 79 was deleted from Section 6.1.3.

---

**Response to Comment #25:** Table 6.1-1 was revised to include the proposed injection site on TDCJ property.

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**Response to Comment #26:** DOE concurs with the comment and thus Section 6.2.3.2 was revised to read “would result” rather than “would be deposited.”

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**Response to Comment #27:** Table 6.3-1 was revised to show “seasonal” precipitation totals. The label “Average Monthly Precipitation” was changed to “Average Precipitation” and the label “Snow” was changed to “Average Snow.” Jewett Section 6.3.2.1 was revised as follows: “about 43 inches (109.2 cm).”

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**Response to Comment #28:** Table 6.3-1 was revised to show “seasonal” precipitation totals. The label “Average Monthly Precipitation” was changed to “Average Precipitation” and the label “Snow” was changed to “Average Snow.” In addition, the corresponding tables for the Odessa, Mattoon, and Tuscola sites were similarly revised.

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**Response to Comment #29:** The comment was discussed in a telephone conversation with the Commentor on July 24, 2007. The Commentor realizes that the estimate of wells penetrating the primary seal cited in the EIV and EIS (57) and the somewhat lower number cited along with other comments both represent best information available to DOE and to the Commentor, respectively, and that uncertainties surround both figures. The Commentor also concurs with DOE that if the Jewett Site were selected, additional site characterization studies would refine and elaborate on the estimate of the number of these wells and their locations.

The text box on Figure 6.4-1 was revised as follows: The note was deleted and replaced with: “Approximately 35 wells with API numbers are shown within the 50-year footprint. Other wells without API numbers may also exist within the plume footprint.” Additionally, text in the legend was revised as follows: “Jewett Sequestration Site 50-year plume after 2.5 MMT/year of CO<sub>2</sub> injected for first 20 years (1.7 mile radius).”

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**J19. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

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**Response to Comment #30:** Comment J19-30 refers to Figure 6.4-1, not Figure 5.4-1. The text box on Figure 6.4-1 was deleted and revised as follows: “Approximately 35 wells with API numbers are shown within the 50-year footprint. Other wells without API numbers may also exist within the plume footprint.” Additionally, the text in the legend was revised as follows: “Jewett Sequestration Site 50-year plume after 2.7 tons/year (2.5 MMT) of CO<sub>2</sub> injected for first 20 years (1.7 mile radius).”

---

**Response to Comment #31:** DOE believes Figure 6.4-2 reasonably illustrates the overall stratigraphy of the Jewett injection area, including the Midway Group, and that the changes recommended in the comment for characterizing the Midway Group are relatively minor. Therefore, Figure 6.4-2 will remain as shown in the EIS.

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**Response to Comment #32:** The Midway Group, which is illustrated in Figure 6.4-2, is not specifically called out as a “secondary seal” in the EIV. However, both the EIV and the EIS address the additional (secondary) protection provided by the over 0.4 mile (0.6 kilometer) of low permeability carbonates and shales above the Eagle Ford. This includes the Midway Group. Therefore, the figure will remain as presented in the EIS.

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**Response to Comment #33:** DOE acknowledges that water meeting the quality requirements for protection as a potential source of underground drinking water may not exist as deep as the Midway Group at all locations within the proposed power plant site and proposed water well field. Based on a 1991 report, the depth of drinking water (<3,000 mg/l dissolved solids) varies considerably around the proposed power plant site (between 400 and 1200 feet bgs) with deeper fresh water to the east. The current figure states “drinking water aquifer (up to 1,400 feet)”. With the caveat of “up to”, the figure is representative of conditions at and near the proposed site. See <http://www.twdb.state.tx.us/publications/reports/GroundWaterReports/GWReports/R332/Figures/Figure18.pdf>. Therefore, the text and figure will remain as presented in the EIS.

---

**Response to Comment #34:** Note on Figure 6.4-2 was revised to read: “Note: Geologic column mostly based on a geophysical log of Well 42161316290000.”

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**Response to Comment #35:** The Midway Group, which is illustrated in Figure 6.4-2, is not specifically called out as a “secondary seal” in the EIV. However, both the EIV and the EIS acknowledge the additional (secondary) protection provided by the over 0.4 mile (0.6 kilometer) of low permeability carbonates and shales above the Eagle Ford. This includes the Midway Group. Therefore, the text will remain as presented in the EIS.

---

**Response to Comment #36:** The comment was discussed in a telephone conversation with the Commentor on July 24, 2007. The Commentor realizes that the estimate of wells penetrating the primary seal cited in the EIV and EIS (57) and the somewhat lower number cited along with other comments both represent best information available to DOE and to the Commentor, respectively, and that uncertainties surround both figures. The Commentor also concurs with DOE that if the Jewett Site were selected, additional site characterization studies would refine and elaborate on the estimate of the number of these wells and their location.

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**J19. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

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**Response to Comment #37:** The Midway Group, which is illustrated in Figure 6.4-2, is not specifically called out as a “secondary seal” in the EIV. However, both the EIV and the EIS acknowledge the additional (secondary) protection provided by the over 0.4 mile (0.6 kilometer) of low permeability carbonates and shales above the Eagle Ford. This includes the Midway Group. The text will remain as presented in the EIS. Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #38:** The comment was discussed in a telephone conversation with the Commentor on July 24, 2007. The Commentor realizes that the estimate of wells penetrating the primary seal cited in the EIV and EIS (i.e., 57 wells) and the 38 wells cited by the Commentor, both represent the best information available to DOE and to the Commentor, respectively, and that uncertainties surround both estimates. The Commentor also concurs with DOE that if the Jewett Site were selected, additional site characterization studies would refine and elaborate on the estimate of the number of these wells and their location. The text will remain as presented in the EIS.

---

**Response to Comment #39:** While the Midway Group shales may provide the “last” or “top” or “uppermost” seal encountered by any leaking CO<sub>2</sub> before the leaked CO<sub>2</sub> would reach drinking water supplies, DOE disagrees that the Midway Group should be given special status as the “ultimate” seal. DOE and the Alliance would be depending primarily on the Eagle Ford Shale to provide a seal at this site. Above this primary seal, there are approximately 3200 feet (maybe slightly more) of strata that contain many shale and shaly layers that each will serve as another seal. To say that the Midway Group is the ultimate seal is to convey the message that we would be relying on the shallowest strata, that strata immediately below (and containing) the underground drinking water supplies, to protect the surface environment and the drinking water supplies from any harm that could occur from a leak. This is not a true representation of DOE’s and the Alliance’s understanding of the geology at this site. The text will remain as presented in the EIS.

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**Response to Comment #40:** Section 4.1 of the EIV states “There are numerous shallow petroleum exploration wells within five miles of the injection wells (Figure 4.2), and the projected plumes for the FutureGen injection wells would encounter 57 plugged and unplugged wells.” The number of wells within the projected plume would vary depending on where on a site an injection well might be placed, and the projected plume itself is not precise. Thus, it is not possible to obtain one precise number. To maintain consistency with the EIV and because of the uncertainties with the data as agreed upon (see Comment #38), DOE has decided to retain the number of wells at 57. The text will remain as presented in the EIS.

---

**Response to Comment #41:** The previous text under ‘Transportation Corridors’ in Section 6.5.3.1 was deleted and the following was inserted: “The proposed site consists of existing road and railroad corridors, therefore no new corridors would need to be constructed and soil would not be directly impacted.”

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**Response to Comment #42:** In Table 2-1 in the revised Risk Assessment regarding Summary of Surface and Subsurface Features of Four Candidate Sites – The Surface Water Resources information was revised as follows: “Lake Limestone” from “Lake Limonite.”

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**J20. Office of the Governor – Texas (Francis, Denise S.)**



**OFFICE OF THE GOVERNOR**

Tuesday, July 10, 2007

RICK PERRY  
GOVERNOR

Mark McKoy, Document Manager  
U. S. Department of Energy  
3610 Collins Ferry Rd., P.O. Box 880  
Morgantown, WV 26507-0880

**RE:** TX-R-20070530-0001-50

Draft EIS - Draft Environmental Impact Statement for FutureGen Project (DOE/EIS-0394D)

Dear Mr. McKoy:

Your application for assistance referenced above has been reviewed. The comments received are summarized below.

The Brazos Valley Council of Governments submits the following: BVCOG Board recommends approval of this project.

No other substantive comments were received.

We appreciate the opportunity to review your proposal. Please let me know if we can be of further assistance.

Sincerely,

*Denise S. Francis*  
Denise S. Francis, State Single Point of Contact  
DSF/dsi

cc: U. S. Department of Energy

#1

**J20. Office of the Governor – Texas (Francis, Denise S.)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**J21. Baylor University (Lilley, John M.)**



John M. Lilley  
President

May 9, 2007

Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

RE: FutureGen Site Proposal-Heart of the Brazos, Texas

Dear Mr. McKoy:

I welcome this opportunity to reiterate Baylor University's strong support for the Heart of the Brazos FutureGen Alliance site proposal, a joint effort of the Heart of Texas and Brazos Valley Councils of Government. The geology of the Jewett, Texas, site makes it an ideal location at which to pursue the Alliance's programmatic objective of developing a technologically and economically feasible coal gasification process that harnesses the nation's abundant coal supplies to produce essential energy while at the same time protecting the environment.

The Jewett site's geographic location, in close proximity to Baylor and other research universities, also makes it especially well-suited to achieve the Alliance's goal of combining state-of-the-art production facilities with ongoing energy research and development. Alternative energy resources already are an area of emphasis within the Baylor research portfolio, in terms both of interdisciplinary faculty research and of degree program offerings. We look forward to making that existing expertise available to the FutureGen project, and to expanding our ongoing federal, state, local and university research collaborations to pursue new opportunities with Alliance partners and other FutureGen participants.

We at Baylor are very pleased to be part of the central Texas team and to endorse this Heart of the Brazos FutureGen site proposal. Do not hesitate to contact me if we can provide additional information or be helpful in other ways.

Sincerely,

A handwritten signature in black ink, appearing to read "John M. Lilley".

John M. Lilley

cc: Michael J. Mudd

OFFICE OF THE PRESIDENT  
One Bear Place #97096 • Waco, Texas 76798-7096 • OFFICE: (254) 710-3555 • FAX: (254) 710-3557

**J21. Baylor University (Lilley, John M.)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**O1. Brown, Jim**

**From:** Jim Brown [jim747@sbcglobal.net]

**Sent:** Wednesday, June 20, 2007 4:57 PM

**To:** FutureGen.EIS@netl.doe.gov

**Subject:** FutureGen for West Texas

Ladies and Gentlemen:

Unfortunately, I was unable to attend your public forum last night discussing the potential location of the FutureGen Project near Odessa, Texas. As a Midland, Texas resident for the past 10 years, I wanted to accept your invitation for additional public comments.

I am a semi-retired petroleum geologist and former vice president/general manager of a large independent natural gas company. Prior to relocating to Midland, I have lived in North Carolina (home), New Orleans and Lafayette in Louisiana, Houston and Tyler in Texas and Oklahoma City, Oklahoma. In Midland, I currently serve on the City of Midland Water Resources Committee as well as the Museum of the Southwest's Planetarium Advisory Committee.

As you have likely witnessed during your visits, the Midland – Odessa - Andrews Area of West Texas is quite unique –and I don't mean just the landscape. Although Houston is often called the Capital of the Energy Industry, my experience has been that Midland- Odessa is really the true Capital of Energy Entrepreneurship. Oil and gas projects throughout the world are initiated and operated from offices here. In recent years, local individuals and companies have helped Texas become the largest wind energy producing state in the Nation. Local towns here have teamed with UT Permian Basin to initiate an experimental high-temperature nuclear reactor. Additionally, Andrews has invited a nuclear waste disposal site to be built as well as teamed with New Mexico to initiate a large nuclear processing facility. I ask you – How many other regions in the US are this farsighted?

This community is extremely science and engineering oriented. If I wanted, I could spend virtually every day of the week attending science or engineering lectures and luncheons with local professional societies, hearing speakers from around the world. As you have seen, UT Permian Basin, Odessa College and Midland College have excellent resources to support research projects. The Center for Energy and Economic Diversification is an excellent example of the link between industry and academia here. Concerning commercial use of CO<sub>2</sub> – including processing, piping and injection - this region literally wrote the book.

I have been in the energy business for over 37 years and firmly believe that we must develop a variety of sources of energy to sustain our modern way of life. I believe that the US should actively pursue coal, nuclear, oil and natural gas, wind and biofuels. Although I'm personally a skeptic concerning anthropogenic greenhouse gas global warming, I am pragmatic enough to realize that we must begin to capture gas from the largest anthropogenic source of CO<sub>2</sub> –coal-fired power plants. The greatest reserve of energy in the US is coal. As an amateur astronomer, I overwhelmingly welcome the reduction or elimination of coal's pollutants like Nitrous Oxide, Sulphur Dioxide and Mercury. As a petroleum geologist, I am excited about the potential for increased utilization of CO<sub>2</sub> in coaxing more oil and natural gas out of the ground.

Since we are located in an arid environment here, many may worry that our water resources are too meager to use for the FutureGen facility. Although I cannot officially represent the City of Midland or its Water Resources Committee, my four years studying Midland's future water demand and supply has impressed me that this plant should not materially affect this region's resources. Through the Colorado River Municipal Water District as well as its own groundwater reserves, Midland has adequate water resources far into the future. Unlike many cities and despite a decade-long drought, Midland has not been required to restrict water usage. Future groundwater reserves for the City have been purchased and delineated. Wastewater re-use is currently being studied and a pilot plant is being permitted. Additionally, new membrane technology will soon allow expanded commercial use of large brackish and salty groundwater reserves throughout this region.

**O1. Brown, Jim**

I believe that building FutureGen at the Penwell Site will be in the best interest of all involved. As you have seen in your meetings here, this State and this Region have done everything in their power to welcome you here. We want you!

Sincerely,

Jim Brown

1603 Stanolind Avenue  
Midland, Texas 79705  
432 618-1980

**O1. Brown, Jim**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #2:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #3:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #4:** Comment noted and will be included in the Administrative Record of the EIS.

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**O2. Trident Environmental (Van Deventer, Gil)**

June 27, 2007

Mr. Mark McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory\  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

*RE: FutureGen Site Proposal/ Penwell (Odessa), Texas*

Dear Dr. Mc Koy:

There is the perception by many people that Texas is one of our country's' biggest, if not the biggest, emitter of air pollutants. For instance, a recent Associated Press article states: "Texas, the leader in emitting this greenhouse gas [CO2], cranks out more than the next two biggest producers combined, California and Pennsylvania, which together have twice the population of Texas." This may or may not be true depending on how you look at it. However, Texas is one of our largest states, is one of the biggest providers *and* users of energy, and has a huge consumer base.

This perception of Texas, and EPA Region 6, having a disproportionately larger amount of total emissions, particularly carbon dioxide, is an important consideration for choosing the Penwell TX location for the new FutureGen plant because obviously Texas is in more need of reducing its emissions than other states, especially Illinois.

Thank you for your consideration of my comment,



Gil Van Deventer  
4915 Tattenham Corner  
Midland TX 79707  
Home: 432-682-0727  
Fax: 413-403-9968  
Mobile: 432-638-8740

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

**02. Trident Environmental (Van Deventer, Gil)**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

8 MR. GIL VAN DEVENTER: Thank you. That  
9 was very well stated. He stole some of my thunder, but  
10 I mean, we have the same thoughts there. My name is Gil  
11 Van Deventer. I'm a hydrogeologist with Trident  
12 Environmental, and we are a local environmental  
13 consulting company.

14 Other than being a resident in this great  
15 area of West Texas for the past 20 years -- I wasn't  
16 born here, got here quick as I could -- but I come here  
17 as an unbiased citizen. I have no financial interest in  
18 FutureGen. By that, I mean I'm not being paid by anyone  
19 to be here and speak my mind.

20 First of all, I'd like to say that I am  
21 very supportive of the Odessa site being chosen as the  
22 site for FutureGen. I read the Draft EIS in its  
23 entirety and I don't foresee any adverse significant  
24 impacts to the resources of the proposed site, other  
25 than improving of the chosen area.

0038

#2

1 In particular, it will be a very  
2 beneficial effect to the division a resources, land use,  
3 social, economics, environmental, justice, community  
4 services, and utility infrastructure. I believe that  
5 the Odessa site is ideally located for environmental  
6 impact to environmental and commercial resources and  
7 human health issues.

8 And each of the remaining sites, Texas and  
9 Illinois, I'm sure they're going to have some  
10 significant impacts or difficult obstacles to overcome  
11 if chosen, and -- however, I think it will be well  
12 within our ability, especially here, to mitigate these  
13 impacts and reduce or eliminate their effects.

14 In fact, I don't think that's a bad thing  
15 to have, you know, some of these challenges, because for  
16 FutureGen to be a success, we need to meet these  
17 challenges by mitigating the various impacts so that we  
18 can learn from them and then transfer this technology to  
19 future FutureGens. And so by then, I'm very confident  
20 that the Odessa site will serve as the best model for a  
21 successful venture of this technology.

22 Permian Basin has long proven its ability  
23 to implement and advance innovative technology, because  
24 it has a great resource of educated and friendly people  
25 in the industry and accommodating business, governmental

**O2. Trident Environmental (Van Deventer, Gil)**

0039

1 and residential atmosphere, well established and  
2 respected colleges and universities, and the existing  
3 utility and transportation corridors and other strategic  
4 qualities. It is these virtues that have made this area  
5 a successful source for distinguished individuals,  
6 including those in high public office in Washington.  
7 You might know of a few and elsewhere, and who are  
8 dividing our country on the right path forward and this  
9 is, you know, one of those right paths forward.

#2

10 Meeting challenges, that's commonplace in  
11 the Permian Basin. I have been for several decades  
12 since the beginning of the oil and gas industry. Our  
13 confidence in that regard is why we're becoming a center  
14 of energy diversification. Like John said, I mean, that  
15 includes the wind and solar energy, nuclear energy, and  
16 hopefully soon, near zero emission coal-fired power  
17 generation. Thank you.

**O2. Trident Environmental (Van Deventer, Gil)**

June 19, 2007

Mr. Mark McKoy - NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory\  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

*RE: FutureGen Site Proposal/ Penwell (Odessa), Texas*

Dear Dr. Mc Koy:

I am a hydrogeologist with Trident Environmental, a local environmental consulting company. Other than being a resident in this great area of west Texas for the past 20 years I come here as an unbiased citizen and have no financial interest in FutureGen. By that I mean I'm not being paid by anyone to be here and speak my mind.

First of all I'd like to say that I am very supportive of the Penwell site being chosen as the site for FutureGen. I have read the draft environmental impact statement in its entirety and do not foresee any adverse significant impacts to the many resources of the proposed Penwell site other than the improvement of the chosen area. In particular, it will have a very beneficial affect to the visual resources, land use, socioeconomics, environmental justice, community services, and utility infrastructure. I believe the Penwell site is ideally located for minimal impact to environmental and cultural resources, and human health issues.

Each of the remaining sites in TX and IL may have some significant impacts or difficult obstacles to overcome if chosen for the FutureGen facility. However, it will be well within our ability to mitigate these impacts and reduce or eliminate their affects. It is not a bad thing to have these challenges because for FutureGen to be a success at other locations in the future we need to meet these challenges by mitigating the various impacts so that we can learn from them and transfer the new technology to future FutureGens.

I am very confident that the Penwell site will serve as the best model for the successful venture of this technology. The Permian Basin has long proven its ability to implement and advance innovative technology, mostly because it has a great resource of educated and friendly people in the industry, an accommodating business, governmental, and residential atmosphere, well established and respected colleges and universities, existing utility and transportation corridors, and other strategic qualities. It is these virtues that have made this area a successful source for distinguished individuals, including those in high public office in Washington and elsewhere, who are guiding our country on the right path forward. Meeting any challenge is commonplace in the Permian Basin and has been for several decades since the beginning of oil and gas industry. Our competence in that regard is why we are becoming a center of energy diversification that includes wind and solar energy, nuclear energy, and hopefully soon, near zero emission coal-fired power generation.

