

September 1, 2015; Issue No. 84

Third Quarter FY 2015

Programmatic EIS Posed Many Challenges, Offers Immediate and Lasting Benefits

By: Matt Marsh, Mark Wieringa, and Micah Reuber, Western Area Power Administration

Programmatic consideration of environmental impacts and mitigation is a pathway to streamlining NEPA review. The proposals in this example share a common technology (wind energy), geographic scope (upper Midwestern states), and federal action (permitting the interconnection of a new electricity generating facility to the transmission system owned and operated by Western Area Power Administration). The joint lead agencies persisted in addressing many challenges, completed a programmatic EIS (PEIS), and found that it is yielding immediate efficiencies in tiered project-level reviews.

The Upper Great Plains (UGP) area, including all or parts of Iowa, Minnesota, Montana, North Dakota and South Dakota, has a high potential for wind energy development because of widespread strong winds. To address environmental concerns associated with such development, Western Area Power Administration (Western) and the U.S. Fish and Wildlife Service (USFWS) used a programmatic EIS to streamline the NEPA review process and implement cost effective mitigation strategies.

As joint lead agencies, Western and the USFWS prepared the *Upper Great*

Plains Wind Energy Programmatic Environmental Impact Statement (DOE/EIS-0408; April 2015) to

(1) Assess the potential environmental impacts associated with wind energy projects that may interconnect to Western's transmission system or that may include placement of facilities on grassland or wetland easements managed by the USFWS within the UGP Region; and

(2) Evaluate how environmental impacts would differ under alternative sets of environmental evaluation procedures, best management practices (BMPs) and



mitigation measures that the agencies could request project developers to implement.

Although the geographic scale of the analysis, the different objectives of the joint lead agencies, and the large number of individuals involved in the preparation and review of the document presented coordination and communication challenges, the PEIS – albeit 7 years in the making – is viewed as a worthwhile effort and valuable reference.

Lessons Learned: What Went Well

Preparation of the PEIS went very well during the planning stage (Summer 2008) and throughout the public scoping period (Fall 2008). Western received only positive comments on the project with the most common comment being, "Hurry up and get your PEIS for wind energy done so we [the wind developers and Western customers] can start using it."

After delving into writing the PEIS, Western and the USFWS decided it would be best to also prepare a programmatic biological assessment (programmatic BA). Information for 28 species of concern was gathered and

Inside Lessons Learned

Welcome to the 84th quarterly report on lessons learned in the NEPA process. This issue features lessons learned regarding a major programmatic EIS, communication in the NEPA process, administrative record guidance, and our summer interns. In addition, we bid farewell to two outstanding NEPA professionals. Thank you for your continued support of the Lessons Learned program. As always, we welcome your suggestions for improvement.

Communication: Making It Work
Eric Cohen Retires
Jeanie Loving Retires
NEPA Administrative Record9
EPA's New Tool Aids EJ Analysis12
NEPA Office Issues 2015 Stakeholders Directory13
A Summer with NEPA14
EPA Study on Greenhouse Gas Mitigation16
EAs and EISs Completed This Quarter
Cost and Time Facts
Questionnaire Results

Carol Borgetrom Director

Office of NEPA Policy and Compliance

Printed on recycled paper

Be Part of Lessons Learned

We Welcome Your Contributions to LLQR

Send suggestions, comments, and draft articles – especially case studies on successful NEPA practices – by October 16, 2015, to Yardena Mansoor at yardena.mansoor@hq.doe.gov.

Quarterly Questionnaires Due November 2, 2015

For NEPA documents completed July 1 through September 30, 2015, NEPA Document Managers and NEPA Compliance Officers should submit a Lessons Learned Questionnaire as soon as possible after document completion, but not later than November 2. Other document preparation team members are encouraged to submit a questionnaire, too. Contact Vivian Bowie at vivian.bowie@hq.doe.gov for more information.

LLQR Online

All issues of *LLQR* and the Lessons Learned Questionnaire are available on the DOE NEPA Website at energy.gov/nepa under Guidance & Requirements, then Lessons Learned. To be notified via email when a new issue of *LLQR* is available, send your email address to yardena.mansoor@hq.doe.gov. (DOE provides paper copies only on request.)

DOE-wide NEPA Support Services Solicitation Open for Offers on GSA eBuy

DOE's National Nuclear Security Administration (NNSA) recently issued a Request for Quotation (RFQ) for DOE-wide NEPA support services – the preparation of NEPA documents and other environmental documents, as well as support for other activities within the NEPA process. These could include support for preparing floodplain and wetland assessments, and meeting obligations under the National Historic Preservation Act and the Endangered Species Act. The scope is similar to that of the DOE-wide NEPA support contracts that expired in the summer of 2014.

NNSA is conducting the acquisition and will administer the anticipated multiple-award blanket purchase agreements that, like the earlier contracts, will be available for use by all of DOE, including NNSA and the Federal Energy Regulatory Commission. RFQ 1002217, available on the General Services Administration (GSA) eBuy website, will close on October 7, 2015. Questions from DOE staff may be addressed to the DOE Office of NEPA Policy and Compliance; questions about the solicitation from interested GSA vendors should be submitted in accordance with the instructions annotated within the RFQ on eBuy.

What Didn't Work – And Making It Work Next Time: Communication Among Preparers, Reviewers, and Public

By: Ralph Barr, Office of NEPA Policy and Compliance

This series highlights reasons why things "didn't work" in the NEPA process, and what can be done to avoid such problems in the future. In this issue, we discuss communication – how it can affect working within the NEPA project team (DOE managers and staff, contractors, and cooperating agencies) and with the public.

Lessons Learned Questionnaire respondents have identified good communication as key to a successful NEPA process. (Questionnaire responses appear at the end of each issue of *LLQR*.) Respondents also have pointed to examples where poor communication among DOE management and staff, agencies, contractors, and the public became an obstacle to preparing a timely, costeffective document.

In a nutshell: Plan communication the same way you plan other parts of the NEPA process. Make sure that everyone understands all steps in the process.

DOE Staff and Contractor Coordination

Why it didn't work:

- Lack of agreement among DOE and contractor staff on project processes and appropriate terminology negatively affected document preparation time.
- Project design changes were not always distributed to all team members, resulting in challenging data collection efforts and increased costs.
- The offsite location of the contractor inhibited faceto-face team communication and hampered the contractor's ability to be fully versed in site operations.

Making it work:

• Create a communications plan.

Most, if not all, of the communication problems raised in questionnaire responses can be addressed through one of the most important documents prepared for a project: a communications plan. This plan, a companion to the project management plan, establishes

Earlier in this Series . . .

Data Collection and Sharing *LLQR*, June 2015, page 1

Keeping NEPA Documents on Schedule *LLQR*, March 2015, page 12

Scoping Process LLQR, December 2014, page 1 the communications roadmap for the project. It provides:

- The categories of information that need to be distributed
- To whom information needs to go, and when
- Responsibilities of team members in implementing the plan, and
- Confidence that the team is working as a well-oiled machine.

The single biggest problem in communication is the illusion that it has taken place.

- George Bernard Shaw

The communications plan identifies approaches in the NEPA Document Manager's tool box, including a combination of email, progress reports, and periodic staff meetings conducted via conference calls and video conferencing. It provides a process and schedule for the NEPA Document Manager to reach out to each team member and ensures that the whole team understands:

- The scope of the project
- · Special requirements to complete some tasks
- Current progress
- Task and project schedules
- Any problems with a project deliverable, and a path forward to solve the problem, and
- Most importantly, the opportunity to acknowledge achievements and recognize team members deserving commendation.

A communications plan is not a static document. Revise it frequently to reflect successful or unsuccessful results and additional tasks and staff.

Interagency Coordination

Why it didn't work:

- Cooperating agencies had conflicting goals and ideas.
- The National Historic Preservation Act Section 106 process was too long and complicated because of dissimilar agency procedures.

Communication

(continued from previous page)

Making it work:

- Prepare an interagency coordination agreement (e.g., Memorandum of Understanding) early in project development that clearly defines each agency's goals and responsibilities. The agreement should:
 - Identify the agencies' regulatory authorities
 - Assign responsibilities to each agency, identifying a "lead agency" where appropriate
 - Establish internal communication procedures
 - Address how privileged and confidential information will be handled, and how information may be disclosed to outside parties
 - Identify points of contact
 - Describe the project scope
 - Identify the lines of authority
 - Determine staffing requirements and potential staffing constraints for each agency
 - Establish that the parties will agree to a schedule with milestones
 - · Identify mechanisms for handling change, and
 - Establish dispute resolution procedures.
- Specific to the Section 106 process, an interagency coordination agreement should establish or identify:
 - Whether there will be a lead agency
 - Communications procedures for consultation with other parties (e.g., Indian Tribes and the State Historic Preservation Officer)
 - If and how Section 106 will be integrated with NEPA, including but not limited to public involvement requirements and sequencing of Section 106 steps with release of NEPA review and decision documents, and
 - The regulatory requirements and constraints related to consultation with Indian tribes.

Public Interaction

Why it didn't work:

- Few individuals attended hearings.
- A large project area made it difficult to schedule meetings that did not require interested landowners to travel for hours.
- Local residents did not comment at public hearings.

• The public was discouraged when they perceived their open and honest communication was followed by preapproved legal responses.

Making it work:

- Include public participation in the communications plan, or prepare a public participation plan that covers each stage in the NEPA process. See the scoping article in *LLQR*, December 2014, page 1 for many strategies for communicating with the public. Key suggestions include:
 - Coordinate public participation activities with the local DOE public affairs office or other appropriate contacts.
 - Develop a current stakeholder's list to be used in contacting the public.
 - Use the current DOE NEPA Stakeholders Directory to supplement the project- or site-specific list. (See page 13.)
 - When scheduling activities, respect local customs and accommodate those with special needs.
 - Put dates for public involvement events, such as meetings and announcements, on the project schedule.
- Use all media Methods of communication have evolved since the creation of NEPA. In addition to traditional forms of communication, reach out to the community using conference calls, Web conferencing, and social media. These electronic forms of communication can eliminate unnecessary travel, accommodate work and family commitments, comfort those who are anxious about speaking before an audience, and be more user friendly for those with special needs.
- Gain public confidence through transparency.
 - Announce the project as early as possible.
 - Regularly update a project webpage to share information with the public throughout the project's development.
 - Stress the importance of the public's involvement in all communications efforts.
 - Listen to the public, and respect each person's point of view. At meetings, participating members of the public are our guests and should be treated as such.
- Explain the NEPA process so that the public is comfortable with its role.

(continued on page 13)

UGP Wind Energy PEIS

(continued from page 1)

analyzed. A comprehensive list of conservation measures (BMPs, minimization measures, avoidance measures, and mitigation measures) was developed for each species of concern.

To ensure that project developers using the PEIS will follow the programmatic BA, Western and the USFWS developed a review and approval system based on consistency forms and checklists of conservation measures for each species. If a wind project developer commits to implement the applicable conservation measures, Western's consultation responsibilities under Section 7 of the Endangered Species Act are concluded when Western and the USFWS review and sign the consistency forms; no separate Section 7 consultation is required.

Dispersed Team and Long Schedule Created Challenges

Most large NEPA projects depend on a well-functioning team, and this PEIS was no exception. Western, USFWS, and the PEIS preparation contractor needed to function effectively as an integrated multidisciplinary team of scientists, managers, specialists, biologists, and other team members.

One major challenge was coordinating a large team spread out over five states. Sit down meetings were infrequent due to travel time and cost, as well as difficulty in coordinating schedules. When problems arose – for example, regarding funding limits, schedule conflicts, or resource shortages – conference calls were scheduled almost immediately to start brainstorming on solutions.

Another major challenge was performing the NEPA analysis as joint lead agencies. A joint lead arrangement between a regulated agency and its regulator inevitably entails different perspectives and needs, and sometimes even opposing goals. Coordinating with the approval authorities in one's own agency can take some time, but coordinating approvals concurrently in two agencies multiplied the time required. Often, when decisionmakers in one organization would sign a document and send it to the other organization for signature, decisionmakers in the second organization identified additional changes, thus prompting another round of review.

During the nearly 7 years it took to complete the PEIS, loss of institutional knowledge from the inevitable staff retirements and transfers had a substantial impact on progress. Bringing new staff members up to speed also proved challenging.

At times, key individuals were not available when needed to schedule public scoping meetings, hearings, and document signings. Delays arose when the agencies waited



The UGP Wind PEIS evaluated measures to minimize impacts to the species of concern, including the greater sage grouse (left) and whooping crane, evaluated in the programmatic BA.

for input from those individuals before moving forward, or when the agencies moved forward without key input and needed to coordinate revisions based on that input when it was received later.