Sincerely,



Gil Van Deventer  
4915 Tattenham Corner  
Midland TX 79707  
Home: 432-682-0727



#3

**O2. Trident Environmental (Van Deventer, Gil)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #2:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #3:** Comment noted and will be included in the Administrative Record of the EIS.

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O3. Clean Coal Technology Council (LaGrone, Scott)  
Summary Comments

**Summary Comments about FutureGen and  
The Permian Basin Application  
By F. Scott LaGrone**

**Introduction**

Thank you for this opportunity to comment about my position on the FutureGen Proposal and the Permian Basin site. I am currently a member of Chairman's Williams' Clean Coal Technology Council having been appointed by Governor Rick Perry in 2004.

I sincerely appreciate all of the Chairman's efforts in gathering all of the "Parties at Interest" in Texas in support of the FutureGen Proposal. Of the two Texas' sites currently under consideration, I am here to support the FutureGen efforts in the Permian Basin.

The National Environmental Policy Act (NEPA) requires that all Federal Organizations submit to the Council of Environmental Quality an Environmental Impact Statement demonstrating the impacts of a federally funded project. In addition to the obvious concerns of NEPA about the physical and biological environmental impacts, there is also consideration for the impacts, both positive and negative, on the population.

For example, one excerpt from the instructions to Federal Agencies in preparing an EIS is as follows:

(d) Encourage and facilitate public involvement in decisions which affect the quality of the human environment.

**My comments will be directed towards these "Human and Societal" considerations for inclusion in this EIS.** It will be the field analyses of the impacts of the biological aspects and the physics and chemistry of the emissions from the facility that determine the other requirements of the NEPA Act.

My belief is that the local and national economic impacts and national energy considerations are very important factors in this specific EIS.

#1

**03. Clean Coal Technology Council (LaGrone, Scott)**

Summary Comments

**In summary, here is a list of my major points:**

- 1. FutureGen is a perfect research tool for the West Texas location and will meet the “Societal and Economic Impacts” requirements of the NEPA Act with the following contributions:**
  - a. Leaders in this region and the general population are energy “aware” and would welcome such a facility and the economic contribution it will bring.**
  - b. IGCC is a chemical process and not a conventional coal operation, it requires a workforce with chemical plant experience to operate, and not pulverized coal experience. The Permian Basin has that capability and experience in its workforce from years of operating Chemical and Gas processing facilities.**
  - c. Environmentally, it is an excellent location for such a facility with a history and acceptance by the population of the importance of energy production.**
  - d. Western Coal is easily available to this location at reasonable costs from existing rail lines.**
  - e. CO2 sequestration is a proven technology in the geology of the producing strata of the Permian Basin and provides real measurable pay offs in energy production.**
  - f. Since IGCC plants are chemical plants, they work best when running at a full load capacity, and not when they are trying to follow the load. The electrical grid in this area can accommodate this base load easily of 275 megawatts.**
  - g. The Texas grid can not only certainly utilize the base load power that such an IGCC system can provide, it needs much more than the FutureGen project is currently sized for. Hopefully with the CO2 question answered and the remaining unknowns about IGCC resolved at the conclusion of this project, this geographical area could become the location for many needed electrical generation facilities.**
  - h. The success of the sequestration aspect of the IGCC project is assured with the demonstrated CO2 injection wells in the Permian Basin.**

#1

**03. Clean Coal Technology Council (LaGrone, Scott)**

Summary Comments

**It is my belief that selecting this site for the FutureGen Project meets the “quality of the human environment” considerations of the NEPA Act.**

**A “win – win” for DOE and its research goals for promoting National Energy independence through new coal technology**

#1

**A “win – win” for the Permian Basin economy with its trained workforce and positive attitudes about energy developments**

**A “win – win” in assisting Texas with its current and future needs in electrical power**

**And lastly,**

**A “win – win” for our national needs for assistance with energy independence through more domestic crude production**

I do appreciate your time and patience to review my positions on these subjects. I hope some of them strike a cord with the appropriate decision makers.

**Scott LaGrone**

[Scott@LaGrone.net](mailto:Scott@LaGrone.net)

512 401-9601

11558 Spicewood Pkwy., Unit 6

Austin. TX 78750

**03. Clean Coal Technology Council (LaGrone, Scott)**  
Written Comments

**Written Comments about FutureGen and  
The Permian Basin Application  
By F. Scott LaGrone**

**Introduction**

Thank you for this opportunity to comment about my position on the FutureGen Proposal and the Permian Basin site. I am currently a member of Chairman's Williams' Clean Coal Technology Council having been appointed by Governor Rick Perry in 2004.

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**My comments will be directed towards these "Human and Societal" considerations for inclusion in this EIS.** It will be the field analyses of the impacts of the biological aspects and the physics and chemistry of the emissions from the facility that determine the other more recognized requirements of the NEPA Act.

My belief is that the local and national economic impacts and national energy considerations are very important factors in this specific EIS.

#1

**03. Clean Coal Technology Council (LaGrone, Scott)**

Written Comments

**Background**

Even though I have been a long time resident of Austin, TX, I was raised here in the Permian Basin. I attended Elementary School and Junior High in Hobbs, NM, and then high school in Odessa at Odessa High School. And yes, that was before there were any other famous high schools in this area.

The energy business here in Permian Basin has afforded me with an excellent high school education that allowed me to go on from here and achieve a couple of degrees in Mathematical and Computational Physics at the University Of Texas.

After college I spent my career in various aspects of the environmental business; consulting, instrumentation and measurements; engineering control systems and in technical management. I was a principal in the founding of a firm where I worked for 25 years. When I retired, our firm had over 1000 scientists and engineers working in various aspects of the environmental business.

My current position is "retired". This means that I am no longer very relevant technically, in any field, especially fields as complex as the energy fields are today. However, I do feel I have some other observations that I would like to share about this proposed project and its impacts.

**Economics**

The tax revenues from the oil production and related economic activity provided local school districts with the funds to recruit and pay teachers somewhat higher than other districts in the state.

The Mathematics and Physics teachers that I had at Odessa High, back in the fifties, both had Masters Degrees in these fields. They were teaching as a second career after 20 plus years in the military. These two teachers made it clear then, that it was the pay scale that drew them to Odessa. Their inspiration and technical knowledge are definitely what advanced me into the field of physics. Many of my class have been very successful in their fields, certainly in part, from the excellent education offered here.

#1

03. Clean Coal Technology Council (LaGrone, Scott)  
Written Comments

**Enhanced Oil Recovery in the Permian Basin**

#2 | I make this point because these oil fields are depleting. This is as expected after all these many years. However, it is having an adverse impact on tax revenues. But these oil fields still have much more product to yield. Using the best available enhanced recovery technologies, these fields have been delivering additional oil production that would otherwise have been left in the ground. Only with technologies of enhanced recovery, like water flood and CO2 flood, (and certainly, later some other exotic techniques), will the Permian Basin continue to feed the economies of West Texas and Southeast NM.

#3 | The scientific knowledge of these large, remaining, in-place “reserves,” has been well understood for many years. However, without acceptable economic solutions for recovering more of this valuable resource, we are risking both the economies of this area as well as a piece of the energy independence story for our nation.

#4 | As discussed earlier, The CO2 Flood has proven its usefulness as a scavenging solvent (CO2) that produces more oil from proven reservoirs. **We know that this “CO2 flood” will work in this specific geology and is commercially viable.** This process has been underway profitably for many years in these same fields. There is no risk in this aspect of the research project from technological success or are there any environmental unknowns with this record.

**Existing Trained Workforce in the Basin**

#5 | First of all, it needs to be made clear that an IGCC operation is a chemical operation and not a coal-fired steam boiler facility. This is very important when you consider the role of the talent necessary to operate an IGCC facility. The Permian Basin has many Gas processing facilities and chemical plants that can provide trained employees who are intimately familiar with the environment of a chemical operation. They have been well trained in the safety and operational procedures of these kinds of plants.

#6 | Furthermore, this industry has always been more than just a livelihood for about energy production and the security and prosperity of this region and of our nation. These workers believed they are currently, and have been in the past, an important contribution to our country’s economy and security. In World War II, the strategic nature of the

**03. Clean Coal Technology Council (LaGrone, Scott)**

Written Comments

petroleum resource was fully recognized. Ever since, their patriotism has always been strong and sincere. There is a still a very intense feeling in the Permian Basin

Our dependence on foreign oil is more than just problematical, it is critical to the long term economic welfare of our nation. Our country's continued efforts to maintain free markets for international oil supplies from the Middle East are testament of just how important it is to our nation's economy that we keep the oil flowing everywhere.

Attitude and acceptance of such a research facility by the local populous is an important part of the measurement of the "impacts".

**Benefits from IGCC installations in Texas**

This project can provide several solutions to different concerns here in the Permian Basin, as well as proving out full scale economic operations of the IGCC technology. Everyone in this room is very familiar with the project and its prospects for IGCC systems in the future. So, if many of the things I am going to comment about are redundant for you, I apologize, but sometimes it is important to review the facts from other prospective.

A research project such as FutureGen will prove out the commercial ability to process coal chemically such that the "unwanted airborne chemicals" (i.e., pollutants) can be removed in the generation of synfuel (hydrogen and carbon monoxide). These types of facilities can also provide much needed electricity for the Texas distribution electrical grid, even as small as 275 megawatts. Also important are the potential captured by-products of an IGCC installation: syngas, hydrogen, sulfur, and of course CO2.

The FutureGen Research Project will investigate all of these opportunities and examine the details of cost effectiveness and applications of these by-products at the various locations. The newly developed prototype technology by DOE that effectively utilizes the waste heat from generating system to take out the moisture in the feedstock coal, may also have application to this project and could even further reduce the emissions from this facility and make it more energy efficient.

#6

**03. Clean Coal Technology Council (LaGrone, Scott)**  
Written Comments

**Natural Gas Electrical Generation  
Versus Coal based Generation**

In 1999, the Governor of Texas, George W. Bush appointed me to the Board for six year term to the State owned Utility in Central Texas known as the Lower Colorado River Authority. In addition to its flood control and water supply mission, LCRA has almost 3000 megawatts of generating capacity. About 10% of this is generated with hydroelectric systems, 1100 megawatts comes from a conventional pulverized western coal facility in LaGrange, TX and the rest from natural gas operations. As expected, and as is true nation wide, LCRA relies mostly on the coal facility for the primary load of its customer base because of the economies of the coal facility.

My Board seat was known as an "Electrical Representative" and I was involved at a detailed level in the electrical needs, prospective generation potentials and improvements to existing facilities. It was through this six year learning period that I was able to understand the serious need for a short term solution, (five to ten years), of the additional power requirements that the electrical grid of Texas needs.

#6

Over the next ten or twenty years, these needs will be met somehow. The most likely solution will be what has been the solution in the past and all around the country. That is, building new power plants using combined cycle technology with natural gas as a fuel and using the excess heat from these gas turbines that fire gas turbines to heat boilers and produce additional power. These units are very efficient compared to the older conventional gas fired steam generating systems. However, with the current price (and projected even higher prices) of natural gas, these combined cycle system produce power that is now much more expensive than the projected costs of generation for IGCC units where the fuel comes from the coal gasification.

Also, these natural gas fired facilities produce more CO<sub>2</sub> than an IGCC with CO<sub>2</sub> sequestration. These plants consume large amounts of a fuel and a most valuable feed stock, natural gas. Natural gas is difficult to import, (less than 2.5% of our current natural gas supplies are imported) so we only have our domestic reserves to rely on. Of course, like so many other of our natural resources, natural gas is in short supply. Natural gas is an ideal residential heating fuel, as well as an invaluable feedstock for our chemical plants.

**03. Clean Coal Technology Council (LaGrone, Scott)**

Written Comments

Natural gas is not appropriate for firing boilers to generate this required power, we should instead use it for residential applications and in the production of basic chemicals and plastics. If there ever was a resource that needs to be conserved, it is natural gas. The infrastructures that are in place for residential heating and chemical production are too expensive to change out were we to deplete our natural gas resources. It is just not the best use of this limited resource. Coal gasification may be the replacement or an additive fuel to this mix some day.

In 1973 during that energy crisis, the bills passed by Congress in the establishment of the Federal Energy Agency (FEA) eliminated the use of natural gas for boiler applications in future construction. This aspect of the Federal Energy Policy was never implemented before it was deemed unworkable and canceled by the Congress. In the last ten years, natural gas has increased in price over three fold and that means generating electricity in this manner only increases the cost of living significantly for us all.

Here again, we will find ourselves using a very valuable resource, natural gas as a stop gap measure, instead of utilizing our nation's most abundant energy resource, coal. As stated so often, a 200 year supply of coal just cannot be ignored. The FutureGen Project is one of our government's answers to this problem. This project's intended purpose is to use domestic coal reserves to generate electricity in a more environmentally acceptable manner.

**Current & Projected Electricity Demand for Texas**

Texas is in a unique, but potentially threatening position, **economically**, when it comes to the electrical power needs in the next 20 years or so. Most people are aware of the "rule of 7", that is, 7% a year increase in anything, essentially doubles when compounded for ten years.

Another corollary of this rule is that 3.5% (approximately) doubles every 20 years. Our cities, and the electrical demands of our state, have been growing right at this pace which means that we will have to find some good solutions to doubling our current 60,000 megawatts of capacity (operating margins) in the ERCOT Grid over the next twenty years if we want to continue the healthy economic growth this state has seen in the past 40 or 50 years.

It will only be through technology like IGCC and projects like FutureGen (and all of the other technological improvements for electrical generation

#6

**03. Clean Coal Technology Council (LaGrone, Scott)**

Written Comments

that are on the horizon) that we can be successful in maintaining our current standard of living in this state, and probably the nation, as well.

#6

These are several advanced technologies for electrical generation: IGCC systems, new technology nuclear reactors, nanotech solar panels and three megawatt towers for wind power systems. All of these technologies have yet to be implemented to any degree. The risk-reward or guaranteed financial success has not been proven up quite yet. The private sector will have to make huge financial investments to build electrical generating systems on the scale that these devices require for their successful and profitable implementation.

**Other areas of Research for DOE to further IGCC**

#7

The last and related issue that I would like to raise is the need for material research in all aspects of energy development. One of these technologies is nanotechnology. This is a relatively new field that has great promise as a solution to material problems.

#8

Areas that I would like to see the DOE investigate are solutions to the vast amounts of oxygen required for the coal combustion process in IGCC systems. It takes about 20% of plant generated power to produce the oxygen required to operate an IGCC plant. (Based on the last information I have been able to obtain.) Real savings in the cost of the generation of electrical power with IGCC can be made with breakthroughs in the oxygen plant economics. As I understand it, great promise is being touted by researchers in desalinization of brackish (even sea water) water using this new "nano" capability. Perhaps it wouldn't be too much further from this same type of a solution to take the next step and separate hydrogen from the oxygen in water with a "nano" solution to generate O<sub>2</sub> for a lot less than the 20% of plant power estimates that I have read about.

Another area of energy requirements for an IGCC plant with CO<sub>2</sub> sequestration is the 5% of power required to separate out the CO<sub>2</sub>. I am sure that with the research being done in all of the major Texas Universities in this new field of Nanotechnology, this could be another fertile ground for future investment as part of the FutureGen project.

Again, the "miracles" of nanotechnology may have an application in IGCC systems with some directed (and funded) research for coal gasification systems. **This research could certainly eliminate the "impact" of depleting further our natural gas supplies.**

**03. Clean Coal Technology Council (LaGrone, Scott)**

Written Comments

**In summary, here is a list of my major points:**

- 1. FutureGen is a perfect research tool for the West Texas location and will meet the “Societal and Economic Impacts” requirements of the NEPA Act with the following contributions:**
  - a. Leaders in this region and the general population are energy “aware” and would welcome such a facility and the economic contribution it will bring.**
  - b. IGCC is a chemical process and not a conventional coal operation, it requires a workforce with chemical plant experience to operate, and not pulverized coal experience. The Permian Basin has that capability and experience in its workforce from years of operating Chemical and Gas processing facilities.**
  - c. Environmentally, it is an excellent location for such a facility with a history and acceptance by the population of the importance of energy production.**
  - d. Western Coal is easily available to this location at reasonable costs from existing rail lines.**
  - e. CO2 sequestration is a proven technology in the geology of the producing strata of the Permian Basin and provides real measurable pay offs in energy production.**
  - f. Since IGCC plants are chemical plants, they work best when running at a full load capacity, and not when they are trying to follow the load. The electrical grid in this area can accommodate this base load easily of 275 megawatts.**
  - g. The Texas grid can not only certainly utilize the base load power that such an IGCC system can provide, it needs much more than the FutureGen project is currently sized for. Hopefully with the CO2 question answered and the remaining unknowns about IGCC resolved at the conclusion of this project, this geographical area could become the location for many needed electrical generation facilities.**
  - h. The success of the sequestration aspect of the IGCC project is assured with the demonstrated CO2 injection wells in the Permian Basin.**

Duplicate of O3-1.

**03. Clean Coal Technology Council (LaGrone, Scott)**

Written Comments

**Selecting this site for the FutureGen Project meets the “quality of the human environment” considerations of the NEPA Act.**

**A “win – win” for DOE and its research goals for promoting National Energy independence through new coal technology**

**A “win – win” for the Permian Basin economy with its trained workforce and positive attitudes about energy developments**

**A “win – win” in assisting Texas with its current and future needs in electrical power**

**And lastly,**

**A “win – win” for our national needs for assistance with energy independence through more domestic crude production**

I do appreciate your time and patience to review my positions on these subjects. I hope some of them strike a cord with the appropriate decision makers.

**Scott LaGrone**

[Scott@LaGrone.net](mailto:Scott@LaGrone.net)

512 401-9601

11558 Spicewood Pkwy., Unit 6

Austin, TX 78750

Duplicate of O3-1.

**03. Clean Coal Technology Council (LaGrone, Scott)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

22 MR. SCOTT LaGRONE: My name is Scott  
23 LaGrone, and I have to say I was raised in the Permian  
24 Basin. I went through high school at Odessa High  
25 School. I spent the last 50 years in Austin, Texas.

0025

1 But I wanted to take this opportunity to talk about the  
2 FutureGen proposal from my perspective. I was not aware  
3 of some of the information I heard tonight. I will make  
4 a comment on that in a moment.

5 I'm currently a member of -- Chairman  
6 Williams is chairman of our Clean Coal Technology  
7 Council. I was appointed by Governor Rick Perry in  
8 2004. I have served six years on the Lower Colorado  
9 River Authority Board of Directors and involved with  
10 3,000 megawatts of power generation during that time  
11 period, as well as coal generation. I do appreciate the  
12 chairman's efforts to promote the FutureGen proposal for  
13 the State of Texas.

14 I can't tell you how important it is that  
15 with find some alternative fuels besides natural gas for  
16 our state to use in the generation of electricity, and  
17 certainly, FutureGen is a real hopeful research area. I  
18 spent 35 years in the research area of energy  
19 environment, and so I started with some of the work in  
20 the (inaudible) process which then became the Texaco  
21 process, which is the now the GE process, which is  
22 what's now called integrated gasification combined  
23 cycle.

#9

24 The NEPA process, which you heard so much  
25 about, requires not only the classical biological and

0026

1 physical examination, but it also requires examination  
2 of the human impacts on the population on the economy.  
3 And I think that these gentlemen are more than qualified  
4 to have looked into the biological and physics of the  
5 emissions, et cetera. But what I would like to comment  
6 on very quickly is the human and societal considerations  
7 for the Permian Basin. My belief is that the local and  
8 national economic factors are very important in this  
9 specific EIS, because of the nature of what it can  
10 achieve for our nation and for our state.

11 In summary, and you should know, I  
12 submitted a 10-page document that has more than you ever  
13 want to know about each of these points, so I will just  
14 give you the summary points and stick within my five  
15 minutes. I believe FutureGen is a perfect research tool  
16 for the West Texas location and will meet the societal  
17 and economic impact requirements of the NEPA act. I  
18 believe that this is because leaders in this region and  
19 the general population are energy aware and would  
20 welcome such a facility and the economic contribution it  
21 will bring.