Another challenge was that the ESA status of several species analyzed in the programmatic BA changed during the consultation and review process, requiring substantial revision to both the programmatic BA and PEIS. Reaching agreement among the biologists was challenging – internally within each agency, between the two lead agencies, and with the cooperating agencies (Department of the Interior Bureau of Reclamation and Bureau of Indian Affairs, and Department of Agriculture Rural Utilities Service).

A critical issue was the sheer number of individuals involved with review of the document, and the inability for the designated point of contact to speak with one voice for all elements of the joint lead agencies. Decisions made and acted upon by the project team were often challenged at a later point by previously uninvolved parties. Concurrent initiatives, such as the USFWS Section 10 Wind Energy Habitat Conservation Plan effort, caused some project team members to feel that the separate efforts needed to be completely consistent in conservation measures and recommendations. The project schedule expanded accordingly.

How Tiering Will Work

In a record of decision signed July 14, 2015, Western selected the preferred alternative, which is also the environmentally preferable alternative, to adopt a standardized process for collecting information and evaluating the potential environmental impacts of wind energy interconnection requests. Western and/or the USFWS (as appropriate for a specific project) would coordinate with project developers during project planning

(continued on page 15)

Headquarters: NEPA Office Unit Leader Eric Cohen Retires

"NEPA Remains Inspiring"

Eric Cohen retired at the end of July after 30 years of dedicated federal service, including 25 years in DOE's Office of NEPA Policy and Compliance. There he led the review of some of DOE's most significant and complex EISs and prepared NEPA guidance to improve the effectiveness and efficiency of DOE's NEPA compliance program.

When asked to distill decades of experience, Eric said that he has always found NEPA to be inspiring as a logical, coherent framework for managing the analysis of complex and even novel issues. The DOE NEPA Community, including the NEPA Office, NEPA Compliance Officers (NCOs), counsel, and staff, should continue efforts to meet environmental review requirements more effectively and efficiently, which our metrics analysis tells us is possible, he said.

"Start with the Premise that NEPA Can Work"

Eric finds it exciting to apply fundamental NEPA principles to novel circumstances or issues that were not specifically envisioned when NEPA was enacted. If unsure how to proceed when faced with a unique proposed action or an emerging environmental issue, such as climate change or intentional destructive acts, instead of arguing that NEPA was not intended to apply, Eric recommends starting with the presumption that NEPA can work.

"Almost by definition, this will lead to a sound, defensible approach," he said. "There are only so many ways to apply the laws of physics to connect a unique circumstance or new issue to NEPA's principal requirements to take a hard look and apply the rule of reason. Find the connection and you'll find a sound NEPA strategy. NEPA does not have to be hard," he explained.

"It is a testament to NEPA's flexibility," Eric continued, "that its principles have met the test of time. They can be applied to new categories of environmental impacts as they become established."

"Improvement Is Attainable"

After a 1994 Secretary of Energy policy initiated the systematic tracking of DOE's NEPA metrics, Eric led the NEPA Office's efforts to collect and analyze NEPA document cost, time, and other performance measures. "When we need to," he observed, "we can do a good job of preparing a timely environmental review that serves its intended purposes." During some periods, he noted, DOE's



Denise Freeman, Office of NEPA Policy and Compliance, presented Eric with her half of the "Green Socks" award (from former General Counsel Scott Blake Harris) that they shared for their work on the DOE NEPA website.

overall NEPA performance has shown reductions in the cost and time spent preparing EISs and EAs. Eric believes taking a "just do it" approach to NEPA compliance can improve outcomes. "Program and field offices should start the process as soon as possible and reviewing offices should bend over backwards to help them succeed," he said.

Another way to improve NEPA performance is by focusing on maintaining a body of guidance, training, and acceptable examples that DOE's NEPA document preparers can use. The NCOs can identify their needs, and weaknesses in draft documents under review can also reveal topics suitable for focused attention, he said.

Major Contributions to NEPA Reviews and Guidance at DOE and Beyond

A registered professional engineer, Eric Cohen earned a Masters degree in Environmental Science in Civil Engineering at the University of Illinois. Before joining DOE's NEPA Office in 1990, he coordinated EPA's innovative and alternative wastewater technology program, managed the installation restoration program for the U.S. Air Force Systems Command, and served as a technical advisor for a wastewater compliance unit in the Chicago office of the Illinois Environmental Protection Agency.

Eric Cohen Retires

(continued from previous page)

At DOE, Eric made significant contributions to major programmatic, site-wide, and project EISs, and led the review of the Waste Management, Spent Nuclear Fuel, and Yucca Mountain EISs, among many others. He contributed substantially to key DOE NEPA guidance products and was the primary author of DOE's accident analysis guidance, interim guidance on considering sabotage and terrorism under NEPA, and DOE training on climate change and NEPA. Eric also authored many *LLQR* articles on NEPA metrics and other topics. Recently, he was called upon by the National Nuclear Security Administration's Office of Defense Programs to help the newly-established Domestic Uranium Enrichment Program office develop a strategy for reestablishing a domestic uranium enrichment capability.

Eric's contributions were not limited to DOE. At the request of the Council on Environmental Quality (CEQ), he participated on the interagency team that drafted CEQ's guidance on *Effective Use of Programmatic NEPA Reviews* (December 2014). He also supported EPA's international environmental capacity building program through briefings to representatives of foreign nations on best practices for environmental impact assessment (EIA), and represented the United States on an international team that developed written guidance on EIA for energy development projects in Central America.



a weekly session volunteering at the Smithsonian's Mary Livingston Ripley Garden (above), a beautiful garden near the Forrestal Building. He is eager to pursue his many hobbies – home gardening, astrophotography, scuba diving and underwater photography, and teaching chess, just to name a few.

The NEPA Office, on behalf of the DOE NEPA Community, appreciates Eric's many contributions to sound NEPA compliance and offers Eric best wishes for his future.

Life after DOE

Fortunately for Eric's NEPA Office colleagues, he will not be far away. The week after his retirement he started

DISTINGUISHED CAREER SERVICE AWARD

Presented by Steven P. Croley, General Counsel

on July 28, 2015

Eric B. Cohen is hereby awarded the Distinguished Career Service Award in recognition of his extraordinary contributions during a Federal career spanning 30 years, 25 of which were with the Department of Energy. As a Unit Leader in the Office of NEPA Policy and Compliance, he excelled in all of his duties, earning the respect and admiration of his colleagues. ... Through his work on these and many other NEPA-related matters, he leaves a legacy of singular professional excellence. Finally, as both a NEPA specialist and a manager, he earned the genuine affection of his associates. Because of his pragmatic, analytically-sound advice, his intelligence, his strength of character, his no-nonsense approach, and his dedication to the public interest, Eric B. Cohen embodies the highest traditions and ideals of public service.