### 03. Clean Coal Technology Council (LaGrone, Scott)

22 The IGCC process is a chemical process.  
23 It's not a conventional coal operation. It requires the  
24 work force with the chemical plant experience where you  
25 need chemical plant experience to operate it, not

0027

1 (inaudible) coal experience. We're veterans in the  
2 Permian Basin where we have years and years of  
3 experience in personnel in operating the chemical and  
4 natural gas facilities. I think that is a very  
5 important point when you start evaluating this location  
6 against other locations in the country.

7 From my perspective, at least, having been  
8 raised here, environmentally, it is an excellent  
9 location for such a facility with a history and  
10 acceptance by the population of the importance of energy  
11 production for our nation.

12 Another valuable point is rail by coal,  
13 especially western coal, is easily available and at a  
14 reasonable cost to this location. I understand you are  
15 going to use other coals as well in this research  
16 facility, but certainly, western coal is -- a line runs  
17 just north of here and provides all Central Texas coal  
18 plants with their western coal.

19 I heard the part about the deep saline  
20 injection, and I've just got to add, I sure hope one of  
21 the slip streams of the CO2 off of this facility is used  
22 to produce more oil for this nation. If there ever was  
23 a case where it's needed, we are currently importing it  
24 from the Four Corners area up in Farmington, New Mexico,  
25 via pipeline. And what better way than to take more

#9

0028

1 than just a slip stream of this million tons a year, but  
2 let's inject it into our water-flooded oil fields and  
3 produce more oil for our nation.

4 Since IGCC plants are chemical plants,  
5 they work best when running at full load capacity or at  
6 least constant load, not when they try to fall the load  
7 like natural gas plants do. The electric we get in this  
8 area can more than accommodate the 275 megawatts this  
9 plant is going to be, so there is no question about  
10 operational feasibility of the plant. I'm sure all of  
11 this is well understood by the scientists and  
12 technologists who have been involved in this but I came  
13 into this kind of late, I must admit.

14 The Texas grid not only wants  
15 275 megawatts, we have a need for 20 or 30,000 megawatts  
16 of power in the next 20 years in this state and we are  
17 desperate. And so this technology needs to move as fast  
18 as it can so that we can get some real-sized plants,  
19 1,000 megawatts as opposed to 275 megawatts, and get  
20 them under way and sequester the CO2 at the same time.

21 I guess in summary, I just have to say  
22 that I believe this project here in the Permian Basin is  
23 a win-win for DOE and its research goals, promoting  
24 national energy independence through new coal  
25 technology. I believe it's a win-win for the Permian

**03. Clean Coal Technology Council (LaGrone, Scott)**

0029

1 Basin economy with its trained work force and positive  
2 attitude about energy development. I think it's a  
3 win-win in helping Texas reach its current and future  
4 needs for electrical power, because we really are in  
5 need in the next ten years, and I think if we will take  
6 this slip stream of CO2 and put it down in the ground, I  
7 think it's a win-win in energy independence for more  
8 domestic crude production.

#9

9 And again, thank you very much for your  
10 time and patience. I hope I stuck with my five minutes,  
11 and I will be happy to answer any questions, if it's  
12 appropriate.

---

**03. Clean Coal Technology Council (LaGrone, Scott)**

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**Response to Comment #1:** While DOE has addressed the local economic impacts of the proposed project, DOE has not explicitly quantified the national economic impacts of this project for either this particular project individually or for the future employment of a fleet of FutureGen progeny power plants. DOE does not believe that it can assess the future national economic impacts to a degree of accuracy that would justify the effort. With this project, DOE aims to foster a fleet of power plants that can efficiently capture and sequester CO<sub>2</sub> with no more than a 10 percent increase in the cost of electricity, on average, resulting from the CO<sub>2</sub> capture and sequestration. Assuming this goal is reached, DOE envisions a wide variety of potential benefits, including especially those from averted global warming or other (economic and environmental) impacts that may occur with rising CO<sub>2</sub> concentrations in the atmosphere. As with national economic impacts, DOE has not specifically quantified the national energy considerations in this EIS. As reported in Section 1.3, this project was conceived based on the recommendations in the National Energy Policy, issued in May 2001 (NEP, 2001). The project is also a national response to the widely perceived need to reduce significantly the emissions of greenhouse gases from the use of fossil fuels.

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**Response to Comment #2:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #3:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #4:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #5:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #6:** Comment noted and will be included in the Administrative Record of the EIS.

---

**Response to Comment #7:** This research is not currently planned for FutureGen but may be considered in the future; therefore, no changes are required to the EIS.

---

**Response to Comment #8:** The "energy penalty" for carbon dioxide capture and sequestration as well as oxygen supply may be high, particularly with the use of the readily available commercial technologies that exist today. However, one of the goals of FutureGen is to help foster new technologies that promote energy efficiency, for example, through the minimization of energy penalties associated with the various components of power plants. Therefore, there are no changes required to the EIS.

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**03. Clean Coal Technology Council (LaGrone, Scott)**

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**Response to Comment #9:** Comment noted and will be included in the Administrative Record of the EIS.

---

**04. Edwards, Kirk**  
**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

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#1

I believe our nation deserves to have the Futuregen plant built in an area that is totally receptive to the project. The Permian Basin understands energy in all forms and provides a perfect environment with knowledgeable workers and community expertise. Being able to use 100% of the CO<sub>2</sub> after 6 years is another added bonus. We appreciate you letting Odessa show how proud we are to have you here, we hope we can show you what a great home we would be for your first site.

THANKS

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME Kirk EDWARDS ORGANIZATION Self  
ADDRESS 5030 E. University D-101 CITY ODESSA STATE TX ZIP 79762  
E-MAIL ADDRESS \_\_\_\_\_

**O4. Edwards, Kirk**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

05. Ward County Teachers Credit Union (Rankin, Kay)



**Ward County Teachers Credit Union**

*Our Members Are The Owners*

301 South Main - Monahans, TX 79756  
(432) 943-3445 phone ~ (432) 943-9208 fax  
www.wctcu.net // creditunion@wctcu.net

April 23, 2007

Mark L McKoy  
NEPA Document Manager for the Future Gen Project  
National Energy Technology Laboratory  
US Department of Energy  
PO Box 880  
Morgantown, W. VA 26507-0880

Future Gen Project Leaders;

As a resident of the Permian Basin I was very excited to learn more about what the Future Gen project could bring to our area economies and to the future of energy in our nation and world!

Any of the four selected areas will have the ability to assure you of a workforce, but to us, experience handling carbon dioxide safely is a vital part of our safety and everyday lives ALREADY!

#1

Local AREA support is what you will find in Penwell, TX and the entire Permian Basin. Along with the natural and human resources you will need for this important project for our nation's future!

I wanted to take the opportunity to again express my support for the Future Gen Project in West Texas. Best of luck in narrowing your site, I hope that anytime you are visiting the Permian Basin you take the opportunity to visit within the area communities and see first hand the support and inter-structure we are so proud of.

Sincerely;



Kay Rankin  
President  
WCTCU

**O5. Ward County Teachers Credit Union (Rankin, Kay)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**06. University of Texas of the Permian Basin (Watts, David)**

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

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#1

As President of the University of Texas of the Permian Basin in Odessa, TX, I want to state my university's desire to work with FutureGen in a variety of ways. (1) Research; (2) Teaching including FutureGen employees and their dependents. UTPB is prepared to work on an open competition basis for any service that FutureGen may desire at any stage in the process.

As president and as an individual, I fully support FutureGen's location in West Texas.

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME DAVID WATTS ORGANIZATION UNIVERSITY OF TEXAS OF THE PERMIAN BASIN  
ADDRESS 4901 E. UNIVERSITY CITY Odessa STATE TX ZIP 79762  
E-MAIL ADDRESS \_\_\_\_\_

**O6. University of Texas of the Permian Basin (Watts, David)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**07. Woltz, Jeff**

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

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#1

As I have come to understand, the containment of the CO<sub>2</sub> gas is the most important aspect of the FutureGen Project. No other site offers the geological formation as the Odessa site location does. Furthermore, the Odessa site's location in the Permian Basin offers the leaders in CO<sub>2</sub> injection knowledge throughout the world. With this in mind, I cannot see how any of the other sites can rank ahead of the Odessa location. There is also easy access to Mexico for international partners and an international airport within 25 miles of the site. With this in mind, I hope you will take note of the public support in the area - which extends into several states and surrounding country.

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME Jeff Woltz ORGANIZATION Individual

ADDRESS \_\_\_\_\_ CITY Odessa STATE TX ZIP 79762

E-MAIL ADDRESS jwoltz@standbymonitoring.com

The handwritten text as been transcribed as follows:

As I have come to understand, the containment of the CO<sub>2</sub> gas is the most important aspect of the FutureGen Project. No other site offers the geological formation as the Odessa site location does. Furthermore, the Odessa site's location in the Permian Basin offers the leaders in CO<sub>2</sub> injection knowledge throughout the world. With this in mind, I cannot see how any of the other sites can rank ahead of the Odessa location. There is also easy access to Mexico for international partners and an international airport within 25 miles of the site. With this in mind, I hope you will take note of the public support in the area which extends in to several states and surrounding country.

**07. Woltz, Jeff**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**08. Gore, Jesse W.**

Jesse W. Gore  
3521 Clearmont Ave.  
Odessa, Texas 79762  
432-367-6941

Mr. Mark L. McKoy  
National Energy Technology Laboratory  
P.O Box 880, MS No3  
Morgan Town, West Virginia 26507-0880

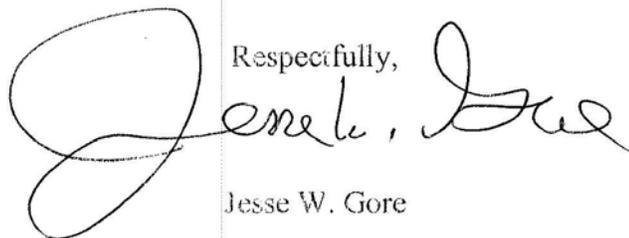
**RE: Concerning the proposed site selection of the Future Gen project to be located at Penwell Texas.**

Dear Mr. McKoy,

#1 | Please allow me the expressed privilege to place my full and unwavering support for the most judicious location among the four final sites. As a native Odessan with a multitude of years and contacts in the multi-faceted energy businesses in the Permian Basin, I can speak with authority, for the unbridled enthusiasm that has engulfed our area with the prospect of acquiring the Future Gen project. I know of no other area that has dedicated the overwhelming majority of it's talented peoples and resources to the energy businesses of yesterday, today, and to the future of America. **Please** select Penwell and the Permian Basin as your site of choice that will propel this great project of a near-zero emissions coal-fired power generating plant to its successful conclusion.

With gratitude, I am

Respectfully,



Jesse W. Gore

**O8. Gore, Jesse W.**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

**09. Odessa Council Member, District 3 (Bodiford, Royce)**



**ROYCE BODIFORD**  
Councilmember  
District 3

June 26, 2007

Re: FutureGen Site Proposal-Odessa, Texas

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Dear Mr. McKoy:

Following your visit this month to the Odessa site, I am writing to express our ongoing support for the FutureGen Project. We are confident that Odessa is the optimal host site for this innovative project and have committed the resources, with plans to commit more if named the final site, needed to ensure that FutureGen is a success.

As I expressed to you during your teams visit here, citizens throughout Odessa and the Permian Basin offer FutureGen wholehearted support. That translates into great community acceptance.

Texas and the Permian Basin is the center of the global energy industry. The technical expertise, skilled workforce and community support we offer are unparalleled. We are proud to be a finalist for this crucial demonstration project and we are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,  
  
Royce Bodiford, Mayor Pro Tem  
City of Odessa, Texas

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW, 5th Floor  
Washington, D.C. 20006

P. O. BOX 4398 • ODESSA, TEXAS 79760-4398 • (432) 335-3276 • FAX (432) 335-4160

#1

**09. Odessa Council Member, District 3 (Bodiford, Royce)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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O10. Boswell, John

**FutureGen Project**

Environmental Impact Statement for Implementation of the FutureGen Project  
U.S. Department of Energy, National Energy Technology Laboratory

**PUBLIC HEARING COMMENT CARD**

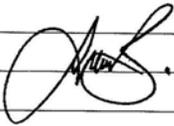
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#1

Now that the D.O.E. has traveled to all four sites,  
I hope you all understand better the case that  
the Odessa site presents as far as accessibility.

This alone should be a major factor in choice.

Thank you for coming! 

I WOULD LIKE TO RECEIVE A COPY OF THE FINAL FUTUREGEN EIS  HARD COPY  CD / SUMMARY

NAME John Boswell ORGANIZATION REACTOR  
ADDRESS 2600 Country Club CITY MIDLAND STATE TX ZIP 79701  
E-MAIL ADDRESS JBoswell@yahoo.com

**O10. Boswell, John**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

14 MR. BOSWELL: Darrell McDonald Realtors  
15 from Midland. Thank you. I should have looked at the  
16 names of the people before me before I signed up on the  
17 list following Michael Williams and everybody. Just  
18 speaking as a citizen of Midland is what I wanted to do.  
19 I did not know there was a public meeting from 4 to 6 or  
20 I would have been here earlier. But I did want to  
21 comment that I have, in my world of real estate, been  
22 talking to people around Midland, and as much as we  
23 might have a rivalry on football, Midland is totally  
24 behind FutureGen coming to West Texas. And looking at  
25 the sites that the DOE has chosen, it just makes

0035

1 complete and total sense to come here and it's easy to  
2 be partial. We live here, we want the business, et  
3 cetera. But when you have an international airport,  
4 when you have La Entrada coming in, we have existing  
5 lines of communications with Mexico and China, as  
6 Midland and Odessa have sister cities in these  
7 countries, there is so much going on here.

#2

8 We've been building up just for our own  
9 sake, let alone for the fact that we would like to have  
10 FutureGen come here, but Midland and Odessa both cities  
11 are on an upsurge, the likes of which neither has seen  
12 for many years. And we're used to booms and busts. The  
13 oil business has seen it all over and again. But now  
14 more than ever, Midland and Odessa are both prepared  
15 beyond belief.

16 We have people moving here from across the  
17 nation on a daily basis. I manage 200 rental units and  
18 I get calls and e-mails every day of people looking for  
19 a place to come to work for every occupation you can  
20 think of, not just coming here to work for the oil  
21 industry, and people transferring here from Dallas,  
22 which is (inaudible), but it's like you're coming here  
23 from Dallas? Colorado, Utah, Chicago, everywhere. I  
24 have not heard one negative thing. I can't think of one  
25 negative thing.

**O10. Boswell, John**

0036

1 Midland-Odessa is all about energy. We  
2 have wind turbine farms in Big Spring and McCamey. We  
3 have the nuclear plant going in up at Andrews. We have  
4 this. We have oil and gas. You know, Stephanie  
5 Sparkman has been talking about how Permian Basin is the  
6 Energy Basin. And that's the absolute truth.

7 We are about as international as a little  
8 town can get and people are going to want to come to  
9 FutureGen from all over the world to see it, be a part  
10 of it, bring it to their country. And how are they  
11 going to be able to do that from some of the other  
#2 12 locations? How are they going to be able to reach them?  
13 Where are they going to stay? Where are they going to  
14 go eat?

15 Some of the other cities are pretty small.  
16 Jewett is around larger cities and larger facilities,  
17 but Eastern Texas, in my opinion, is becoming highly  
18 congested. And that's why they're wanting to do a  
19 trans-Texas corridor and do this massive eight-lane  
20 freeway going north and south. And they're overdoing  
21 what they need to do, in my opinion, whereas here in  
22 Midland-Odessa, you've got the interstate, pow, you're  
23 right on the site. You've got airports ten minutes  
24 away. It's so easy here.

25  
0037

1 And just speaking as a public person from  
2 the City of Midland, I've had some tough acts to follow  
3 here tonight, but Midland has your full support and you  
4 know, I'm anxious to see how this all works about and  
5 would like to see it come here. So that's all I was  
going to say.

**O10. Boswell, John**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

23 MR. BOSWELL: I'm John Boswell. I did  
24 think of one other thing that I wanted to comment. I  
25 may have touched on this, but I want to hit it again.

0043

1 It's a real big thing for West Texas to hear something  
2 big coming and then it not happen. We've had, you know,  
3 various companies rumored to come to Midland, you know,  
4 oil companies and whatnot, doesn't happen. Walt Disney  
5 was going to have a Disney World here. Of course, that  
6 didn't happen. We had a Disney store for a little  
7 while.

8 You know, Midland and Odessa have heard  
9 the whole gambit of things coming here, yes, no, maybe  
10 so. This room is not nearly as full as it ought to be  
11 with the people who are in support of this. And they  
12 are skeptical, and with good reason. But they're all in  
13 favor of it, and I guarantee if this site was chosen,  
14 the Odessa site were chosen, you'd see support coming  
15 out of the woodwork. You would see people who have left  
16 Texas for jobs coming back to Texas just to, you know,  
17 be a part of it, because it's going -- the synergy that  
18 this is going to create, this is a one-time plant.

#3

19 We're going to get it off the ground. We  
20 are going to learn a lot from it. But the growth  
21 potential from all of this, you know, the university is  
22 going to grow from this. Andrews, the surrounding  
23 communities there, the airport, the rail system, that's  
24 going to create La Entrada's real system going north to  
25 Denver and Colorado. The ramifications of it are

0044

1 monumental.

2 And I have seen the big picture and I have  
3 tried to communicate it to a lot of people and they're  
4 all like yeah, that's all good and great, go get it,  
5 John. And you know, I'm the one who's beating the drum  
6 and I'm doing the best I can. But I've been to Austin.  
7 I've met, you know, Mr. Seliger and many others and you  
8 know, we can only do so much. But you definitely have  
9 the support of Midland, and I just wanted to reiterate  
10 that one time.

**O10. Boswell, John**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**Response to Comment #2:** Comment noted and will be included in the Administrative Record of the EIS.

---

**Response to Comment #3:** Comment noted and will be included in the Administrative Record of the EIS.

---

Tuesday, June 12, 2007 10:01 AM

**O11. McCulloch, Michael J.**

Michael J. McCulloch 4323327389

p.02

**MICHAEL J. McCULLOCH, D.V.M.**  
**601 N. Grandview**  
**Odessa, Texas 79761**  
**Phone: 432-580-5624**  
**Fax: 432-332-7389**  
**E-Mail: [permiansea@cableone.net](mailto:permiansea@cableone.net)**  
June 6, 2007

Mark L. McKoy  
NEPA Document Manager  
National Energy Technology Laboratory  
P.O. Box 880  
Morgantown, WV 26507

Dear Mr. McKoy:

As an advocate for the restoration of the Pecos River Watershed, I have limited knowledge of the FutureGen Project. My initial thoughts are that it will have very little negative impact on wildlife, water, or the land at the proposed Penwell site. Theoretically I can envision a major positive impact if desalination is incorporated into the process.

As you may or may not know, our area was part of the ancient Permian Sea, thus the name Permian Basin. When the sea receded it left massive salt formations, consequently we have a large amount of ground and surface water that has a high salinity due to the dissolution of gypsum, halite, and epsomite. Another source of salt water is from oil field activity that has to be disposed of, usually in deep wells.

If a desalination project could be incorporated into the FutureGen Project, then it could eliminate the use of fresh water sources for human consumption and serve a multitude of purposes in the Pecos River Watershed. For brevity sake, I will not list those purposes, but I will be glad to furnish them to you on request. The technology and human resources to accomplish a desalination project is readily available in Texas and New Mexico

In summary, I envision the by-products of the FutureGen project as ash, CO<sub>2</sub>, sulfur, and most importantly to the Pecos River Watershed additional water with improved quality.

Sincerely,



Michael J. McCulloch D.V.M.

#1

06/12/2007 11:02AM

**O11. McCulloch, Michael J.**

---

**Response to Comment #1:**

DOE oversees numerous projects that are investigating and supporting a wide variety of power plant technologies. Desalination of brine for the purpose of supplying fresh water to the nearby communities has not yet been planned or considered for this project. Project planners and those who would conduct demonstration projects at the FutureGen facility in the future could consider one or more methods of desalinating brines for the purpose of creating a public supply of fresh water. This type of project could be considered after the plant becomes operational during the time period when various R&D projects would be conducted. R&D projects have not yet been identified for this time period.

---

**O12. Complex Community Federal Credit Union (Jones, Carolyn)**



4900 EAST 52ND STREET  
ODESSA, TEXAS 79762

2201 SOUTH GRANDVIEW  
ODESSA, TEXAS 79766

200 WAL-MART COURT  
SPACE A  
ODESSA, TEXAS 79763

1117 SOUTH STOCKTON  
MONAHANS, TEXAS 79756

432-550-9126  
FAX: 432-550-9128  
TOLL FREE: 800-375-2168  
WEB: www.comcfcu.com

April 23, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: FutureGen Site Proposal / Odessa, Texas

Dear Mr. McKoy:

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry; and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

Cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O12. Complex Community Federal Credit Union (Jones, Carolyn)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O13. Complex Community Federal Credit Union (Montoya, Grace)**



4900 EAST 52ND STREET  
ODESSA, TEXAS 79762  
  
2201 SOUTH GRANDVIEW  
ODESSA, TEXAS 79766  
  
200 WAL-MART COURT  
SPACE A  
ODESSA, TEXAS 79763  
  
1117 SOUTH STOCKTON  
MONAHANS, TEXAS 79756  
  
432-550-9126  
FAX: 432-550-9128  
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April 23, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: FutureGen Site Proposal / Odessa, Texas

Dear Mr. McKoy:

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

Cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O13. Complex Community Federal Credit Union (Montoya, Grace)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O14. Complex Community Federal Credit Union (Rook, Tom)**



4900 EAST 52ND STREET  
ODESSA, TEXAS 79762

2201 SOUTH GRANDVIEW  
ODESSA, TEXAS 79766

200 WAL-MART COURT  
SPACE A  
ODESSA, TEXAS 79763

1117 SOUTH STOCKTON  
MONAHANS, TEXAS 79756

432-550-9126  
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April 23, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: FutureGen Site Proposal / Odessa, Texas

Dear Mr. McKoy:

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

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Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

Cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O14. Complex Community Federal Credit Union (Rook, Tom)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O15. Complex Community Federal Credit Union (Jimenz, Mayra)**



4900 EAST 52ND STREET  
ODESSA, TEXAS 79762

2201 SOUTH GRANDVIEW  
ODESSA, TEXAS 79766

200 WAL-MART COURT  
SPACE A  
ODESSA, TEXAS 79763

1117 SOUTH STOCKTON  
MONAHANS, TEXAS 79756

432-550-9126  
FAX: 432-550-9128  
TOLL FREE: 800-375-2168  
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April 23, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: FutureGen Site Proposal / Odessa, Texas

Dear Mr. McKoy:

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Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,  
*Mayra F. Jimenz*

Cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O15. Complex Community Federal Credit Union (Jimenz, Mayra)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O16. Complex Community Federal Credit Union (Henry, Beth)**



4900 EAST 52ND STREET  
ODESSA, TEXAS 79762

2201 SOUTH GRANDVIEW  
ODESSA, TEXAS 79766

200 WAL-MART COURT  
SPACE A  
ODESSA, TEXAS 79763

1117 SOUTH STOCKTON  
MONAHANS, TEXAS 79756

432-550-9126  
FAX: 432-550-9128  
TOLL FREE: 800-375-2168  
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April 23, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: FutureGen Site Proposal / Odessa, Texas

Dear Mr. McKoy:

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Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

Cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O16. Complex Community Federal Credit Union (Henry, Beth)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O17. Till, Justin**

April 23,2007

Justin Till  
P O Box 516  
Monahans, Tx 79756

Re: FutureGen Site Proposal/ Odessa, Texas

Dear Mr. McKoy,

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

#1 We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,



Justin Till

Cc: Michael J Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street NW  
5<sup>th</sup> Floor  
Washington, DC 20006

**O17. Till, Justin**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

**O18. Till, Jarred**

April 23, 2007

Jarred Till  
P O Box 516  
Monahans, Tx 79756

Re: FutureGen Site Proposal/ Odessa, Texas

Dear Mr. McKoy,

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

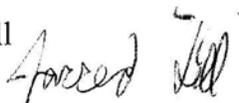
#1

We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

Jarred Till



Cc: Michael J Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street NW  
5<sup>th</sup> Floor  
Washington, DC 20006

**O18. Till, Jarred**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

**O19. Best Made Designs (DeFranco, Tino)**

April 23,2007

Best Made Designs  
Tino DeFranco  
1113 S. Betty APT# 122  
Monahans, Texas 79756

Re: FutureGen Site Proposal/ Odessa, Texas

Dear Mr. McKoy,

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

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Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

Tino DeFranco



Cc: Michael J Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street NW  
5<sup>th</sup> Floor  
Washington, DC 20006

**O19. Best Made Designs (DeFranco, Tino)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O20. Best Made Designs (Brown, Gene)**

April 23,2007

Best Made Designs  
Gene Brown  
1300 South Leon Avenue  
Monahans, Texas 79756

Re: FutureGen Site Proposal/ Odessa, Texas

Dear Mr. McKoy,

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

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Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,  
  
Gene Brown

Cc: Michael J Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street NW  
5<sup>th</sup> Floor  
Washington, DC 20006

**O20. Best Made Designs (Brown, Gene)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O21. Best Made Designs (Garcia, Connie)**

April 23,2007

Best Made Designs  
Connie Garcia  
1113 S. Betty #122  
Monahans, Texas 79756

Re: FutureGen Site Proposal/ Odessa, Texas

Dear Mr. McKoy,

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

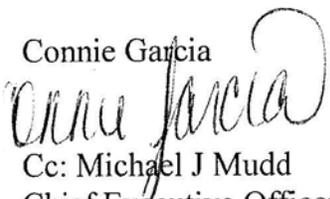
#1

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Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

Connie Garcia



Cc: Michael J Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street NW  
5<sup>th</sup> Floor  
Washington, DC 20006

**O21. Best Made Designs (Garcia, Connie)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O22. Caulder, KC**

April 23,2007

KC Caulder  
13093 WC Road #122  
Odessa, Texas 79765

Re: FutureGen Site Proposal/ Odessa, Texas

Dear Mr. McKoy,

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

#1

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Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,



KC Caulder

Cc: Michael J Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street NW  
5<sup>th</sup> Floor  
Washington, DC 20006

**O22. Caulder, KC**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

**O23. Shropshire, Catherine**

April 23,2007

Catherine Shropshire  
604 Darwood  
Kermit, Tx 79745

Re: FutureGen Site Proposal/ Odessa, Texas

Dear Mr. McKoy,

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

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Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,



Catherine Shropshire

Cc: Michael J Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street NW  
5<sup>th</sup> Floor  
Washington, DC 20006

**O23. Shropshire, Catherine**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

**O24. Till, Donna**

April 23, 2007

Donna Till  
P O Box 516  
Monahans, Texas 79756

Re: FutureGen Site Proposal/ Odessa, Texas

Dear Mr. McKoy,

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

#1

We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,



Donna Till

Cc: Michael J Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street NW  
5<sup>th</sup> Floor  
Washington, DC 20006

**O24. Till, Donna**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

O25. Till, Lynn

April 23, 2007

Lynn Till  
P O Box 516  
Monahans, Texas 79756

Re: FutureGen Site Proposal/ Odessa, Texas

Dear Mr. McKoy,

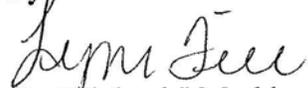
I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

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Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

Lynn Till



Cc: Michael J Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street NW  
5<sup>th</sup> Floor  
Washington, DC 20006

**O25. Till, Lynn**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

**O26. Cobos, Cynthia**

April 23,2007

Cynthia Cobos  
1312 S Elm  
Pecos, Texas 79772

Re: FutureGen Site Proposal/ Odessa, Texas

Dear Mr. McKoy,

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

#1 We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

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Sincerely,



Cynthia Cobos

Cc: Michael J Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street NW  
5<sup>th</sup> Floor  
Washington, DC 20006

**O26. Cobos, Cynthia**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

**O27. Ward County (Oyerbides, Patricia)**



**Patricia Oyerbides**

District Clerk  
Ward County  
P.O. Box 440  
Monahans, Texas 79756

Phone: (432) 943-2751

Fax: (432) 943-3810

April 26, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the Future Gen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P. O. Box 880  
Morgantown, WV 26507-0880

Re: FutureGen Site Proposal/Odessa, Texas

Dear Mr. McKoy,

I am writing again today to express our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the residents of the Permian Basin region look forward to hosting FutureGen.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

  
Patricia Oyerbides

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O27. Ward County (Oyerbides, Patricia)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O28. Ward County Commissioner, Precinct 2 (Hanna, Larry J.)**

*Larry J. Hanna*

400 E. 4TH  
MONAHANS, TEXAS 79756  
432-943-6343

April 23, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of energy  
P.O. Box 880  
Morgantown, WV 26507-0880

*Re: FutureGen Site Proposal / Odessa, Texas*

Dear Mr. McKoy:

I am writing today to express our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the Ward County residents are excited at the possibility of having FutureGen as a part of our regional economy.

We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We the citizens of Ward County are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

*Larry J. Hanna*

Larry J. Hanna  
Ward County Commissioner, Pct. 2

Cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance

#1

**O28. Ward County Commissioner, Precinct 2 (Hanna, Larry J.)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

O29. Monahans Main Street Association (Walker, Paula)



April 24, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

*Re: FutureGen Site Proposal / Odessa, Texas*

Dear Mr. McKoy:

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We have committed all necessary resources to make the project a success, and we will continue to provide anything you need for the future.

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Sincerely,

A handwritten signature in cursive script that reads 'Paula Walker'.

Paula Walker  
Director  
Monahans Main Street Association

City of Monahans ★ P.O. Box 1381 ★ Monahans, TX 79756 ★ (432) 943-3418 ★ Fax (432) 943-6868

**O29. Monahans Main Street Association (Walker, Paula)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O30. First National Bank (Hunt, Todd)**



April 23, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

*Re: FutureGen Site Proposal / Odessa, Texas*

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Sincerely,

  
Todd Hunt  
President

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

FIRST NATIONAL BANK • 307 S. MAIN • P.O. BOX 170 • MONAHANS, TEXAS 79756  
(432) 943-2503 • (888) 303-8298 • FAX (432) 943-5865

#1

**O30. First National Bank (Hunt, Todd)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

O31. First National Bank (Almanza, Rosie)



April 23, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

*Re: FutureGen Site Proposal / Odessa, Texas*

Dear Mr. McKoy:

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

A handwritten signature in black ink, appearing to read "Rosie Almanza".

Rosie Almanza  
Vice President

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

FIRST NATIONAL BANK • 307 S. MAIN • P.O. BOX 170 • MONAHANS, TEXAS 79756  
(432) 943-2503 • (888) 303-8298 • FAX (432) 943-5865

**O31. First National Bank (Almanza, Rosie)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

O32. First National Bank (Fredericks, Jim)



April 23, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

*Re: FutureGen Site Proposal / Odessa, Texas*

Dear Mr. McKoy:

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Fredericks".

Jim Fredericks  
Senior Vice President

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

FIRST NATIONAL BANK • 307 S. MAIN • P.O. BOX 170 • MONAHANS, TEXAS 79756  
(432) 943-2503 • (888) 303-8298 • FAX (432) 943-5865

#1

**O32. First National Bank (Fredericks, Jim)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

O33. West Texas State Bank (Johnson, Sheran)

**West Texas State Bank**

April 26, 2007

Mr. Mark L. Mckoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: FutureGen Site Proposal/ Odessa, Texas

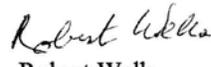
Dear Mr. McKoy:

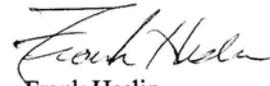
The purpose of the letter is to express West Texas State Bank's support for the FutureGen Project. We feel that the Permian Basin is the perfect location for this vital DOE research project. The residents of the Permian Basin region look forward to hosting FutureGen.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support offered are unparalleled.

Sincerely,

  
Sheran Johnson  
Executive Vice-President

  
Robert Wells  
Sr. Vice-President

  
Frank Heslin  
Sr. Vice-President



P.O. Box 410 • Monahans, Texas 79756-0410 • (432) 943-7561

#1

**O33. West Texas State Bank (Johnson, Sheran)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

034. West Texas State Bank (Wells, Robert)

**West Texas State Bank**

April 26, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: FutureGen Site Proposal/ Odessa, Texas

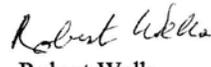
Dear Mr. McKoy:

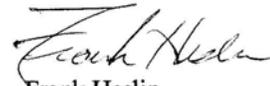
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Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support offered are unparalleled.

Sincerely,

  
Sheran Johnson  
Executive Vice-President

  
Robert Wells  
Sr. Vice-President

  
Frank Heslin  
Sr. Vice-President



P.O. Box 410 • Monahans, Texas 79756-0410 • (432) 943-7561

#1

**O34. West Texas State Bank (Wells, Robert)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**035. West Texas State Bank (Heslin, Frank)**

**West Texas State Bank**

April 26, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: FutureGen Site Proposal/ Odessa, Texas

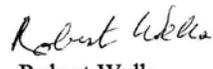
Dear Mr. McKoy:

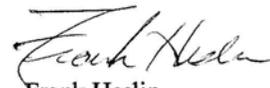
The purpose of the letter is to express West Texas State Bank's support for the FutureGen Project. We feel that the Permian Basin is the perfect location for this vital DOE research project. The residents of the Permian Basin region look forward to hosting FutureGen.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support offered are unparalleled.

Sincerely,

  
Sheran Johnson  
Executive Vice-President

  
Robert Wells  
Sr. Vice-President

  
Frank Heslin  
Sr. Vice-President



P.O. Box 410 • Monahans, Texas 79756-0410 • (432) 943-7561

#1

**O35. West Texas State Bank (Heslin, Frank)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O36. Monahans-Wickett-Pyote Independent School District (Richardson, Keith)**

*Monahans-Wickett-Pyote Independent School District*

606 SOUTH BETTY AVENUE • MONAHANS, TEXAS 79756

PHONE 432/943-6711 • FAX 432/943-2307



KEITH RICHARDSON  
*Superintendent*

April 25, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: FutureGen Site Proposals / Odessa, Texas

Dear Mr. McKoy:

I am writing to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin Region look forward to hosting FutureGen.

We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

Keith Richardson

KR/ms

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 J Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O36. Monahans-Wickett-Pyote Independent School District (Richardson, Keith)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

O37. Monahans Office of the Mayor (Cutbirth, David)



*Monahans*

OFFICE OF THE MAYOR

112 W. Second St. - Telephone 943-4343  
Monahans, Texas 79756

April 25, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: *FutureGen Site Proposal / Odessa, Texas*

Dear Mr. McKoy:

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

*David B. Cutbirth*

David B. Cutbirth  
City of Monahans  
Mayor

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O37. Monahans Office of the Mayor (Cutbirth, David)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

O38. City of Monahans (Garica, Mary)



*Monahans*

112 W. Second St. - Telephone 432-943-4343  
Monahans, Texas 79756

April 25, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: *FutureGen Site Proposal / Odessa, Texas*

Dear Mr. McKoy:

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

A handwritten signature in cursive script that reads "Mary S. Garica".

Mary S. Garica  
City of Monahans  
Council Member District No. 1

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O38. City of Monahans (Garica, Mary)**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

O39. City of Monahans (Wilson, Jeppie S.)



*Monahans*

112 W. Second St. - Telephone 432-943-4343  
Monahans, Texas 79756

April 25, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: *FutureGen Site Proposal / Odessa, Texas*

Dear Mr. McKoy:

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

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Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

A handwritten signature in cursive script that reads "Jeppie S. Wilson, Jr.".

Jeppie S. Wilson  
City of Monahans  
Council Member District No. 2

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O39. City of Monahans (Wilson, Jeppie S.)**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

O40. City of Monahans (Benad, Ken)



*Monahans*

112 W. Second St. - Telephone 432-943-4343  
Monahans, Texas 79756

April 25, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: *FutureGen Site Proposal / Odessa, Texas*

Dear Mr. McKoy:

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

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Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

A handwritten signature in black ink, appearing to read "Ken Benad".

Ken Benad  
City of Monahans  
Council Member District No. 3

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O40. City of Monahans (Benad, Ken)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

O41. City of Monahans (Ward, Ted)



*Monahans*

112 W. Second St. - Telephone 432-943-4343  
Monahans, Texas 79756

April 25, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: *FutureGen Site Proposal / Odessa, Texas*

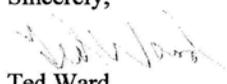
Dear Mr. McKoy:

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We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

  
Ted Ward  
City of Monahans  
Council Member District No. 4

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O41. City of Monahans (Ward, Ted)**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

O42. City of Monahans (Hawkins, Richard)



*Monahans*

112 W. Second St. - Telephone 432-943-4343  
Monahans, Texas 79756

April 25, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: *FutureGen Site Proposal / Odessa, Texas*

Dear Mr. McKoy:

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

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Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Hawkins".

Richard Hawkins  
City of Monahans  
Council Member District No. 5

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O42. City of Monahans (Hawkins, Richard)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

O43. City of Monahans (Mills, David)



DAVID MILLS  
City Manager

April 25, 2007

The word "Monahans" is written in a large, elegant, cursive script font.

112 W. Second St. - Telephone 432-943-4343  
Monahans, Texas 79756  
email: monahans@aol.com  
website: www.cityofmonahans.org

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: *FutureGen Site Proposal / Odessa, Texas*

Dear Mr. McKoy:

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,  
A handwritten signature in black ink, appearing to read "David Mills".  
David Mills  
City of Monahans  
City Manager

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O43. City of Monahans (Mills, David)**

---

**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

O44. City of Monahans (Marquez, Lorena)



*Monahans*

112 W. Second St. - Telephone 432-943-4343  
Monahans, Texas 79756

April 25, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: *FutureGen Site Proposal / Odessa, Texas*

Dear Mr. McKoy:

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

We have committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

  
Lorena Marquez  
City of Monahans  
City Secretary

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O44. City of Monahans (Marquez, Lorena)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O45. Monahans Economic Development Corporation (Haynes, Morse)**



Monahans Economic  
Development Corporation

David Cutbirth, President

Daryl Skinner, Vice President

Camilla Blum, Secretary/Treasurer

Mark Smith, Director

Arlice Wittie, Director

**City of Monahans**

David Mills, City Manager

David Cutbirth, Mayor

Mary Garcia, Council Member  
District #1

Jeppie Wilson, Council Member  
District #2

Ken Benad, Council Member  
District #3

Ted Ward, Council Member  
District #4/Mayor Pro Tem

Richard Hawkins, Council Member  
District #5

#1

May 1, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U. S. Department of Energy  
PO Box 880  
Morgantown, WV 26507-0880

Re: FutureGen Site Proposal  
Odessa, Texas

Dear Mr. McKoy:

I am writing this letter in regards to my support for the FutureGen project and West Texas. We are very confident that the Odessa site is an ideal location to host the DOE research project. I know that the Monahans area as well as the entire Permian Basin is very supportive of the FutureGen Project.

We have committed all necessary resources to make the project a success, and will continue to provide any support you need in the future.

The Permian Basin is the center of the global energy industry. We have a skilled workforce, technical expertise, great year round climate, easy access to the site, and have great support for the project. We are anxiously awaiting the opportunity to be involved with FutureGen.

Sincerely,

Morse Haynes  
Director  
Monahans Economic Development Corporation

CC: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW, 5th Floor  
Washington, DC 20006



P.O. Box 61 303 S. Allen Monahans, Texas 79756  
432.943.2062 (fax) 432.943.6868 www.monahans.org

**O45. Monahans Economic Development Corporation (Haynes, Morse)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

13 MR. MORSE HAYNES: Morse Haynes,  
14 M-O-R-S-E. Didn't really plan to talk today, but I  
15 thought any time I get an opportunity to talk about  
16 Monahans and this region, I thought I would go ahead and  
17 take advantage of that. And what I would like to stress  
18 on this is how it is a regional project and Odessa and  
19 Midland have been very strong in this. And all the  
20 communities around it are very supportive of them in  
21 this venture. And I know Monahans is and we have a  
22 great support there.