Environmental Management: NCO Retires Jeanie Loving: Offers Lessons Learned and Hopes for the Future

Approaching retirement is turning out to be a time for major retrospection as well as anticipation. I am thinking especially about the important lesson I've learned from my daughter, Holly: a deep confidence in the value of education. Back when she was her son's current age (6), we started our first little ecosystem in a terrarium. We gave oatmeal to crickets, and fed them to anoles. From there, we diversified: a large talkative bird, a ferret, snakes, rodents, and cats to name a few. The result is a grown-up daughter who takes my grandson to lakes, creeks, and fields and shows him the wonders of life. His observational skills are already remarkable. In all this, I learned a deeper appreciation for the powerful impacts we can have on our children's attitudes and behavior. We should start educating children not later than first grade about the importance of, and methods for, preserving and protecting our natural environment.

Why am I telling you this? If we teach our children to <u>believe</u> in the importance of protecting the natural environment for the betterment of public health and welfare, it could become easier to act to achieve improvement. Perhaps society wouldn't take so long to agree on the need to address such serious environmental concerns as climate change and the need to recycle, reuse, and repurpose our natural resources.

These concepts are inherent in NEPA practice. I'm grateful for the opportunities I've had throughout my career to contribute to things I believe in, including participation in DOE's NEPA program. I started my career in a research lab working on the health effects of air pollution, then on radionuclide toxicology for the U.S. Public Health Service, and am happy to have been one of the people identified for transfer to the Environmental Protection Agency when it was established in 1970. I came to DOE nearly 15 years ago, first as a contractor writing NEPA documents, then in the Office of NEPA Policy and Compliance, and finally as NCO for one of DOE's most significant program offices – the Office of Environmental Management.

I leave the DOE NEPA program with several hopes that it will thrive:

- A hope that we can recruit and keep competent and conscientious people who genuinely want to do the right thing by the environment.
- A hope that our politicians will recognize the importance of keeping the decisionmaking process for major federal actions open to public involvement.
- A hope for fewer attempts to weaken or eliminate NEPA, and recognition that the NEPA process is a critical factor in sound decisionmaking and that the time required for the process is not an impediment.



Jeanie Loving, with her daughter, Holly, believes we need to teach our children the importance of preserving our natural environment.

The body of NEPA-related issues addressed in *LLQR* over time is substantive indeed. I recommend that anyone involved in NEPA take advantage of this timely and informative resource.

I would like to endorse the advice to NEPA Document Managers offered by my friend Harold Johnson, who retired as the Carlsbad Field Office NCO in 2007: "Involve GC early and often," he said, for a smooth Headquarters review; prepare high quality documents so that the NEPA Office can focus on NEPA adequacy of a document instead of editing.

I'd also like to thank all of my colleagues, especially Carol Borgstrom, Director, Office of NEPA Policy and Compliance, and Matthew Urie, Assistant General Counsel for Environment, for their help and patience, willingness to teach me things, and highly capable attention to their jobs, even in the face of adversity. To me, they represent what the ideal public servant should strive to be.

With heartfelt wishes for the continued success of DOE's "NEPA people,"

– Jeanie Loving, NEPA Compliance Officer

On behalf of the DOE NEPA Community, we offer Jeanie, a dedicated NEPA professional, best wishes on her retirement endeavors.

Ensure that a NEPA Administrative Record Reflects the Decisionmaking Process

By: P.E. Hudson, Counsel, Department of the Navy, Office of General Counsel, Ventura, California

This contributed article describes the important role of an administrative record for a proposal undergoing NEPA review. The author is a NEPA trainer for the Department of the Navy and was a principal contributor to the NEPA pilot program on EA best practice principles (LLQR, March 2015, page 11). This article represents the views of the author, and not necessarily those of the Department of the Navy, the Department of Defense, or the Federal Government.

An Important Role in Litigation

The administrative record (AR) is the paper trail that documents the agency's decisionmaking and NEPA compliance processes, and provides the basis for the agency's decision. The AR should include those materials directly or indirectly considered by the agency decisionmaker at the time of the decision. The AR therefore should include the documents and materials prepared, reviewed, or received by agency personnel. At the start of the NEPA project planning, the agency's executives, project managers, environmental professionals, attorneys, and public affairs personnel should prepare for the development of the AR. At most agencies, a larger file is developed, informally called the project file, for each proposal that is analyzed under NEPA. The project file, which may reside on a shared server or online repository, allows the project team to locate important documents quickly, which reduces inefficiency and duplication of effort, while also reducing the risk of overlooking information. The project file also enables an agency to respond to document requests under the Freedom of Information Act (FOIA) and similar state public records laws.

If a lawsuit is filed, the project file provides a starting point for preparing the AR. Although a best practice is to compile an AR for each project, because of resource constraints some agencies prepare the AR only when litigation is a possibility. Because NEPA does not include a private right of action, a challenge to NEPA occurs pursuant to the Administrative Procedure Act (APA). Under the APA, a court reviews an agency's action to determine whether it was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2) (b). In making this determination, a reviewing court must engage in a "thorough, probing, in-depth review" of the agency's decision. Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 415 91 S.Ct. 814, 823 (1971). The court does so through its review of the whole AR.

Environmental lawyers generally acknowledge that we can only truly convince a court that the agency's decisionmaking was sufficient if we have an adequate AR. Generally, if information isn't in the AR before the court reviews an agency decision, the information wasn't considered. For example, discussion during consultation with regulators can result in agreement that some of the project area is not critical habitat under the Endangered Species Act; creating a written record of oral discussion can be important to show that the agency appropriately considered all potential impacts. See also *Friends of the Earth, Inc. v. U.S. Army Corps of Engineers*, 109 F.Supp. 2d 30 (D.D.C. 2000) (remanding for further analysis of proposed casino projects where the record included conclusory statements but no evidence of actual analysis of impacts). In certain situations the court may allow supplementing the AR, but agencies should not rely upon this possibility.

The NEPA team's hard work will not be successful if the basis for agency decisionmaking isn't well documented in the AR. A close relationship with your attorneys is critical to compiling a defensible AR, especially where litigation is threatened.