#2 23 Just today, everywhere I go, well, what do  
24 you think about FutureGen? Well, I spend 20 minutes at  
25 the post office talking about how important FutureGen is

0049  
1 and what it's going to do for this region. And anyway,  
2 not that we have -- what I would like to say is we have  
3 options. Midland-Odessa, quality of school systems,  
4 quality of communities, Monahans, Crane, Wink, Kermit,  
5 Andrews, all of them are quality. I think what the  
6 difference would be, you have communities around the  
7 other sites but here you have quality, and I think that  
8 is a very important to the project. And again, as a  
9 region, we are very supportive of FutureGen. Thank you.

**O45. Monahans Economic Development Corporation (Haynes, Morse)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**Response to Comment #2:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O46. Texas Railroad Commissioner (Williams, Michael)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

15 MR. MICHAEL WILLIAMS: Mark, thank you.  
16 Understanding the admonition to all of us elected  
17 officials to be short and recognizing the proverb that  
18 says, "Blessed is he with little to say and refrains  
19 from saying it," I will be short. I want to do a couple  
20 of things. First of all, to so I thank you, Jerry, to  
21 folks from the Alliance for the way that you worked with  
22 us and the way you have allowed us to make the best  
23 presentation that we could have.

24 And second, obviously, it's to DOE for the  
25 same and I want to do the same thing to Hoxie, to you

0030

1 and your group here locally for doing what you could on  
2 behalf of West Texas. It is a pleasure for me as a son  
3 of Midland and Odessa to have a chance to come back home  
4 and then to also welcome all of you here, from myself  
5 and from Governor Rick Perry for all the work that you  
6 have done.

7 And as it specifically relates, Mark, to  
8 the EIS, let me do this from the State of Texas. We  
9 appreciate the thoroughness, the accuracy of the work  
10 that you did, and we appreciate the fact that Gretchen,  
11 I think we left the scoping meeting and I said that I  
12 looked forward to you coming back to Texas in November,  
13 so let me leave this podium the way I left it the last  
14 time. I look forward to you coming back to Texas in  
15 November, because in Texas, in November, one of those  
16 two sites will be the site that you select. As I tell  
17 folks, right now because officially on behalf of both of  
18 them, I am a parent with two kids. I want both my kids  
19 to succeed and look forward to one of them succeeding.  
20 Thank you.

#1

**O46. Texas Railroad Commissioner (Williams, Michael)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O47. U.S. Representative Mike Conaway (Wright, Ricky)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

24 MR. RICKY WRIGHT: I think it's a little  
25 unfair to make me follow a first-class act like Michael,  
0031  
1 not much I can add to that. But on behalf of  
2 Congressman Conaway, he regrets the fact he can't be  
3 here tonight. He sent a quick statement, basically to  
4 address the good folks from the DOE and welcome you to  
5 West Texas.

6 As it begins, "Welcome to Odessa, Texas,  
7 and the Permian Basin. I am disappointed I could not be  
8 here to join you today for this very important first  
9 step in making FutureGen a reality. I appreciate the  
10 opportunity you have given me to brag on the excellent  
11 efforts of the Odessa community and the efforts they  
12 have put in bringing FutureGen to the Permian Basin.

13 "The Permian Basin has long been a leader  
14 in energy production in research, both traditional and  
15 alternatives forms of energy. Generally known for oil  
16 and gas, the community has put together a tremendous  
17 effort in looking toward the future with the efforts to  
18 bring FutureGen to West Texas. The statement of having  
19 a traditional oil and gas center push for an alternative  
20 energy source is a testament to the dedication of this  
21 community to improve our nation's energy security and  
22 lead us into an independent energy source.

23 "In regard to the environmental concerns  
24 of FutureGen, I am confident that the Penwell-Odessa  
25 site has the most positive impact on the environment.

#1 0032

1 In addition to natural advantages of the remoteness of  
2 the site, FutureGen will receive support from the area's  
3 years of expertise in handling CO2 sequestering and  
4 enhanced oil recovery. This provides the infrastructure  
5 to continue such efforts and will also help in assuring  
6 that CO2 is always handled in an  
7 environmentally-sensitive manner.

8 In addition, the FutureGen committee and  
9 the supporting communities have addressed all the issues  
10 in relation to the EIS, including concerns regarding the  
11 availability of water to the site.

12 Again, thank you for your efforts in  
13 making the FutureGen a reality. I continue to believe  
14 that the Penwell-Odessa site is far the best site for  
15 energy production." No offense there, Michael.

16 "And I hope you will enjoy some of West  
17 Texas' fine hospitality during your stay and please call  
18 on me or my office if there is anything or any  
19 assistance I can be. Sincerely, Michael Conaway, US  
20 Congressman." Thank you.

21 MR. McKOY: We have certainly been  
22 enjoying the West Texas hospitality.

23 MR. RICKY WRIGHT: We've got some more.

**O47. U.S. Representative Mike Conaway (Wright, Ricky)**

20 MR. RICKY WRIGHT: I will add a little bit  
21 there, if you don't mind. I really didn't want to do  
22 this, but Mike and I have traveled this district. And  
23 as most of you know, District 11 stretches from Loving  
24 County, which is just west of here a hundred or million  
25 miles, wherever that is, we have been there several

0042

1 times, and it runs all the way over to Comanche County,  
2 which is where I'm from.

3 And as we have traveled, we have not heard  
4 one comment from any area within our district that is  
5 not for FutureGen and the project coming to Texas. And  
6 our district in Odessa has done a great job. Folks from  
#1 7 my hometown, small communities like Goldthwaite and San  
8 Saba have even made comments, "Are you guys going to get  
9 this project? We think it's great. We'd love to see it  
10 happen. Texas needs it. We think Odessa is the place  
11 to put it." They believe in the Permian Basin and they  
12 believe in its ability to do things with energy.

13 So just as a side comment, Odessa is doing  
14 a great job. So is Midland and the Permian Basin as a  
15 whole, Monahans, Andrews, Big Lake, and so forth,  
16 they're all behind it. But there are even parts of  
17 Texas that probably won't see it unless they come out  
18 here and visit, and they're for it. So you have got a  
19 strong support in Texas. And Michael, your oldest son  
20 in Texas wants it out here.

**O47. U.S. Representative Mike Conaway (Wright, Ricky)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**O48. Texas State Senator Kel Seliger (Perkins, Denise)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

0033

1 MS. DENISE PERKINS: I'm Denise Perkins,  
2 and I'm with Senator Seliger's office and he could not  
3 be here tonight, but he sends this comment. He says,  
4 "Texas is completely committed to the FutureGen project.  
5 It has been one of my legislative priorities in the  
#1 6 Senate. I believe the Permian Basin is the best  
7 location for the project, because of its unique ability  
8 to sequester the CO2 and represent a future of  
9 environmentally sensitive projects."  
10 Thank you.

**O48. Texas State Senator Kel Seliger (Perkins, Denise)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**O49. Odessa Chamber of Commerce (George, Mike)**  
*Public Hearing Oral Comment (see full transcript in Appendix K)*

14 MR. MICHAEL GEORGE: I didn't officially  
15 sign up. I will be more than happy to speak.

16 I'm Mike George, G-E-O-R-G-E. I'm  
17 president and CEO of the Odessa Chamber of Commerce. I  
18 would just like to say that we would concur that the  
19 Odessa-Penwell site, in our opinion, is the best place  
20 for this project, because all of the components of  
21 FutureGen, including the chemistry and the gas plant  
22 construction, the handling, the CO2, all the components  
23 that make up the FutureGen project are all layered  
#1 24 together here in one place where we have been doing all  
25 of those components individually for decades. And I

0034  
1 don't think you will find that anywhere else in the  
2 country.

3 And we've welcomed FutureGen to Odessa and  
4 we think we have the work force that can handle it and  
5 the community is certainly very supportive, the entire  
6 region. So we welcome it. Thank you.

**O49. Odessa Chamber of Commerce (George, Mike)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**O50. Heard, Beatrice**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

18 MS. BEATRICE HEARD: Can someone say  
19 something from here?

20 MR. McKOY: You need to come here and  
21 speak to make sure everyone can hear you and the  
22 transcriptionist can hear you. You need to come up here  
23 and state your name.

24 MS. BEATRICE HEARD: My name is Beatrice  
25 Heard, and I am a Midlander. And when they had the last

0045  
1 meeting, I came to the meeting and I work for MISD and I  
2 work for -- work with a man, he is a retired engineer.  
3 And he retired and became certified as a teacher and I  
4 was telling him, I said you know, I'm kind of interested  
5 in finding out more about FutureGen. And so he said,  
6 well, why don't you go to the meeting? So I said, oh,  
7 okay. So he finally talked me into it and when I drove  
8 up, I sat in my car for a few minutes. I said, oh God,  
9 I say, give me the strength, I said. I'm going in here  
10 with all these sorehead men. I said there will not be  
11 women there. I said first thing they're going to know  
12 why I'm out here. So I said, okay, God, you've got to  
13 give me the strength.

14 So I walked in and this pleasant lady was  
15 standing at the door, and I run up to her and I said,  
16 "Oh, thank God you're here." And so she said, "Why?"  
17 And I said, "I just thought I was going to be the only  
18 woman here." And so she said, "Come on in, come in  
#1 19 here." So I came and she was very nice and the  
20 reception was very nice. And I picked up some  
21 information and everything and I've been keeping up with  
22 it.

23 As a matter of fact, I have every article  
24 on FutureGen I have cut out of the paper, trying to keep  
25 up with what's going on. But I just feel like the last

0046  
1 meeting I was there, it was 11 ladies. So it's about 30  
2 of us now. I don't know what you all are here for, but  
3 I have a little reason but I can't tell my little reason  
4 right now. But I am so pleased that this will come to  
5 Midland.

6 I hope -- I hope that you all will decide  
7 Midland will be -- Midland for the Permian Basin will be  
8 the site. And I don't know what you women are here for,  
9 but I know you're here for a reason, because they said  
10 behind every good man there is a woman. So there you  
11 see these women. And I just wanted to say, I appreciate  
12 you all considering Midland and I hope it comes to  
13 Midland. Thank you, very much.

**O50. Heard, Beatrice**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**O51. Mayberry, Michelle**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

23 MS. MICHELLE MAYBERRY: Hello. My name is  
24 Michelle Mayberry, and a good person just left. His  
25 name is Michael Williams. He's the Railroad  
0047  
1 Commissioner. My mother didn't tell you, he's our  
2 cousin. And so as you can see, we all have the gift for  
3 talking. But I truly love my cousin and I highly  
4 endorse what he supports. So we in Midland and Odessa  
5 and the Permian Basin area, we truly would love to see  
#1 6 you guys come to West Texas. This is a great  
7 opportunity for all of us to make West Texas more  
8 diversified and provide more opportunities,  
9 employment-wise. And just wouldn't it be great for us  
10 to be the first location in the world to have something  
11 like this?  
12 So I look forward to it. I hope and pray  
13 that you guys will decide to come to West Texas, and we  
14 look forward to seeing you. Thank you and glad everyone  
15 is here.

**O51. Mayberry, Michelle**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**O52. Sparkman, Jessica**

*Public Hearing Oral Comment (see full transcript in Appendix K)*

#1 16 MS. JESSICA SPARKMAN: I just had a really  
17 quick statement. And actually, I'm related to the  
18 environmental -- my name is Jessica Sparkman,  
19 S-P-A-R-K-M-A-N. I have seen the artistic  
20 representations of what the actual site will look like  
21 for the facility and I know that you guys went to the  
22 site yesterday and saw it. I haven't been to the other  
23 three, but I do know that I would guess that of the  
24 four, we would probably be the one that would have the  
25 best environmental impact locally. I think it would  
0048  
1 improve our beautification of the area quite a bit.  
2 So I want to make sure that you understand  
3 that that's actually, environmentally, that's a big plus  
4 here that you can actually add to the beautification of  
5 the area. So I just wanted to add that comment.

**O52. Sparkman, Jessica**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

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**O53. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

*Public Hearing Oral Comment (see full transcript in Appendix K)*

25

MR. WALDEN: Hello. I'm Steven Walden,

0040

#1

1 and I'm here to represent the FutureGen Texas team. And  
2 primarily, what I'm trying to do is let you know that a  
3 lot of work has gone into this project, and I'm here  
4 primarily to congratulate the DOE and their contractors.  
5 They have done a marvelous job, and my tasks for the  
6 FutureGen Texas team, my role has been to oversee the  
7 environmental accumulation of the information and pass  
8 it on to them.

9 We sent them a mountain. They have melted  
10 and synthesized it and done all the risk analysis and  
11 have done a spectacular job of putting it together. I  
12 commend you on this effort. It's Herculean. Good job.  
13 And unlike Jerry Oliver who was here earlier, he said he  
14 thought this time had passed fast. To me, it seems like  
15 we have been working on this since the Eisenhower  
16 administration. Good job, good job.

**O53. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

- #2** The last entry in Table S-4 on this page mentions that the proposed injection targets are a “lower interval of the Delaware Mountain Group sandstones and an upper interval of Queen formation sandstones.” This is ambiguous and could be misconstrued. Please clarify that the lower target is the Delaware Mountain Group (not a lower interval of the DMG) and the upper target is the lower part of the Queen Formation.
- #3** In Table S-4, the description incorrectly states that the proposed sequestration site for the Odessa site is “3 miles (4.8 kilometers) east of Fort Stockton.” Please revise the description to state that the outer boundary of the injection reservoir area is more than 8 miles (12.9 kilometers) east of Fort Stockton, and the actual injection sites will be farther.
- #4** In Table S-12, regarding Surface Water – The DEIS indicates that anticipated pipeline construction for the Odessa site will require approximately 3 to 6 stream crossings. No perennial streams exist within any of the proposed corridors for this site, and only a limited number of ephemeral draws could potentially be impacted by construction. There will be no CO2 pipeline crossings of perennial streams, except potentially along the ROW for the existing commercial CO2 pipeline from the plant site to the sequestration site. Please revise the description to distinguish between perennial stream crossings and intermittent or ephemeral stream crossings and if these occur within existing or new ROW.
- #5** In Table S-12 regarding Biological Resources – The DEIS incorrectly suggests that primarily row crops would be lost to any new corridor construction for the Odessa site. Please revise the description to indicate that the affected area is primarily non-arable, brush lands.
- #6** The last entry in Table 2.4 on this page mentions that the proposed injection targets are a “lower interval of the Delaware Mountain Group sandstones and an upper interval of Queen formation sandstones.” This is ambiguous and could be misconstrued. Please clarify that the lower target is the Delaware Mountain Group (not a lower interval of the DMG) and the upper target is the lower part of the Queen Formation.
- #7** In Table 2-4, regarding Odessa Site Description – Same comments as identified in SUMMARY, Table S-4.
- #8** In Figure 2.14, the number of injection wells and plumes shown (10) doesn't match any injection scenario. Please clarify the discrepancies.
- #9** On the last bulleted item on the page, the EIS mentions Lower Delaware Mountain Group and upper interval of Queen formation. Please clarify that the lower target is the Delaware Mountain Group (not a lower interval of the DMG) and the upper target is the lower part of the Queen Formation.
- #10** Surface Water – The DEIS suggests that the “...Odessa sites would include underground crossings of surface waters by CO2 pipelines. In the unlikely event of a CO2 pipeline leak near one of these crossings, surface water impacts could include a reduction in pH and localized high concentrations of CO2 and H2S.” There will be no CO2 pipeline crossings of perennial streams, except potentially along the ROW for the existing commercial CO2 pipeline from the plant site to the sequestration site. Please revise the description to distinguish between perennial stream crossings and intermittent or ephemeral stream crossings and if these occur within existing or new ROW.
- #11** The target sequestration formation shown as “Lower Delaware Mountain Group and upper interval of the Queen Formation” is incorrect. Please clarify that these should be Delaware Mountain Group (primary) and Lower Queen Formation (secondary)

**O53. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

- #12 | Table 3-13 incorrectly indicates that “Some surface water use would occur in Odessa, Jewett, and Tuscola. Impacts of water use are likely to be more important for the Odessa Site.” No surface water will be used for either the Jewett or Odessa sites. Please revise the table to remove references to Jewett and Odessa surface water use.
- #13 | **TCEQ** - In Table E-9 regarding Air Modeling Protocol – In Table E-9 for Odessa, the “annual” table lists an average Bowen Ratio value that does not seem consistent with the 12 sector average values. Please revise the table to correct the annual average Bowen Ratio value.
- #14 | **TCEQ** - Air Modeling Protocol - The DEIS lists “The nearest ambient monitors to the site and the pollutants monitored at these locations ...” and indicates that “The stations selected are in proximity to the Odessa site.” It further includes Table E-12 which “presents the representative yet conservative background for these criteria pollutants for the proposed Odessa site.” Please consider the following recommended monitoring locations as more representative alternatives for the Odessa site: Although Odessa and Hobbs NM sites are good choices, El Paso is not. Other sites that might be used are Carlsbad NM (NOx, O3 and PM2.5) -110 mi, Artesia NM (SO2 and NOx) -130 mi., Lawton OK (O3) - 300 mi, and Big Bend (O3 and PM2.5) - 200 mi.
- #15 | **TCEQ** - In Table E-12 regarding Air Modeling Protocol – The appendix lists background ambient air quality Odessa which is not consistent with the corresponding table in Volume 2, Table 7.2-2. Please revise this information to be consistent or explain the discrepancies.
- #16 | The second entry in Table 7.1-1 on this page mentions that the proposed injection targets are a “lower interval of the Delaware Mountain Group sandstones and an upper interval of Queen formation sandstones.” This is ambiguous and could be misconstrued. Please clarify that the lower target is the Delaware Mountain Group (not a lower interval of the DMG) and the upper target is the lower part of the Queen Formation.”
- #17 | In Table 7.1-1 regarding Odessa Site Features – Same comments as shown for Summary, Table S-4
- #18 | In Figure 7.1-3, the number of injection wells and plumes shown (10) doesn't match any injection scenario. Please clarify discrepancies.
- #19 | Affected Environments – The DEIS incorrectly indicates “The proposed (Odessa) injection site is located ... approximately 3 miles (4.8 kilometers) east of Fort Stockton.” Please revise the description to clarify that the outer boundary of the injection reservoir area is actually more than 8 miles from Fort Stockton, and actual injection wells will be farther.
- #20 | **TCEQ** - Operational Impacts – The DEIS notes an amount of annual mercury predicted by AERMOD to be deposited and within a certain distance from the project site. However, given the units presented, this seems to be the annual ground-level concentration predicted by AERMOD. Please revise these statements to reflect “ground-level concentrations” rather than “deposition.”
- #21 | The DEIS incorrectly indicates that the average annual precipitation at the Odessa site is “about 5 inches.” Please revise the average annual precipitation to approximately 15 inches to more accurately reflect meteorological conditions in the area.
- #22 | In Table 7.3-1 regarding Seasonal Weather Data – The weather precipitation data in the table is incorrectly labeled. Please revise the table to clarify that this reflects “Average Monthly Precipitation” rather than “Precipitation.”
- #23 | The meaning of “sandstone carbonate” in the third paragraph is unclear. Please clarify if this is referring to sandstones and carbonates (separate units) of the Trinity Group.

**O53. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

#24 | The meaning of the statement “The depth interval of the injection reservoir for the lower Queen Formation is between approx. 0.5 to 1.0 mile for the Delaware Mountain Group.” Is unclear. Please clarify statement.

#25 | This section states that 4 wells are required for lower injection rate and 10 for higher; summary document says at least 3 wells are required for lower rate and at least 8 for higher rate. Please clarify this inconsistency.

#26 | Wetlands – The DEIS states “No areas potentially subject to Section 404 jurisdiction are located within the CO2 pipeline corridor east or west of the proposed (Odessa) power plant site.” However, only one CO2 pipeline is proposed to connect to the existing pipeline located east of the plant site. This Ector County pipeline segment should not be confused with the two pipeline corridors that have been proposed coming from existing CO2 pipelines east and west of the injection reservoir in Pecos County. Please revise the text to clarify this description.

#27 | In Table 2-3 regarding Weather Information for Odessa, TX – The table incorrectly labels the weather data. Please revise the table to clarify that the values represent “Average Monthly Precipitation” rather than Precipitation; and “Average Wind Speed” rather than Wind Speed for each season.

#28 | Offsite Populations – The DEIS states that for the Odessa site “Fort Stockton is about 8 miles (13 kilometers) west of the injection site, although there may be a shorter distance between the nearest of the 10 injection wells and the town, depending on the exact location of the wells.” Please revise the description to clarify that Fort Stockton is actually more than 8 miles from the outer boundary of the estimated maximum extent of the injection reservoir and that the exact well locations will be farther, not nearer, to the town.

#29 | Key Factors Affecting Risk Assessment - The DEIS incorrectly states that populated areas are within 8 miles of the CO2 injection site for Odessa. Please revise the description to clarify that Fort Stockton is the closest populated area and is more than 8 miles from the outer boundary of the estimated maximum extent of the projected injection reservoir and that the exact well locations will be farther, not nearer to town.

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**O53. FutureGen Texas Team (Walden, Steven – Walden Consulting)**  
*(The complete comment document submitted to DOE is shown in G10.)*

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #2:** Table S-4 has been revised as follows: “Proposed injection targets for this site include a lower interval (the Delaware Mountain Group sandstones) and an upper interval (the lower part of Queen formation sandstones).”

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**Response to Comment #3:** Table S-4 has been revised as follows: “The proposed injection site would be approximately 13 miles (21 kilometers) east of Fort Stockton, Texas.”

---

**Response to Comment #4:** Table S-12 and Table 3-3 were revised to specify that the 3 to 6 crossings are ephemeral draws not perennial streams.

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**Response to Comment #5:** Table S-12 has been revised as follows: “Up to 128.5 miles (207 kilometers) total, of which 68.7 miles (111 kilometers) within new ROW, primarily non-arable brush lands would be impacted.”

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**Response to Comment #6:** Table 2-4 has been revised as follows: “Proposed injection targets for this site include a lower interval (the Delaware Mountain Group sandstones) and an upper interval (the lower part of Queen formation sandstones).”

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**Response to Comment #7:** Table 2-4 has been revised as follows: “The proposed injection site would be approximately 13 miles (21 kilometers) east of Fort Stockton, Texas.”

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**Response to Comment #8:** Figure 2-14 shows 10 wells. This is consistent with text in Table 2-4 which states that a minimum of eight wells would be needed to support a 2.8 million tons (2.5 MMT) per year injection rate. The figure illustrates a scenario using two more wells than the minimum required to support a 2.8 million tons (2.5 MMT) per year injection rate. If Odessa were selected, the final number and position of wells will reflect more detailed site characterizations. The text also points out that a lower injection rate could require only three wells. Therefore, the text will remain as presented in the EIS.

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**Response to Comment #9:** The last bulleted item in Section 3.1.4 has been revised as follows: “0.4 to 1 mile (0.6 to 1.6 kilometers) for Odessa lower target (the Delaware Mountain Group) and Odessa upper target (lower part of the Queen formation).”

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**Response to Comment #10:** Section 3.1.7 was revised to specify the Odessa crossings are ephemeral draws not perennial streams.

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**Response to Comment #11:** Table 3-3 was revised as follows: "Formation: Delaware Mountain Group (primary) and Queen Formation (secondary)." Table S-12 in the Summary was also revised.

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**O53. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

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**Response to Comment #12:** Table 3-13 has been revised as follows: “Some surface water use would occur at Tuscola.”

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**Response to Comment #13:** The annual average Bowen Ratio value in Table E-9 has been revised to “4.392708.”

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**Response to Comment #14:** The issue of representative ambient air monitoring site was discussed in detail with the Site Proponent and DOE used information from data that were available. Since there are no actual monitoring stations within the ROI of the site, it would be making more assumptions as to the representativeness of any monitoring station that would be chosen. As part of the air permitting process, it would be more appropriate to consider monitoring at the site, if it is selected. Therefore, the text will remain as presented in the EIS.

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**Response to Comment #15:** Table 7.2-2 was revised to be consistent with Table E-11.

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**Response to Comment #16:** Table 7.1-1 has been revised as follows: “Proposed injection targets for this site include a lower interval (the Delaware Mountain Group sandstones) and an upper interval (the lower part of Queen formation sandstones).”

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**Response to Comment #17:** Table 7.1-1 has been revised as follows: “The proposed injection site would be approximately 13 miles (21 kilometers) east of Fort Stockton, Texas.”

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**Response to Comment #18:** Figure 7.1-3 shows 10 wells. This is consistent with text in Table 7.1-1 which states that a minimum of eight wells would be needed to support a 2.8 million tons (2.5 MMT) per year injection rate. The figure illustrates a scenario using two more wells than the minimum required to support a 2.8 million tons (2.5 MMT) per year injection rate. If Odessa were selected, the final number and position of wells will reflect more detailed site characterizations. The text also points out that a lower injection rate could require only three wells. Therefore, the text will remain as presented in the EIS.

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**Response to Comment #19:** Text in Tables 7.1-1, 2-4, and S-4 was revised. The following sentence was added: “The proposed injection site would be approximately 13 miles (21 kilometers) east of Fort Stockton, Texas.”

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**Response to Comment #20:** DOE concurs with the comment and thus, Section 7.2.3.2 was revised to read “would result” rather than “would be deposited.”

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**Response to Comment #21:** Precipitation data from the monitoring station at Penwell was consulted. This indicated the annual average rainfall of 13.2 inches per year. Subsequently, the text in Section 7.3.2.1 was revised to: “Average annual precipitation is about 13 inches (33 centimeters) (at Penwell), and measurable precipitation occurs about 64 days per year.”

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**O53. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

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**Response to Comment #22:** Table 7.3-1 was revised as requested, changing the label from: “Average Monthly Precipitation” to “Average Precipitation” (e.g., total seasonal average). As indicated in the Response to Comment No. 21, data from the monitoring station at Penwell was used, resulting in an annual average rainfall of approximately 13 inches per year.

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**Response to Comment #23:** Section 7.4.2.1 was revised as follows: "...Cretaceous-aged carbonates and sandstone that are approximately..."

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**Response to Comment #24:** The text cited in the comment was deleted based on its being unclear and unessential.

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**Response to Comment #25:** Section 7.4.2.3 was revised as follows: "Numerical modeling results indicate that a minimum of three wells would be required to support the proposed injection rate for the lower injection rate and a minimum of eight wells for the higher rate."

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**Response to Comment #26:** Section 7.8.2.1 was revised as follows: "No areas potentially subject to Section 404 jurisdiction are located within the CO<sub>2</sub> pipeline corridor east of the proposed power plant site that would connect to the existing CO<sub>2</sub> pipeline."

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**Response to Comment #27:** Table 2-1 in the revised Risk Assessment regarding Summary of Surface and Subsurface Features of Four Candidate Sites was revised under: “climate” to show the headings “Average Seasonal Daily Temperatures”, “Average Seasonal Precipitation” and “Annual Precipitation” and values were updated accordingly. Specifically, annual precipitation was revised to 42.6 inches for Jewett and 14.9 inches for Odessa.

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**Response to Comment #28:** The Response and the text has been revised in Section S-4, Table S-4; Section 2.4.4, Table 2-4; Section 7.1.3, Table 7.1-1 of the EIS; and Section 4.3.1.2 in the Risk Assessment as follows: “The proposed Odessa Sequestration Site area is located in a semi-arid, sparsely populated area adjacent to (i.e., north and south of) I-10 in Pecos County, Texas. The proposed injection site is located on an approximately 42,320-acre (17,126-hectare) property approximately 58 miles (93.3 kilometers) south of the proposed Odessa Power Plant Site, and approximately 13 miles (21 kilometers) east of Fort Stockton, Texas.”

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**Response to Comment #29:** The specific locations for the injection wells have not been selected. However, the potential location of the closest well is 13 miles from Fort Stockton.

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**O54. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

Tornado frequency

#1

“The Odessa region has the lowest historical tornado activity, with one tornado greater than F1 intensity occurring every 200 years.”

Section 7.3.2.2 of the EIS reports 7 tornadoes of intensity F1 or greater in Ector county in the last 56 years. That is certainly a higher rate than one every 200 years. Was the same methodology used for all four sites to obtain a predicted tornado frequency?

**O54. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**  
*(The complete comment document submitted to DOE is shown in G8.)*

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**Response to Comment #1:**

The DEIS included tornado information from both the EIVs and from NOAA. However, to ensure consistency, the EIS has been revised so that tornado data is based solely on NOAA sources and not information in the EIVs. The same methodology was applied to each site: 1) a query of the NOAA database was performed on a county basis (e.g., Ector County) for the 57.3 year time interval between January 1950 and March 2007; 2) the land area of the county was determined from a web search; 3) the number of F1 or higher tornadoes per 50 years (possible operating timeframe of the power plant) was calculated for each county (total multiplied by (50/57)); 4) to be able to compare the normalized tornado frequency for each candidate site across the same amount of land area (to account for differences of the sizes of the counties), the average area of the counties was calculated (850 square miles); and 5) the normalized tornado frequency over 50 years was estimated for a standardized 850 square mile area by multiplying the number in step 3 by 850 sq. mi divide by the/county area in sq.mi.).

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**O55. City of Coahoma (Read, Bill)**  
**CITY OF COAHOMA**  
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May 17, 2007

Mark L. McCoy  
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National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

RE: FutureGen site proposal - Odessa, Texas

Dear Mr. McCoy:

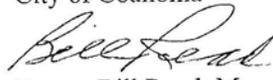
I wrote to you by letter dated April 24, 2006, on behalf of the City of Coahoma, Texas, concerning our support of Odessa, Texas, as the site for the FutureGen Project. The purpose of this letter is to renew our support of Odessa as the site for this project. The citizens of Coahoma believe that Odessa would be the ideal community for this vital research project and in fact all of the 250,000 residents of the Permian Basin region of Texas look forward to hosting this project.

We understand that Odessa has committed all necessary resources to insure the success of this project and that Odessa will continue to provide all necessary support in the future.

West Texas in general, and Odessa in particular, has all the technical expertise and skilled personnel necessary to support this project, and the citizens of Coahoma are confident that the entire country will benefit from the location of this important project in Odessa, Texas.

Yours very truly,

City of Coahoma

  
By: Bill Read, Mayor

cc: Michael J. Mudd  
CEO, FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

**O55. City of Coahoma (Read, Bill)**

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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

O56. Sivalls, Inc. (Sivalls, C. Richard)



May 22, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the Futuregen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Dear Mr. McKoy:

We in Odessa, TX are excited and ready to insure the success of the Futuregen Project if and when Odessa is selected as the site for the project. With a long history of oil and gas development in the Permian Basin area we have the expertise to aid in the research, construction, and support for the Futuregen Project.

A skilled workforce is here and the infrastructure of manufacturing, supply, and support services are readily available. A long oil patch history of handling and using CO2 is also within our area of expertise. The community wholeheartedly supports the prospect of the Futuregen Project and welcomes the opportunity to show the country and the world of our knowledge and capabilities.

We are proud to be a finalist in the site selection process and are eager to show you what we can do.

Very truly yours,

Sivalls, Inc.

C. Richard Sivalls, P.E.  
President

cc: Michael J. Mudd  
Chief Executive Officer  
Futuregen Alliance  
International Square  
1875 I Street, NW, 5<sup>th</sup> Floor  
Washington, DC 20006

Sivalls, Inc. • Box 2792 • Odessa, Texas 79760 • 432/337-3571

#1

**O56. Sivalls, Inc. (Sivalls, C. Richard)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O57. Raymond James Financial Services, Inc. (McCall, Peggy)**



May 24, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the Futuregen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WM 26507-0880

RE: Futuregen Site Proposal

Dear Mr. McKoy:

I would like to emphasize the comments sent to you by Mr. Tom McMinn, a friend who has urged me to write to you;

"You will not find a community more squarely behind the Futuregen project than Odessa, Texas". Not only does this community offer the support for this project in terms of community cooperation, but in also in the areas of skilled labor and technical expertise.

Our local Optimist Club had the honor of listening to a presentation by Jill Sparkman, representative for the committee to bring Futuregen to our area. She and her group have tirelessly coordinated efforts both on a State and National Level. Her presentation drove home the advantages our area has in making this project a success and demonstrated the capacity for mutual growth. West Texas remains committed to the growth and diversification of the energy industry.

I add my name to the many in the West Texas area who ask that you consider the Penwell, Texas site as a finalist in the location of the Futuregen project.

Sincerely,

A handwritten signature in cursive script that reads "Peggy McCall".

Peggy McCall  
Financial Advisor

Cc: Michael J. Mudd

BANK ONE BUILDING  
3800 E. 42ND ST., SUITE 330 ODESSA, TEXAS 79762  
432.367.5500 FAX 432.368.4145 TOLL FREE 888.797.4141

**O57. Raymond James Financial Services, Inc. (McCall, Peggy)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O58. San Angelo Chamber of Commerce (Neighbors, Phil)**



May 24, 2007

Mr. Mark L. McKoy  
NEPA Document Manager  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Dear Mr. McKoy:

Having followed the process for establishing the FutureGen Project, I am pleased to support the bid of Odessa, Texas, to become the final site.

Although San Angelo is approximately 120 miles from Odessa, our sparsely populated region of West Texas is closely interconnected economically, and the FutureGen Project would undoubtedly benefit San Angelo and all of the other communities in West Texas. More germane to your needs, everything that I have read and heard indicates that Odessa is strongly committed to the project, willing to provide the community resources to help make the project succeed, and rich in the technical and workforce skills required for an undertaking of this magnitude.

While San Angelo is working to establish itself in the wind-power energy sector, we are equally excited about the prospects of Odessa, the center of the Permian Basin oil industry, hosting the nation's and the world's first zero-emissions fossil fuel plant.

Please include our support for Odessa as you give every possible consideration to Odessa for the location of the FutureGen Project.

Sincerely,

Phil Neighbors, CCE  
President

cc: Michael J. Mudd

#1

*San Angelo Chamber of Commerce*  
418 West Ave. B San Angelo, TX 76903  
[www.sanangelo.org](http://www.sanangelo.org)  
Bus: 325.655.4136  
Fax: 325.658.1110

**O58. San Angelo Chamber of Commerce (Neighbors, Phil)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O59. Odessa College (Williams, Gregory D.)**



www.odessa.edu

201 W. University • Odessa, Texas 79764  
(432) 335-6400

May 22, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for FutureGen Project  
National Energy Technology Laboratory  
U. S. Department of Energy  
P. O. Box 880  
Morgantown, WV 26507-0880

*Re: FutureGen Site Proposal / Odessa, Texas*

Dear Mr. McKoy:

I am writing today to once again express the support of Odessa College for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to and are excited by the possibility of hosting FutureGen.

#1

Our community has committed all necessary resources to make the project a success, and we will continue to provide anything you need in the future. Additionally, Odessa College and its Board of Trustees stand strongly behind the project and will offer any and all appropriate services to the FutureGen team.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce, and community support we offer are unparalleled. We are eager to collaborate with all those involved in this history making project.

Sincerely,

A handwritten signature in cursive script that reads "Gregory D. Williams".

Gregory D. Williams, Ed.D.  
President

c: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

**O59. Odessa College (Williams, Gregory D.)**

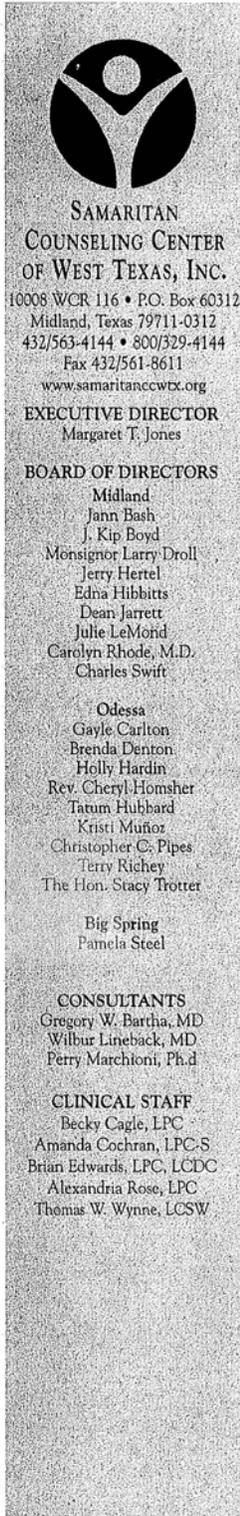
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**Response to Comment #1:**

Comment noted and will be included in the Administrative Record of the EIS.

---

**O60. Samaritan Counseling Center of West Texas, Inc. (Jones, Margaret T.)**



#1

#2

#1

April 26, 2007

**RE: FutureGen Site Proposal –Odessa, Texas**

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P. O. Box 880  
Morgantown, WV 26507-0880

Dear Mr. McKoy,

As the leading outpatient, faith-based counseling center in the Permian Basin, the Samaritan Counseling Center of West Texas, Inc., strongly supports the location of the U.S. Department of Energy FutureGen Project in Odessa, Texas.

Serving the Permian Basin for over 34 years, Samaritan will play a role in providing quality counseling services by a team of master's level, state licensed therapists to complement the lives of the FutureGen employees and families that will find a new home in the Permian Basin. The Center is just one of many quality of life components that will make Odessa THE location of choice for The Project. Our workforce, climate, economy, educational opportunities with the University of Texas at the Permian Basin and "can do" attitude of the Odessa Chamber of Commerce and the FutureGen Task Force of West Texas are additional enhancements.

The citizens of the Permian Basin stand united in their support of the FutureGen Project and will offer our endorsement and support in any way we can. The resources have been committed to ensure that FutureGen will be a very successful endeavor if Odessa is the selected site.

This community stands ready to assist the DOE and the Alliance in whatever way is needed. Look forward to working with you.

Sincerely yours,

Margaret T. Jones  
Executive Director

CC Michael J. Mudd, CEO of FutureGen Alliance

**O60. Samaritan Counseling Center of West Texas, Inc. (Jones, Margaret T.)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #2:** Comment noted and will be included in the Administrative Record of the EIS.

---

**061. Pecos Economic Development Corp. (Burkholder, Mike A.)**



**PECOS  
ECONOMIC  
DEVELOPMENT CORP.**

MIKE A. BURKHOLDER, PRESIDENT

P.O. BOX 1493 ♦ PECOS, TX 79772 ♦ Ph. (432) 445-9960, (432) 445-4929, Fax (432) 445-9945 ♦ E-mail: pecosedcorp@cebridge.net

April 19, 2007

Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

*Re: FutureGen Site Proposal/ Odessa, Texas*

Dear Mr. McKoy,

Pecos, Texas is located 70 miles west of Odessa but we share a great number of mutual interests. People from here do a lot of their shopping, health care, and work in Odessa so what is good for them is good for us. We are experiencing a huge surge in fossil based energy exploration in our area at this time and it is facilitated by the vast technological, intellectual, and financial resources of that community. In a lifetime of observing the pioneering spirit of the Permian Basin Community and the Get The Job Done attitude of our people, FutureGen is a no-brainer when selecting Odessa as the site for this monumental project.

Pecos, and every one of the communities within major portion of West Texas with whom I have talked, supports this initiative. The expertise, resources, and energy required for making FutureGen a success have been pledged by our citizens.