Work with Counsel on AR Content

An agency's Office of General Counsel will provide AR guidance, after consulting with the agency litigation team, and at times, the Department of Justice litigation team. The guidance will specify the types of records to be included in the AR and, often, how to submit the records to a central location. It may also designate certain records as "core documents" – critical documents in the decisionmaking process such as draft and final NEPA documents, records of agency decisions, and records of consultation with other agencies and public involvement. The designation allows for these core documents to be quickly located and presented to the court.

The AR may include:

- Documents and materials that do not support the agency decision
- · Electronic databases, videos, Twitter feed, or webpages
- Privileged and non-privileged documents and materials (included in the AR but released only to those within scope of privilege)
- Classified materials (which are included in the AR but released only to those with appropriate clearance) and

Administrative Record

(continued from previous page)

- redacted or summarized unclassified versions of these materials
- · Policies, guidelines, directives and manuals
- Articles and books, including scientific literature reviews, after ensuring that any needed intellectual property license(s) are in place, and
- Communications the agency received from other agencies and from the public, and any responses to those communications.

Agencies normally exclude from the AR any documents and materials that were not in existence at the time of the agency decision.

Generally, internal "working" drafts of documents need not be included, but draft documents that were circulated for comment outside the agency should be included, as changes to these documents may reflect significant input into the decisionmaking process.

An AR needs an index to identify and locate documents. For each document, the index provides a unique identification number and brief description, and indicates whether the document is privileged and the basis for the privilege.

General Guidance Resources

A useful publication is *Maintaining a Project File and Preparing an Administrative Record for a NEPA Study.* This 2006 "Practitioner's Handbook" was prepared by the American Association of State Highway and Transportation Officials (AASHTO) primarily for Federal Highway Administration projects, but it is broadly relevant to other agencies and types of projects. This AR handbook covers: maintaining accurate project files during the NEPA process, using the NEPA process to build a strong administrative record, identifying potential administrative record documents in project files, making judgment calls about what documents to include in the AR, and submitting the AR to the court.

"[1]it is not uncommon for the administrative record in a NEPA case to include tens of thousands of pages. For that reason, compiling the administrative record requires a substantial effort, which typically involves both program staff and attorneys from the agency or agencies involved. The best way to expedite the preparation of the administrative record during litigation is to maintain accurate and up-todate project files during the NEPA process."

- AASHTO Practitioner's Handbook, 2006

Several government agencies have issued guidance on compiling an AR. These documents may be considered "best practices" guidelines.

- U.S. Department of Justice, Environment and Natural Resources Division, United States Attorneys Bulletin, *Guidance to Client Agencies on Compiling the Administrative Record* (February 2000, a revision of January 1999 guidance).
- National Oceanic and Atmospheric Administration (NOAA) OGC Memorandum *NOAA Guidelines for Compiling an Agency Administrative Record* (December 12, 2012).
- Department of the Interior, United States Fish and Wildlife Service, *Compiling a Decision File and an Administrative Record*, 282 FW 5 (March 2, 2007).

For questions concerning the AR for a NEPA action, consult with your agency's legal counsel.

Key Issues to Consider

Excerpt from: Maintaining a Project File and Preparing an Administrative Record for a NEPA Study

American Association of State Highway and Transportation Officials

Maintaining the Project File

- Who is tasked with maintaining the project file?
- Are separate files being maintained by [the federal agency, state agency], and/or the project consultants? If so, who is responsible for maintaining key project documents?
- Is there a written filing protocol? What issues are addressed in the filing protocol?
- Will a database be used to manage the project file? If so, what are the strengths and limitations of the database?
- What method is being used for filing or archiving project-related e-mails? How will other electronic documents and data be stored (e.g., maps, modeling results, engineering drawings)?
- Who will identify and retain privileged materials?
- How are you handling oversize documents for example, displays, maps, etc.?
- How are you handling attachments? For example, if a document is sent to agencies for review, does the file include the attachment?
- What "checks" are in place to ensure that proper filing is taking place?
- What record-keeping requirements or policies must be considered? For example, does the State DOT have a policy regarding records management and disposition?
- Are potential administrative record documents identified or segregated in some manner in the project files? If so, how is this being done?

Preparing the Administrative Record

- Is there an existing index?
- Where are study documents located? One central file or multiple files?
- Is there a central repository of e-mails? If not, how will e-mails be located and compiled?
- What system was used for filing documents during the study? As a result of that system, are there any built-in gaps or omissions in the record-keeping?
- Will the record be electronically scanned and incorporated into a litigation database? If so, what technology (e.g., litigation database) will be used? If not, what is the best way to structure the administrative record?
- How will the administrative record be produced to the court and the other parties to the litigation?
- Does the court in which the case has been filed have any specific requirements with respect to the filing of administrative records?
- Aside from [the lead agency], are other federal agency approvals needed? If so, what coordination is needed regarding the preparation of their administrative records?

EJSCREEN: EPA's New Tool Aids EJ Analysis

The Environmental Protection Agency (EPA) recently released EJSCREEN, a new screening and mapping tool that facilitates the consideration of environmental justice (EJ) in the decisionmaking process. "EJSCREEN provides essential information to anyone seeking greater visibility and awareness about the impacts of pollution in American communities," said EPA Administrator Gina McCarthy in the June 10 announcement that the tool is available for public use.

EJSCREEN utilizes nationally consistent data to highlight places that may have higher environmental burdens and vulnerable populations. EJSCREEN combines demographic factors (percent low-income and percent minority) with environmental indicators to produce 12 EJ Indexes (text box). A high EJ index shows where the combination of three factors is elevated: high environmental indicator, large number of people potentially exposed, and high proportion of lowincome and/or minority populations. EJSCREEN produces high resolution, color-coded maps, bar charts, raw data downloads, and printable reports and graphs. For example, the EJSCREEN website can generate reports based on census block groups or the area surrounding a point (e.g., location of a proposed facility) and compare results to the state, EPA region, and nation.

12 EJ Indexes Available in EJSCREEN

Hazard Risk:

- Air Toxics Cancer Risk
- Air Toxics Respiratory Hazard
- Air Toxics Neurodevelopmental Hazard

Potential Exposure:

- Diesel PM
- PM_{2.5}
- Ozone
- Lead Paint

Proximity:

- Traffic and Volume
- Risk Management Plan Sites
- Treatment Storage and Disposal Facilities
- National Priorities List Sites
- Major National Pollutant Discharge Elimination System Direct Dischargers



The mapping tool adds many types of data by overlaying various datasets (called "layers"). Source: EPA

Many Uses of EJSCREEN

EPA uses EJSCREEN to support agency work to inform public outreach and involvement; implement aspects of permitting, enforcement, compliance, and voluntary programs; develop reports of EPA work; and enhance geographically based initiatives. EPA staff who review other agency EISs pursuant to Section 309 of the Clean Air Act report that they primarily use EJSCREEN in the scoping process to identify potential low-income and minority populations and environmental effects. They may also look to EJSCREEN to help identify areas of EJ concern that may have been overlooked in the NEPA process.

"A NEPA review is exactly the sort of practice where EJSCREEN immediately shows its value and power," noted Matthew Tejada, Director of EPA's Office of Environmental Justice. "EJSCREEN can highlight important environmental and demographic data in a very fine resolution. Thus, it allows a NEPA practitioner to get an initial screen, or a 'snapshot' of the community level context of an issue."

DOE NEPA practitioners may find EJSCREEN helpful during the early planning stages of NEPA (e.g., scoping process) as a preliminary step to help highlight communities with greater risk of exposure to pollution (e.g., minority and/or low-income populations). They may also find it beneficial to be familiar with EJSCREEN when evaluating public comments that may be based on information from this tool.

In addition, EPA noted in its June announcement that EJSCREEN could be used to share information with state and tribal partners and the public, and to support

NEPA Office Issues 2015 Stakeholders Directory

If you are planning to distribute an EA or EIS, or initiate other NEPA public involvement and consultation activities, the Office of NEPA Policy and Compliance encourages you to consult the *Directory of Potential Stakeholders for DOE Actions under NEPA*. The NEPA Office issued the 32nd edition of the directory on July 29, 2015. It includes current information for points of contact in federal agencies; states, territories, and state government associations; and nongovernmental organizations. The *Stakeholders Directory* is primarily intended to supplement the lists of interested parties that DOE offices compile for individual projects or facilities. It also lists DOE points of contact for tribal issues, and NEPA document websites

EJSCREEN

(continued from previous page)

educational programs, grant writing, and community awareness efforts.

A Screening Tool Has Limits

On its website, EPA explains that EJSCREEN is a pre-decisional screening tool and that it is important to recognize that EJSCREEN has limitations. For example, EJSCREEN examines some but not all of the relevant issues related to environmental justice, relies on demographic and environmental estimates that involve uncertainty, and the environmental indicators are only screening-level proxies for actual impacts. EPA notes that EJSCREEN does not direct final outcomes or decisions and that the baseline results from EJSCREEN should be

Communication

(continued from page 4)

- Consider conducting a workshop or webinar that presents, in layperson's terms, the NEPA process and how it involves the public throughout a project.
- Explain the NEPA process on the project webpage.
- Provide informational materials explaining the NEPA process at public hearings (e.g., the DOE, NEPA, and You brochure available on the DOE NEPA Website).
- Some agencies have produced YouTube videos explaining public participation and the NEPA process. Consider linking to one of them on your project website, or creating one of your own.

and public reading rooms used by DOE program and field offices.

For the 2015 *Stakeholders Directory*, about 40 percent of listings have changed their contact information since last year's edition. For the first time, NEPA contacts are listed for the Federal Communications Commission, FirstNet, and the District of Columbia. The NEPA Office updates the directory throughout the year, as new contact information is received. Send updates and questions to askNEPA@hq.doe.gov.

supplemented with more detailed local information and experience.

EJSCREEN incorporates recommendations from the National Environmental Justice Advisory Council and builds upon prior EPA experience, including with EJView (*LLQR*, June 2012, page 8). EPA plans to refine the uses for EJSCREEN as they receive feedback from stakeholders in the next several months and to release a revised version in 2016. More information is available on EPA's EJSCREEN website or by contacting Kevin Olp, EPA's Office of Environmental Justice, at olp.kevin@epa.gov.

Using these shared strategies can help make communication with contractors, other agencies, and the public "work" for you in the NEPA process. Please contact Ralph Barr at ralph.barr@hq.doe.gov with suggestions for other communication strategies or topics for future articles in this series.

You can have brilliant ideas, but if you can't get them across, your ideas won't get you anywhere.

> – Lee Iacocca Former Chrysler Chairman

A Summer with NEPA

The Office of NEPA Policy and Compliance was fortunate to have two outstanding interns assisting the staff this summer. We asked them to share their thoughts on their experiences in the NEPA Office and their future plans.

Donna Chen, a rising senior at the University of Chicago, is majoring in Economics and Environmental Studies.

My internship at the DOE Office of NEPA Policy and Compliance has shown me the importance of NEPA and the crucial role it has played in the larger environmental movement. NEPA's requirement that federal agencies consider and publicly disclose the environmental consequences of their decisions was a pivotal change in the governmental decisionmaking. Working directly with this statute has given me a newfound appreciation of how it functions and a hope that the environment's well-being will occupy an ever higher rank among our national priorities.

During my internship, I also became more familiar with the other major environmental statutes and their interactions with NEPA. Seeing how the Endangered Species Act, Clean Air Act, and National Historic Preservation Act operate in coordination with NEPA enhanced my understanding of NEPA and the broader U.S. environmental law and policy framework. I witnessed how all of these combined environmental considerations intersect to produce sometimes daunting, but extremely thorough, NEPA documents. To me, the level of detail was impressive and reassuring in that the DOE environmental review process evidently takes great pains to create an accurate, comprehensive, scientifically-sound, and transparent product.

The EIS projects I worked briefly on this summer included: the proposed Plains & Eastern transmission line, the proposed Greater-Than-Class C (GTCC) Low-Level Radioactive Waste and GTCC-like waste disposal facilities, the Engineered High Energy Crop Programs, and Hawaii Clean Energy Program. Working on such diverse NEPA projects expanded my understanding of their unique environmental concerns. For instance, by reviewing public comments, I saw how differently the public reacted to each proposal or program. These reviews gave me a sense of the wide range of environmental values and issues across the country.

In addition to reviewing EISs, I contributed to the NEPA Office's support for process improvement by examining DOE NEPA metrics. Prior to this internship, I was stunned by the size of the documents and by the time and cost needed for their completion. This summer I reviewed NEPA metrics and learned about the tools DOE uses to reduce the cost and time of preparing NEPA documents. It has been rewarding to contribute to these efforts to streamline and improve the environmental review process.