**BRING ON THE JOB!**

Cordially

  
Mike A. Burkholder

Cc: Michael J. Mudd  
Chief Executive officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O61. Pecos Economic Development Corp. (Burkholder, Mike A.)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**062. Ector County Independent School District (Sollis, Wendell)**



---

ECTOR COUNTY INDEPENDENT SCHOOL DISTRICT  
Phone: (432) 332-9151 • Fax: (432) 335-8984  
P.O. Box 3912 • 802 N. Sam Houston Ave • Odessa, Texas 79760  
[www.ector-county.k12.tx.us](http://www.ector-county.k12.tx.us)

April 23, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
PO Box 880  
Morgantown, W. VA. 26507-0880

RE: FutureGen Site Proposal/Odessa, Texas

Dear Mr. McKoy:

I am writing today to express again our support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

We have committed all necessary resources to make this project a success, and we will continue to provide anything you need in the future.

Texas is the epicenter of the global energy industry, and the technical expertise, skilled workforce, and community support we offer are unparalleled. We are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

A handwritten signature in cursive script that reads 'Wendell Sollis'.

Wendell Sollis  
*Superintendent of Schools*

C: Michael J. Mudd, Chief Executive Officer  
FutureGene Alliance - International Square  
1875 I Street, NW - 5<sup>th</sup> Floor  
Washington, DC 20006

#1

**O62. Ector County Independent School District (Sollis, Wendell)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

O63. City of Levelland (Bradley, Hugh)



April 23, 2007

Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
PO Box 880  
Morgantown, WV 26507-0880

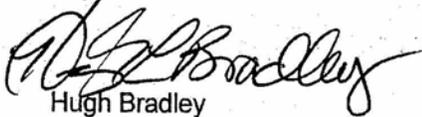
Dear Mr. McKoy:

I am once again writing to express my support for the FutureGen project to be located in Odessa, TX. Odessa is the perfect location for this important DOE research project. I can assure that the entire Texas High Ground region supports and looks forward to having the FutureGen in Odessa. Odessa and the region have committed the necessary resources to make the project successful, and will continue to do so in the future.

Odessa Texas is a key component in the global energy industry, with technical expertise, skilled workforce and community support. They are eager to collaborate with all those involved in the FutureGen Initiative.

Sincerely,

City of Levelland



Hugh Bradley

Mayor

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

*Discover a Texas Treasure*

1709 Avenue H • P.O. Box 1010 • Levelland, TX 79336 • (806) 894-0113 • Fax (806) 894-0119

#1

**O63. City of Levelland (Bradley, Hugh)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O64. Meteor Crater Friends, Inc. (Rodman, Thomas E.)**

Meteor Crater Friends, Inc.  
620 North Grant Avenue Suite 1204  
Odessa, Texas 79761  
(432) 332-1666 FAX (432) 332-1667

May 3, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

RE: FutureGen Site Proposal / Odessa, Texas

Dear Mr. McKoy:

Meteor Crater Friends, Inc. a support group for the Odessa Meteor Crater and Museum, enthusiastically support FutureGen coming to the Odessa area.

The Odessa Meteor Crater, a meteorite impact site, is within a few miles of the proposed FutureGen location. It was formed some 63,000 years ago by impact of an iron meteorite estimated to weigh some 250 tons.

Like FutureGen, the Odessa Meteor Crater is on the cutting edge of scientific research. Personnel from Texas A&M, Texas University and Alabama University are currently considering the possibility of the Odessa Crater being formed by a low angle impact resulting in a glancing blow with some material rebounding back into outer space. This is the first crater to be so considered.

We know FutureGen personnel will find the Crater of great scientific interest, and we look forward to welcoming them into our community of the Permian Basin.

Respectfully submitted,

*Thomas E. Rodman*

Thomas E. Rodman, Fellow  
The Meteoritical Society

cc: Michael J. Mudd  
Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW  
5<sup>th</sup> Floor  
Washington, DC 20006

TER/hh

**O64. Meteor Crater Friends, Inc. (Rodman, Thomas E.)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O65. City of Odessa Housing Authority (Spears, Bernadine H.)**

May 4, 2007

Mark L. McKoy  
NEPA Document Management for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

**Reference: FutureGen Site Proposal - Odessa Texas**

Dear Mr. McKoy:

In regards to the referenced caption above, the following comments are offered.

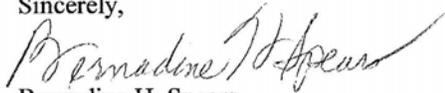
As one of the Affordable Housing Providers of the City of Odessa Texas, this letter is written to offer our support of the FutureGen Project for this community.

Our community has committed the necessary resources to ensure the success of FutureGen and we are prepared to commit even more if the award is granted to us. We have the support of the entire Permian Basin; we are ready, willing and able to assist the DOE and Alliance in whatever way that is deemed appropriate. Also, because of the groundwork that has already been laid since the shortlist announcement, we will make it a priority to see that your arrival this fall will be as seamless as possible.

Thank you in advance for your assistance and if further information is needed or required, please so advise.

As always, I remain.

Sincerely,



Bernadine H. Spears  
Executive Director  
Odessa Housing Authority

xc:  
Michael J. Mudd, CEO of the Alliance  
Chuck McDonald, McDonald Public Relation, Inc.  
OHA Board of Commissioners



**Housing  
Authority**  
City of Odessa

P. O. DRAWER 154 / ODESSA, TX. 79760 / OFF. (432) 333-1088 / FAX (432) 337-8712

#1

**O65. City of Odessa Housing Authority (Spears, Bernadine H.)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

O66. McMinn's Furniture (McMinn, Tom)

# McMINN'S *Furniture*

May 17, 2007

RE: Futuregen Site Proposal – Odessa, Texas

Mr. Mark L. McKoy  
NEPA Document Manager for the Futuregen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Dear Mr. McKoy:

You will not find a community more squarely behind the Futuregen project than Odessa, Texas. In my business, and also in my capacity as President of the Odessa Development Corporation, I come in contact with large and diverse groups of citizens on a daily basis. I can truly say I have yet to find a resident from this area that has anything but glowing praise for the Futuregen project.

#1

Mr. McKoy, all the pieces are in place in Odessa to make the Futuregen project not only a reality, but a tremendous success. We have the skilled workforce, the technical expertise, and most importantly an unprecedented level of community cooperation. We are committed to provide all the support the Alliance requires to locate here.

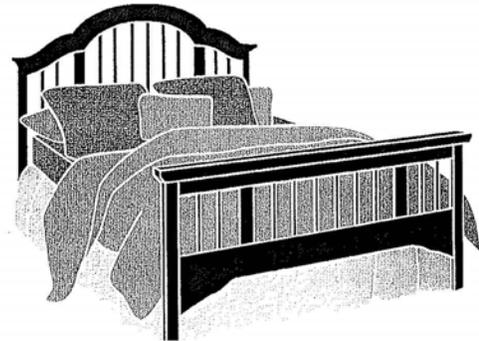
We are proud to have been chosen as a finalist, and are eager to prove that we represent your best choice for the final site for this crucial project.

Sincerely,



Tom McMinn  
President

cc: Michael J. Mudd  
Chief Executive Officer  
Futuregen Alliance  
International Square  
1875 I Street, NW 5<sup>th</sup> Floor  
Washington, DC 20006



3323 Andrews Hwy. • Odessa, Texas 79762  
432-550-2338 • 1-800-223-6852  
Email: askus@mcminns.com

**O66. McMinn's Furniture (McMinn, Tom)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O67. Office of the County Judge (Leck, Bonnie)**

**OFFICE of the COUNTY JUDGE  
BONNIE LECK ~ WINKLER COUNTY**



*P.O. Drawer Y  
Kermit, TX 79745  
(432) 586-6658  
Fax (432) 586-3223*

*Vida Simpson  
Administrative Assistant*

May 14, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

**RE: Odessa FutureGen Project**

Dear Mr. McKoy:

Please accept this letter as my hope that you will favorably consider the selection of the City of Odessa, County of Ector, Texas as the site for the FutureGen Project. Placing this Project in the Permian Basin of Texas will prove to be of benefit to FutureGen and this area. Winkler County borders Ector County and has joined with them in encouraging your support for this proposal.

There is an extremely diversified workforce in this area that has risen to the challenges of the oil and gas industries for many years. The citizens of this area desire new industries that offer stability and will utilize the talents developed by the West Texas economy. Our young people are choosing the field of energy as their field of study and employment, and we foresee a workforce that will be available now and in the future.

We believe that this area of West Texas offers the benefits that this project requires and the community support that is evident from all areas of the Permian Basin.

Very truly yours,

A handwritten signature in cursive script that reads "Bonnie Leck".

Bonnie Leck  
County Judge  
Winkler County, Texas

BL/vs

CC: Mr. Hoxie Smith, Midland College PPDC

#1

**O67. Office of the County Judge (Leck, Bonnie)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O68. Ector County Health Department (Solla, Gino)**

ECTOR COUNTY HEALTH DEPARTMENT  
221 N. TEXAS  
ODESSA, TEXAS 79761



TELEPHONE  
AREA CODE (432)  
498-4141  
FAX  
498-4143

**ECTOR COUNTY, TEXAS**

May 7, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Dear Mr. McKoy,

The City of Odessa/Ector County along with the Permian Basin and even southwest New Mexico are very excited at prospect of hosting this most important energy project. The entire Permian Basin is committed to working together to bring this project to our area.

The Permian Basin is a leader of CO2 technology use for the purpose of enhanced oil recovery. This project will allow us to show that we have the expertise in carbon dioxide to utilize our oil and coal resources in a more responsible way.

We feel that our site near Penwell offers the best value for the federal-private initiative due to the fact that we have safely used carbon dioxide for 30 years. We also have the infrastructure in place for its use and experienced people to do the work.

The State of Texas as well as the City of Odessa/Ector County have taken measures to ensure that FutureGen is a success and are committed to making the Permian Basin the perfect site for the project.

Our community welcomes the opportunity to be a part of this selection process. If I can be of any assistance to you please do not hesitate to contact me.

Sincerely,

Gino Solla, Director  
Ector County Health Department

ECTOR COUNTY IS AN EEO / AA EMPLOYER

#1

**O68. Ector County Health Department (Solla, Gino)**

---

**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**O69. Medical Center Hospital (Webster, William)**



P.O. Box 7239  
Odessa, Texas 79760-7239  
(432) 640-4000  
www.mchodessa.com

**ADMINISTRATION**

William Webster, FACHE  
Chief Executive Officer  
(432) 640-2404  
(432) 640-2494 (fax)  
bwebster@echd.org

April 30, 2007

Mr. Mark L. McKoy  
NEPA Document Manager for the FutureGen Project  
National Energy Technology Laboratory  
U.S. Department of Energy  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: FutureGen Site Proposal/Odessa, TX

Dear Mr. McKoy:

#1

I am writing to express once again, Medical Center Hospital's (MCH) support for the FutureGen project. We are confident that Odessa is the perfect host community for this vital DOE research project. I can assure you that the 250,000 residents of the Permian Basin region look forward to hosting FutureGen.

#2

Medical Center Hospital of Odessa, Texas, is a Lead Level III Trauma Facility and a full-service, general, acute-care hospital, which serves as the primary referral center for the seventeen county Permian Basin region of West Texas. Our CareStar emergency flight service which began in June 2003, provides emergency helicopter service within a 150 mile radius. MCH is in close proximity to the proposed FutureGen site and would be available to provide emergency services to the employees and contractors at the site.

#1

We have committed all necessary resources to make this project a success and will continue to provide support in the future. The groundwork we have laid since the shortlist announcement will make your arrival this fall as seamless as possible.

Texas is the epicenter of the global energy industry. The technical expertise, skilled workforce and community support we offer are unparalleled. Our community is eager to collaborate with all those involved in the FutureGen initiative.

Sincerely,

William Webster, FACHE  
Chief Executive Officer

Cc: Michael J. Mudd, Chief Executive Officer  
FutureGen Alliance  
International Square  
1875 I Street, NW, 5<sup>th</sup> Floor  
Washington, DC 20006

**O69. Medical Center Hospital (Webster, William)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #2:** Comment noted and will be included in the Administrative Record of the EIS.

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### Texas – Both Sites Table of Comments

TX1.	Trainor, Eileen.....	13-519
TX2.	Calhoun County Resource Watch (Wilson, Diane) .....	13-521
TX3.	Sembritzky, David.....	13-523
TX4.	Texas Department of Transportation (Barta Jr., James P.) .....	13-525
TX5.	FutureGen Texas Team (Walden, Steven – Walden Consulting) ( <i>The complete comment document submitted to DOE is shown in G10.</i> ).....	13-527
TX6.	Illinois State Federation of Labor and Congress of Industrial Organizations (Carrigan, Michael T.).....	13-531
TX7.	FutureGen Illinois Team (Swager, Ronald – Patrick Engineering) ( <i>The complete comment document submitted to DOE is shown in G8.</i> ).....	13-533
TX8.	Texas Commision on Environmental Quality (Weber, Thomas W.).....	13-535

Commentor (Alphabetical)	Commentor #
Calhoun County Resource Watch (Wilson, Diane)	TX2
FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)	TX7
FutureGen Texas Team (Walden, Steven – Walden Consulting)	TX5
Illinois State Federation of Labor and Congress of Industrial Organizations (Carrigan, Michael T.)	TX6
Sembritzky, David	TX3
Texas Commision on Environmental Quality (Weber, Thomas W.)	TX8
Texas Department of Transportation (Barta Jr., James P.)	TX4
Trainor, Eileen	TX1

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**TX1. Trainor, Eileen**

From: Eileen Trainor [et02@rocketmail.com]  
Sent: Saturday, June 23, 2007 2:08 AM  
To: FutureGen.EIS@netl.doe.gov  
Subject: No More Coal in Texas

#1 | The Associated Press analyzed state-by-state emissions of carbon dioxide from 2003, the latest U.S. Energy Department numbers available.  
#1 | The review shows startling differences in states' contribution to climate change. The biggest reason? The burning of high-carbon coal to produce cheap electricity.

#2 | Texas, the leader in emitting this greenhouse gas, cranks out more than the next two biggest producers combined, California and Pennsylvania, which together have twice Texas' population.

#3 | No more coal. We have natural resources that we are not using: solar energy, wind energy, geothermal power, power from biomass, power from methane.

You have children or nieces, nephews, God children, children of family friends. Would you burn coal in your fireplace with these people present?

If we start now, we MAY make a difference to the future health of our children in Texas.

Thank you.

Eileen Trainor  
503 Picasso Drive  
San Marcos, TX 78666  
512 353 4870

**TX1. Trainor, Eileen**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

---

**Response to Comment #2:** Comment noted and will be included in the Administrative Record of the EIS.

---

**Response to Comment #3:** DOE oversees numerous projects that are investigating and supporting a wide variety of renewable energy generation technologies, including wind, solar and hydro. However, the particular goal of the FutureGen Project is to demonstrate an advanced power generation facility based on fossil fuels, specifically coal. Hence, technologies that would not be based on coal use are not within the scope of the FutureGen Project.

---

**TX2. Calhoun County Resource Watch (Wilson, Diane)**

**From:** WilsonAlamobay@aol.com  
**Sent:** Thursday, June 21, 2007 2:56 PM  
**To:** FutureGen.EIS@netl.doe.gov  
**Subject:** Comments on the proposed Future Gen Project, DEIS

#1

I am a citizen and President of an environmental group. We are concerned about clean air in Texas. Due to our extremely low air quality, we are not interested in the addition of ANY coal related plants in Texas no matter what form they may take. In light of the recent approval of the Oak Grove plant, one of the dirtiest plants in the country that will significantly deteriorate further our currently unacceptable air quality, action must escalate if there is to be any hope of protecting the air and water of Texas. We oppose any and all additions of coal technology as it has become abundantly clear that the powers designed to protect us have failed. As citizens we want clean alternative energy development such as wind and solar power generation. Just the mining of coal destroys and pollutes our land.

Thank you very much  
Diane Wilson  
Calhoun County Resource Watch  
Box 1001  
Seadrift, Texas 77983t

**TX2. Calhoun County Resource Watch (Wilson, Diane)**

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**Response to Comment #1:**

Oak Grove is addressed in Section 3.3.3.2 and Section 3.3.4.2 of the EIS.

Additionally, DOE oversees numerous programs that are investigating and supporting a wide variety of renewable energy generation technologies, including winds, solar and hydro. However, the particular goal of the FutureGen Program is to demonstrate an advanced power generation facility based on fossil fuels, specifically coal, and will use state-of-the-art technologies to minimize air emissions. Technologies that would not be based on coal use are not within the scope of this EIS. Therefore, the text will remain as presented in the EIS.

---

**TX3. Sembritzky, David**

**From:** David Sembritzky [sembritzky@iname.com]  
**Sent:** Thursday, June 21, 2007 2:05 PM  
**To:** FutureGen.EIS@netl.doe.gov  
**Subject:** Solar power  
To Whom it May Concern,

#1 | Solar power is the only way to go!

Sincerely,  
David

David Sembritzky  
3349 Wilshire Ave  
Grapevine, Texas 76051-8727  
sembritzky@iname.com

(817) 416-4234 (H)  
(817) 280-3786 (W)  
(817) 278-3786 (FAX)

**TX3. Sembritzky, David**

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**Response to Comment #1:**

DOE oversees numerous projects that are investigating and supporting a wide variety of renewable energy generation technologies, including wind, solar and hydro. However, the particular goal of the FutureGen Project is to demonstrate an advanced power generation facility based on fossil fuels, specifically coal. Hence, technologies that would not be based on coal use are not within the scope of the FutureGen Project.

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**TX4. Texas Department of Transportation (Barta Jr., James P.)**



June 13, 2007

Draft Environmental Impact Statement  
U.S. Department of Energy

FutureGen Project (DOE/EIS-0394D)

Mr. Mark McKoy  
NEPA Document Manager  
National Energy Technology Laboratory  
3610 Collins Ferry Road  
P.O. Box 880  
Morgantown, WV 26507

Dear Mr. McKoy:

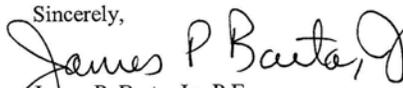
Thank you for the opportunity to review the Draft Environmental Impact Statement (DEIS) for the Department of Energy's FutureGen project. There are no identified concerns for planned highway improvements within the State of Texas regions indicated within the DEIS. However, proposed transmission and utility lines which cross state roadways will require permits from the Texas Department of Transportation (TxDOT). Permits are obtained from the TxDOT District office in which the crossing will occur. For more information about permitting in the site specific locations, contact:

Odessa, Texas Site  
TxDOT Odessa District  
3901 East US Highway 80  
Odessa, Texas 79761  
(432) 332-0501

Jewett, Texas Site  
TxDOT Bryan District  
1306 N. Texas Avenue  
Bryan, Texas 77803  
(979) 778-9600

If you have questions or require additional information, please contact Bryan Phillips at (512) 416-2534.

Sincerely,

  
James P. Barta, Jr., P.E.  
Project Management Section Director  
Environmental Affairs Division

THE TEXAS PLAN  
REDUCE CONGESTION • ENHANCE SAFETY • EXPAND ECONOMIC OPPORTUNITY • IMPROVE AIR QUALITY  
INCREASE THE VALUE OF OUR TRANSPORTATION ASSETS

*An Equal Opportunity Employer*

#1

**TX4. Texas Department of Transportation (Barta Jr., James P.)**

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**Response to Comment #1:**

The EIS addresses transportation and traffic impacts and anticipated required road improvements; for example, see Summary Table S-12. Although not specifically called out in Table C.1-3 (Permit or Approval Requirements), DOE agrees that utility road crossing permits from cognizant TxDOT District Offices may be required and, if so, would be obtained. The text will remain as presented in the EIS.