Florence Chen (left) and Donna Chen made many contributions to the NEPA Office this summer.

In the same spirit of constant improvement, I worked at length on providing recommendations to increase user-friendliness of the NEPA Office website, improve navigation, and better tailor the website to the public's needs.

My experiences here in the NEPA Office have reinforced my determination to continue working in the environmental field. In the future, I plan to attend graduate school and to pursue a career related to environmental research and policy analysis.

Florence Chen, who graduated from Harvard University in May, is continuing her studies in Geology at Cambridge University this fall.

My first day at the NEPA Office consisted of surprise after surprise. Before coming to the NEPA Office, I had been under the impression that implementing a federal law is quite straightforward, that the job of an intern consists of assisting staff members with basic tasks, and that my college research project about formation of sulfur minerals was mainly of interest to other geochemists. Yet upon my arrival, I found a thick binder filled with information about NEPA regulations and implementation guidance. At my first staff meeting, I was asked what types of projects I hoped to pursue independently that summer. Later that day, one of the staff members told me that my mention of geochemistry research on my resume had caught his eye, and he hoped to hear all about it. These surprises gave me a taste of the challenges and the opportunities that a summer at the NEPA Office could provide.

My purpose in coming to the NEPA Office was to gain exposure to federal energy and environmental policymaking. As an Earth and Planetary Sciences major

Summer Interns

(continued from previous page)

with an extracurricular passion for government and law, I am always seeking opportunities to work at the intersection of science and government. DOE seemed to be the perfect place for this.

In the NEPA Office, I worked on a wide variety of projects. I reviewed EISs and public comments for projects as diverse as clean energy, electricity transmission, and nuclear fuel shipments. One of my most interesting assignments consisted of drafting an article about a new report from the Environmental Protection Agency that analyzes the benefits of mitigating climate change by reducing greenhouse gas emissions (page 16). In addition, I had the opportunity to pursue my interests in climate change and geology by studying how climate change impacts are being addressed through federal regulations for building structures in floodplains, and by writing reports on recent geochemical and geophysical research that can contribute to fossil and geothermal energy development.

The opportunity to intern in the NEPA Office was especially valuable because it enabled me to learn about the large range of policy issues that fall under DOE's purview. As a NEPA Office intern, I could be attending

UGP Wind Energy PEIS

(continued from page 5)

activities to identify the project-specific measures that would be applicable to each project. A project-specific NEPA analysis, either an EA or EIS, would be tiered from the PEIS provided that the proposed project incorporates the applicable BMPs and mitigation measures analyzed in the PEIS. The tiered NEPA document would summarize the information covered in the PEIS or incorporate it by reference. This approach would allow for more efficient NEPA documents that would properly focus on local or site-specific issues. If a developer does not wish to implement the evaluation process, BMPs, and mitigation measures identified for the proposed project, a separate consultation or NEPA evaluation that does not tier off the analyses in the PEIS would be required, as appropriate, to address specific issues.

A project-specific ESA Section 7 consultation will utilize the programmatic BA provided that the project implement applicable BMPs, minimization measures, mitigation measures, and monitoring requirements established in the programmatic BA. (Consultation under the National Historic Preservation Act Section 106 process and related tribal consultations will continue unchanged from the present practice, since these issues are very site-specific.) a meeting about a nuclear waste storage site one day and looking up the potential environmental impacts of undersea cables on marine life the next day. This summer also taught me about the challenges of balancing economic development, research projects, and policy goals with consideration for environmental impacts on air quality, water quality, climate change, endangered species, and even cultural resources and historic properties. I have come to understand how an act of Congress is just the beginning; implementing a law entails careful research, interpretation, and solicitation of input from the public.

This fall, I will be heading to England on a Fulbright Fellowship. I will work towards earning a Master's degree in Earth Sciences at the University of Cambridge, where my research will focus on changes in the carbon cycle and the climate on million-year time scales. Because of my time at DOE, I know that a scientific background can be very helpful in energy and environmental policy. Therefore, after completing the Master's, I hope to use my knowledge of science and government to help build a political consensus for action on climate change.

Conclusion: It Was Worth It

The scope and complexity of this effort were daunting, especially in envisioning how all the complex components would work in concert. Administration policy and senior management support proved instrumental in completing the programmatic BA and the PEIS. Nevertheless, the geographic separation of contributors, their philosophical differences, and the agencies' conflicting needs and goals caused schedule slippage and additional expense.

Overall, the UGP PEIS for wind energy was a pioneering initiative; already several current and future developers are using the document. Making environmental reviews for proposed wind energy generation projects more efficient is good governance. Additional information is available on the PEIS website or contact Matt Marsh at mmarsh@wapa.gov.

Editor's Note: Matt Marsh is the NEPA Compliance Officer (NCO) for Western's Upper Great Plains Service Region and all three authors are NEPA Document Managers. Former NCO Nick Stas, who retired in the summer of 2014 (LLQR, June 2014, page 15), served as NEPA Document Manager until shortly before the Final PEIS was issued.

Does Greenhouse Gas Mitigation Make a Difference? EPA Study Projects Substantial Benefits

By: Florence Chen, Intern, Office of NEPA Policy and Compliance

The projected environmental impacts of climate change in the United States and the physical and monetary benefits of reducing global greenhouse gas (GHG) emissions are described in a new report issued by the U.S. Environmental Protection Agency (EPA). *Climate Change in the United States: Benefits of Global Action* (EPA 430-R-15-001, June 2015) summarizes the results from EPA's ongoing Climate Change Impacts and Risk Analysis (CIRA) project.



This peer-reviewed study compares the impacts, in 2050 and in 2100, that could result from two hypothetical climate change scenarios - a "Reference" scenario based on current emission rates and a "Mitigation" scenario in which global GHG emissions are substantially reduced relative to the Reference scenario.

In the "Reference" scenario, GHG emissions would rise to 2.5 times the 2005 emissions level and atmospheric GHG concentrations would reach 1,750 parts per million (ppm) CO_2 -equivalent¹ by 2100. In the "Mitigation" scenario, global action would reduce GHG emissions to about a third of the 2005 emissions level, and atmospheric GHG concentrations would be below 500 ppm CO_2 -equivalent in 2100.

Physical and Economic Impacts

The CIRA report presents results from a large set of sectoral impact models that quantify and monetize climate change impacts using consistent inputs (e.g., socioeconomic and climate scenarios). The authors of the report developed these scenarios by using current trends for economic development and GHG emissions to make projections for future climate change. According to EPA, these projections fall within the latest range of predictions from the Intergovernmental Panel on Climate Change (IPCC).