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**TX5. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

- #1** In Figure S-14, the number of injection wells and plumes shown (10) doesn't match injection scenario mentioned in summary (at least 3 or 8 wells, depending on injection rate). Please clarify the discrepancies.
- #2** **TCEQ** - In Table S-12, regarding Air Quality – Modeling results suggest a relatively higher probability of exceedances of the SO<sub>2</sub> PSD increments and Annual PM<sub>2.5</sub> levels that approach the NAAQS at the Jewett site. These are higher than would be expected for the rural East Texas area. The ambient air quality data used for this analysis, described in Appendix E, indicates that all monitors are located in highly urbanized areas not representative of the Jewett area. Please consider the following recommended monitoring locations as more representative alternatives for the Jewett site: Kaufman (SO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) - 80 mi.- would probably be the most representative and could replace Dallas North; Fayette County (SO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) - 100 mi - would be good second choice and probably should be used instead of Aldine; Tyler Airport (NO<sub>x</sub> and O<sub>3</sub>) would also be acceptable; Alabama Coushatta (O<sub>3</sub>) - 90 mi. - but it has limited use do to the limited number of parameters measured.
- #3** **TCEQ** - In Table S-12 regarding Air Quality – The Table lists predicted concentrations from each of the four sites, and Tables E-17 and E-18 of Appendix E list the same information for Jewett and Odessa, respectively, with additional information included as footnotes to the tables. For Jewett, the 3-hr concentration is noted to be the 618<sup>th</sup> maximum concentration, and the 24-hr concentration is noted to be the 88<sup>th</sup> maximum concentration. Probabilities of exceeding the short-term SO<sub>2</sub> increment (both 3-hr and 24-hr) are also presented with the listed concentrations. The same approach with different ranked concentrations is also presented for Odessa (33<sup>rd</sup> maximum concentration for the 3-hr concentration). Please clarify the rationale for selecting the predicted concentrations listed for the SO<sub>2</sub> plant upset scenarios.
- #4** Incomplete and Unavailable Information – The DEIS incorrectly suggests that the disposition of the wastewater from the on-site sanitary wastewater treatment plants for the Jewett and Odessa sites is undetermined. Please revise the information to clarify that the on-site wastewater systems will be designed according to standard industry practice to ensure that no discharge occurs.
- #5** **TCEQ** - Under the heading, “Annual Monitoring Methods section,” the DEIS incorrectly describes the LiDAR technology. Please correct sentence to read “LiDAR is an aerial technique that uses laser pulse travel times from aircraft to land surface....”
- #6** In Table 3-3, regarding Summary Comparison of Impacts – Same comments as Table S-12 in SUMMARY
- #7** **TCEQ** - Air Quality – The DEIS indicates that “Air modeling was conducted to assess the potential for impacts to ambient air quality conditions at each site from operating the proposed power plant. Because local air quality monitoring data were not available for any of the alternative sites, monitoring data from the closest attainment area to each site were used as a surrogate data for the local background ambient air quality.” Information regarding the ambient air data provided in Appendix E indicates that all of the monitoring stations are located in urban areas which are not representative of the rural plant sites in Texas. The Draft EIS then misuses the “high ambient concentrations” taken from the urban background monitors and states that the PM<sub>2.5</sub> NAAQS would be approached at the proposed FutureGen sites. Please revise the Draft EIS to clarify how unlikely this scenario would be considering the very conservative estimates of ambient background concentrations. Please consider the following recommended monitoring locations as more representative alternatives for the Jewett site: Kaufman (SO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) - 80 mi.- would probably be the most representative and could replace Dallas North; Fayette County (SO<sub>2</sub>, NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) - 100 mi - would be good second choice and probably should be used instead of Aldine; Tyler Airport (NO<sub>x</sub> and O<sub>3</sub>) would also be acceptable; Alabama Coushatta (O<sub>3</sub>) - 90 mi. - but it has limited use do

**TX5. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

- #7 to the limited number of parameters measured. Also, please consider the following recommended monitoring locations as more representative alternatives for the Odessa site: Although Odessa and Hobbs NM sites are good choices, El Paso is not. Other sites that might be used are Carlsbad NM (NO<sub>x</sub>, O<sub>3</sub> and PM<sub>2.5</sub>) -110 mi, Artesia NM (SO<sub>2</sub> and NO<sub>x</sub>) -130 mi., Lawton OK (O<sub>3</sub>) - 300 mi, and Big Bend (O<sub>3</sub> and PM<sub>2.5</sub>) - 200 mi.
- #8 In Table C.1-3 regarding State and Federal Regulatory and Permitting Requirements – Table C.1-3 incorrectly indicates that 30 TAC 122 would require a state Air Operating Permit to be issued to a minor source if it is determined that a Title V operating permit under the federal CAA would not be required. Please revise the table to clarify that while 30 TAC 122 codifies the Texas rules necessary to implement the delegated federal Title V program, Texas has not established any additional state operating permit requirements not mandated by federal statute.
- #9 In Table C.1-3 regarding State and Federal Regulatory and Permitting Requirements – Table C 1-3 cites requirements for a Hydrostatic Test Discharge Permit for Texas but does not include any similar requirement for Illinois. Please revise the table to show comparable regulatory information for both states, as applicable.
- #10 In Table C.1-3 regarding State and Federal Regulatory and Permitting Requirements – Upon delegation of the NPDES program, Texas adopted the Texas Pollution Discharge Elimination System (TPDES) program. Please revise the table to reference TPDES, rather than NPDES, requirements.
- #11 In Table C.1-3 regarding State and Federal Regulatory and Permitting Requirements – Table C 1-3, in reference to Solid Waste Management, On-Site Disposal of Nonhazardous Industrial Solid Waste (30 TAC Ch. 335), inappropriately describes requirements for the permitting of hazardous waste disposal. The disposal or treatment of hazardous waste is not anticipated on the FutureGen site, and associated permitting should not be applicable. Please revise the table to clarify that on-site disposal of nonhazardous waste does not require a permit in Texas.
- #12 **RRC** - In Table C.1-3 regarding State and Federal Regulatory and Permitting Requirements – Table C 1-3, in reference to Underground Injection Control Permit includes typographical errors. Please revise the table to change “Texas Council on Environmental Quality” to “Texas Commission on Environmental Quality” and the term “projective” of oil, gas or geothermal resources in the second sentence to “productive.”
- TCEQ** - Air Modeling Protocol – The appendix notes that the TCEQ pre-processed AERMET data are required in AERMOD modeling analyses. These AERMET pre-processed data are not required. The meteorology used for Texas is conservative screening meteorology--predicted concentrations, particularly long-term averages, will be higher than would be expected if more refined surface roughness length values were used. An applicant can always run AERMET with the proper technical justification for representative selections of Albedo, Bowen Ratio, and surface roughness length in AERMET.
- #13 Please revise the following text in section E.3.2.1:
- “The Texas Commission on Environmental Quality’s (TCEQ) Air Dispersion Modeling Team (ADMT) has prepared AERMOD meteorological data sets that can be used for air dispersion modeling in the state of Texas.”
- “The preprocessed meteorological data sets provided by TCEQ incorporate conservative values of the above three surface characteristics.”
- #14 In Table 2-1 regarding Summary of Surface and Subsurface Features of Four Candidate Sites – The Climate data for the Jewett and Odessa sites, labeled as “Range of Seasonal Precipitation,” is incorrect and actually reflects monthly seasonal averages. Please revise the table to reflect actual annual averages, comparable to the Illinois data, of approximately 42.6 inches for Jewett and 14.9 inches for Odessa.

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**TX5. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

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**Response to Comment #1:** Figure S-14 shows 10 wells. This is consistent with text in Table S-4 which states that a minimum of eight wells would be needed to support a 2.8 million tons (2.5 MMT) per year injection rate. The figure illustrates a scenario using two more wells than the minimum required to support a 2.8 million tons (2.5 MMT) per year injection rate. If Odessa were selected, the final number and position of wells will reflect more detailed site characterizations. The text also points out that a lower injection rate could require only three wells. Therefore, the text will remain as presented in the EIS.

---

**Response to Comment #2:** The issue of representative ambient air monitoring site was discussed in detail with the Site Proponent and DOE used information from data that were available. Since there are no actual monitoring stations within the ROI of the site, it would be making more assumptions as to the representativeness of any monitoring station that would be chosen. As part of the air permitting process, it would be more appropriate to consider monitoring at the site, if it is selected. Therefore, the text will remain as presented in the EIS.

---

**Response to Comment #3:** DOE used the same analytical approach for all sites as described in Appendix E. As described in Appendix E, the different maximum concentrations were used to show at what stage the increments were exceeded and to calculate the probability of that exceedance occurring. Therefore, the text will remain as presented in the EIS.

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**Response to Comment #4:** In Section S.9.1, the text was revised as follows: “Design and construction details of the on-site wastewater systems that will employ standard industry practices to achieve zero liquid discharge at Jewett and Odessa.”

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**Response to Comment #5:** Text in Section 2.5.2.2 has been revised as follows: “LiDAR is an aerial technique that uses laser pulse travel times from an aircraft to the land surface to obtain high resolution topography data.”

---

**Response to Comment #6:** Table 3-3 was revised to reflect changes made to Table S-12 in the Summary.

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**Response to Comment #7:** The issue of representative ambient air monitoring site was discussed in detail with the Site Proponent and DOE used information from data that were available. Since there are no actual monitoring stations within the ROI of the site, it would be making more assumptions as to the representativeness of any monitoring station that would be chosen. As part of the air permitting process, it would be more appropriate to consider monitoring at the site, if it is selected. Therefore, the text will remain as presented in the EIS.

---

**Response to Comment #8:** Table C.1-3 was revised as requested. In Table C.1-3, the description for the Air Operating Permit was changed to read: “Required for non-major sources designated by EPA, through rulemaking, and as specified by federal requirements. If EPA designated the FutureGen facility as a non-exempt, non-major source, it would be required to obtain a federal, not a state, operating permit. Texas has no State Operating Permit program.”

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**TX5. FutureGen Texas Team (Walden, Steven – Walden Consulting)**

*(The complete comment document submitted to DOE is shown in G10.)*

---

**Response to Comment #9:** Table C.1-3 was revised as requested. Text for Hydrostatic Test Discharge Permit was added under Illinois State Permitting as follows: “NPDES Temporary Discharge Permit (General Forms 1 and 2E and Form ILG67).”

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**Response to Comment #10:** Table C.1-3 was revised to reference TPDES, not NPDES, requirements.

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**Response to Comment #11:** Table C.1-3 was revised as requested. The words “permitting under” were replaced with “requirements of.”

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**Response to Comment #12:** Table C.1-3 has been revised as follows: “Authorization from the Texas Commission on Environmental Quality is required for injection below the base of usable quality water and that is not productive of oil, gas, or geothermal resources.”

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**Response to Comment #13:** Although not a regulatory requirement the AERMET data is required by the AERMOD modeling software for a complete analysis. The text was modified as requested to provide clarity and better describe the state's role in the modeling data.

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**Response to Comment #14:** Table 2-1 in the revised Risk Assessment regarding Summary of Surface and Subsurface Features of Four Candidate Sites was revised under “climate” to show the headings: “Average Seasonal Daily Temperatures,” “Average Seasonal Precipitation” and “Annual Precipitation” and values were updated accordingly. Specifically, annual precipitation was revised to 42.6 inches for Jewett and 14.9 inches for Odessa.

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**TX6. Illinois State Federation of Labor and Congress of Industrial Organizations (Carrigan, Michael T.)**

Jul 16 07 01:58p

IL AFLCIO

2175440225

p. 3

534 South Second Street  
Springfield, Illinois 62701-1705  
217/544-4014 • FAX: 217/544-0225



55 West Wacker Drive, Suite 716  
Chicago, Illinois 60601-1609  
312/251-1414 • FAX: 312/251-1420

**OFFICERS**

**Michael T. Carrigan**, President  
**Tim Drea**, Secretary-Treasurer

[www.ilaff-cio.org](http://www.ilaff-cio.org)

July 16, 2007

Mr. Mark L. McKoy  
NEPA Document Manager  
P.O. Box 880  
Morgantown, WV 26507-0880  
Attn: FutureGen Project EIS

SENT VIA FAX: (304) 285-4403

Dear Mr. McKoy:

Following up on the formal comment made by staff member Mr. William Looby at the Tuscola Public Hearing held June 28, 2007, the Illinois AFL-CIO would like to request that the U.S. Department of Energy investigate further the wages presented by the Texas sites in the Socioeconomics portion of the Environmental Impact Statement.

Our research shows that both the Jewett and Odessa-area wages for construction trades are significantly higher than indicated in the draft EIS.

For example, using Texas Workforce Development Board statistics, construction workers in the Jewett area make anywhere from 40 percent to 90 percent more by trade than what is indicated in the EIS. In the Odessa area, the range is smaller but not by much – from 25 percent more to 90 percent by trade.

While we acknowledge Illinois is a higher wage state than Texas and the numbers will bear that out, we believe through our ample and highly skilled workforce our construction trades will make this project a complete success.

We implore the DOE to make sure the wage rates are accurate in order to provide a complete picture of what the two states have to offer. Thank you for your time and attention to this matter and don't hesitate to contact me with any questions.

Sincerely,

Michael T. Carrigan  
President

ILLINOIS STATE FEDERATION OF LABOR AND CONGRESS OF INDUSTRIAL ORGANIZATIONS

07/16/2007 03:05PM

**TX6. Illinois State Federation of Labor and Congress of Industrial Organizations (Carrigan, Michael T.)**

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**Response to Comment #1:**

Wage rates included in the EIS have been reviewed and are accurate. The Davis-Bacon Wage Determination rates were used and are issued by the Department of Labor under the Davis-Bacon and related Acts. The Wage and Hour Division of the U.S. Department of Labor determines prevailing wage rates to be paid on federally funded or assisted construction projects. Therefore, the text will remain as presented in the EIS.

---

**TX7. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

Monitoring

#1

“Although injection-induced seismicity is unlikely, monitoring methods discussed in Section 6.4.4 would further reduce the possibility of accidentally inducing seismicity”

The referenced section 6.4.4 (7.4.4) does not exist in the EIS. In fact, no section of the document thoroughly addresses the means and methods that will be used to monitor the injected CO2 plume or to provide early detection of leaks from the CO2 pipelines and storage formations.

Wage rates

#2

“Table 6.19-3 (7.19-3) provides 2003 average hourly wages for Freestone, Leon, and Limestone counties (Ector County) for trades that would be required for construction of the proposed project. The minimum and maximum wages for these trades were not available.

Wage rates for these areas of Texas are available at the Texas Workforce Commission website: <http://www.tracer2.com/cgi/dataanalysis/AreaSelection.asp?tableName=Oeswage>. Also, the wages cited by this source seem significantly higher than those given in the corresponding tables.

---

**TX7. FutureGen Illinois Team (Swager, Ronald – Patrick Engineering)**

*(The complete comment document submitted to DOE is shown in G8.)*

---

**Response to Comment #1:**

The referenced Sections 4.4.4; 5.4.4; 6.4.4; and 7.4.4 were typographical errors and the correct Section reference is 2.5.2.2. A discussion of continuous monitoring methods proposed for the FutureGen Project has been inserted into Section 2.5.2.2. These monitoring methods include the use of micro-tiltmeters that would continuously record measurable changes in surface tilt from the CO<sub>2</sub> plume. Also, monitoring wells would be drilled to the top of the primary seal and would house a permanent microseismic array for monitoring faint earth tremors (microseisms). Therefore, these sentences have been revised in Sections 4.4.3.2; 5.4.3.2; 6.4.3.2; and 7.4.3.2 to state “Although injection-induced seismicity is unlikely, monitoring methods discussed in Section 2.5.2.2 would alert the operator of pressure build-up that could lead to induced seismicity, where appropriate remediation strategies could be employed to prevent or minimize adverse impacts.”

The text describing continuous monitoring methods (including use of micro-tiltmeters) was added to the Response and to Section 2.5.2.2. as follows:  
“Continuous Monitoring Methods

A Supervisory Control and Data Acquisition (SCADA) system would continuously monitor and transmit flow rate, pressure, and temperature information from the injection wells to a central data collection point. An Eddy Covariance tower(s) would measure atmospheric CO<sub>2</sub> concentrations over a large area using an infrared gas analyzer and measure local meteorological variables such as wind velocity, relative humidity, and temperature. Using detectors installed at the wellheads, continuous CO<sub>2</sub> monitoring would also be conducted at existing wells that are within a predicted five-year plume footprint and that penetrate into the injection reservoir. An array of borehole micro-tiltmeters would be installed in shallow (25 foot [7.6 meter]) boreholes arranged in transects extending away from each injection well to the edge of the five-year plume footprint. The micro-tiltmeters would continuously record measurable changes in surface tilt from the CO<sub>2</sub> plume. Monitoring wells would be installed that contain instrumentation for continuously monitoring and recording pressure and temperature in or above the injection reservoir. Additional monitoring wells would be drilled to the top of the primary seal and would house a permanent microseismic array for monitoring faint earth tremors (microseisms).”

---

**Response to Comment #2:**

Wage rates included in the EIS have been reviewed and are accurate. The Davis-Bacon Wage Determination rates were used and are issued by the Department of Labor under the Davis-Bacon and related Acts. The Wage and Hour Division of the U.S. Department of Labor determines prevailing wage rates to be paid on federally funded or assisted construction projects. Therefore, the text will remain as presented in the EIS.

---

**TX8. Texas Commission on Environmental Quality (Weber, Thomas W.)**

Kathleen Hartnett White, *Chairman*  
Larry R. Soward, *Commissioner*  
H. S. Buddy Garcia, *Commissioner*  
Glenn Shankle, *Executive Director*



**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

*Protecting Texas by Reducing and Preventing Pollution*

August 1, 2007

Mr. Mark L. McKoy  
NEPA Document Manager  
National Energy Technology Laboratory  
P.O. Box 880  
Morgantown, WV 26507-0880

Re: TCEQ Grant and Texas Review and Comment System (TRACS) #7740, Future Gen Project (DOE/EIS-0394D)

Dear Mr. McKoy:

The Texas Commission on Environmental Quality (TCEQ) has reviewed the above-referenced project and offers following comments:

A review of the project for General Conformity impact in accordance with 40 CFR Part 93 and Title 30, Texas Administrative Code § 101.30 indicates that the proposed action is located in Ector and Leon Counties, which is currently unclassified or in attainment of the National Ambient Air Quality Standards for all six criteria air pollutants. Therefore, general conformity does not apply.

#1

Although any demolition, construction, rehabilitation or repair project will produce dust and particulate emissions, these actions should pose no significant impact upon air quality standards. Any minimal dust and particulate emissions should be easily controlled by the construction contractors using standard dust mitigation techniques.

We do not anticipate significant long term environmental impacts from this project as long as construction and waste disposal activities are completed in accordance with applicable local, state, and federal statutes and regulations. We agree with a finding of no significant impact and have no objection to the release of funds for this project. We recommend that best management practices to control runoff from construction sites be utilized to prevent impact to surface and groundwater.

#2

It has been determined from a review of the information provided that an Application for TCEQ Approval of Floodplain Development Project need not be filed with TCEQ. Our records show that the community is a participant in the National Flood Insurance Program and as such has a Flood Hazard Prevention Ordinance / Court Order. Accordingly, care should be taken to ensure that the proposed construction takes into account the possible Flood Hazard Areas within the community's floodplains. Please notify the community floodplain administrator to ensure all construction is in compliance with the community's Flood Hazard Prevention Ordinance / Court Order.

#3

**TX8. Texas Commission on Environmental Quality (Weber, Thomas W.)**

Mr. Mark L. McKoy  
Page 2  
August 1, 2007

Re: TCEQ Grant and Texas Review and Comment System (TRACS) #7740, Future Gen Project  
(DOE/EIS-0394D)

Thank you for the opportunity to review this project. If you have any questions, please call Ms. Betty Thompson at (512) 239-1627.

Sincerely,



Thomas W. Weber, Manager  
Water Programs, Chief Engineer's Office  
Texas Commission on Environmental Quality

**TX8. Texas Commision on Environmental Quality (Weber, Thomas W.)**

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**Response to Comment #1:** Comment noted and will be included in the Administrative Record of the EIS.

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**Response to Comment #2:** Best management practices (BMPs) will be implemented for the FutureGen Project. Table 3-14 lists BMPs to prevent impacts to surface and groundwater resources.

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**Response to Comment #3:** The FutureGen Project will obtain all federal, state, and local permitting/approvals required for site construction and operation. This would also include Flood Hazard Area approvals and coordination with the community floodplain administrator.

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