The report discusses consequences of the Reference and Mitigation scenarios on six broad sectors in the United States: health, infrastructure, electricity, water resources, agriculture, and ecosystems. Within these broad sectors, the report examines 20 sector-specific climate change impacts, including impacts on flooding, environmental justice, and other resource areas that are typically addressed in NEPA reviews (table, next page). EPA concludes that temperature increases, sea level rise, and changes in precipitation

would result in damages to all sectors under the Reference scenario and that global GHG emissions reduction could substantially reduce these damages under the Mitigation scenario.

A Potential NEPA Resource

For DOE NEPA documents, the report complements, and its results are consistent with, other primary sources of information about climate change impacts, such as the 2014 National Climate Assessment issued by the U.S. Global Change Research Program (USGCRP) and the Fifth Assessment Report issued by the IPCC. (See *LLQR*, June 2014, page 3; and December 2014, page 7.) EPA explains on its website that the CIRA project differs from USGCRP and IPCC climate assessments by focusing on the targeted questions of (1) what the physical and economic damages of climate change would be in the United States and (2) how reducing global emissions could reduce or avoid those impacts.

EPA's Office of Atmospheric Programs, Climate Change Division, coordinated the study; researchers from the Massachusetts Institute of Technology and from the Department of Energy's Pacific Northwest National Laboratory and National Renewable Energy Laboratory were among the contributors. The report includes the results of 35 peer-reviewed scientific articles that model the impacts of climate change, and it underwent additional peer review by seven independent researchers.

Information on the CIRA project, including the report, is available on EPA's website at http://www2.epa.gov/cira.

For nearly all sectors analyzed, global GHG mitigation is projected to prevent or substantially reduce adverse impacts in the U.S. this century compared to a future without emissions reductions Therefore, decisions we make today can have long-term effects, and delaying action will likely increase the risks of significant and costly impacts in the future.

> Climate Change in the United States: Benefits of Global Action Report

 1 CO₂-equivalent, or CO₂-e, is a common unit of measurement for greenhouse gases. This measurement converts the global warming potential of different greenhouse gases into an equivalent amount of CO₂.



16 September 2015

U.S. Impacts of Climate Change (Reference Scenario) and Benefits (Avoided Damages) from Global Action to Mitigate Climate Change (Mitigation Scenario) in 2100

In the CIRA report on climate change impacts in the United States, EPA estimates damages that could result from unmitigated climate change and calculates the savings and avoided damages that could result from global mitigation. This table presents some of EPA's findings. Changes in the Reference Scenario are presented relative to 2005. Changes in the Mitigation Scenario are relative to the Reference Scenario. Unless otherwise noted, the information presents annual impacts in 2100, expressed in 2014 dollars.

IMPACT TYPE	REFERENCE SCENARIO	MITIGATION SCENARIO
Air Quality	Increase in ozone and fine particulate matter pollution	57,000 fewer deaths from poor air quality, valued at \$930 billion
Extreme Temperature	Net increase (from more extreme heat; less extreme cold) of 13,000 projected deaths in 49 cities	12,000 fewer deaths from extreme heat and cold, valued at \$200 billion
Labor	Loss of 1.8 billion labor hours for U.S. workers due to increases in extreme temperatures	Avoided loss of 1.2 billion labor hours, valued at \$110 billion
Water Quality	Decline in Water Quality Index, resulting in over \$3 billion in damages	\$2.6-3.0 billion in avoided damages from poor water quality
Coastal Property	\$5 trillion in damages from sea level rise, storms, property abandonment, and adaptation ²	\$3.1 billion in avoided damages from sea level rise and storm surges and adaptation costs ²
Drought	Increased number of droughts in the Southwest	40-59% fewer severe and extreme droughts, with corresponding avoided damages to the agricultural sector of \$2.6-\$3.1 billion
Agricultural	Substantial decreases in yields for most major irrigated crops and all rainfed crops	\$6.6-11 billion in avoided damages
Shellfish	Reduced U.S. supply of oysters (45%), scallops (48%), and clams (32%)	Avoided loss of U.S. supply of oysters (34%), scallops (37%), and clams (29%), with corresponding consumer benefits of \$380 million
Wildfire	Major increase in area burned by wildfires in most of the contiguous U.S., especially in the West	6.0-7.9 million fewer acres burned and corresponding avoided wildfire response costs of \$940 million-\$1.4 billion

² Cumulative damages and avoided damages from 2000-2100 (discounted at 3%).

EAs and EISs Completed April 1 to June 30, 2015

EAs¹

Bonneville Power Administration

DOE/EA-1973 (5/14/15) Kootenai River Habitat Restoration at Bonners Ferry Project, Boundary County, Idaho EA was prepared in-house by DOE; therefore, cost is not applicable. Time: 17 months

Office of Fossil Energy

DOE/EA-1983 (6/26/15)

Sabine Pass Liquefaction Expansion Project and Cheniere Creole Trail Pipeline Expansion Project, Cameron Parish, Louisiana EA was adopted; therefore, cost and time data are not applicable to DOE. [Federal Energy Regulatory Commission (FERC) was the lead agency; DOE was a cooperating agency.]

Oak Ridge Office/Office of Environmental Management

DOE/EA-2011 (5/7/15)

Proposed Release of the Biological Control of the Emerald Ash Borer (Agrilus Planipennis) in the Continental United States EA was adopted; therefore, cost and time data are not applicable to DOE. [US Department of

Agriculture (USDA) was the lead agency; DOE was a cooperating agency.]

Western Area Power Administration

DOE/EA-1955 (6/11/15)

Campbell County Wind Farm, Campbell County, South Dakota

The cost for this EA was paid by the applicant; therefore, cost information does not apply to DOE. Time: 29 months

EISs

Office of Fossil Energy

DOE/EIS-0493 (80 FR 22992, 4/24/15) (Draft EIS EPA Rating: EC-2) *Corpus Christi LNG Project*, Nueces and San Patricio Counties, Texas EIS was adopted; therefore cost and time data are not applicable to DOE. [FERC was the lead agency; DOE was a cooperating agency.]

¹ EA and finding of no significant impact (FONSI) issuance dates are the same unless otherwise indicated. ^{*} Recovery Act Project

National Nuclear Security Administration/ Savannah River Operations Office

DOE/EIS-0283-S2 (80 FR 26559, 5/8/15) (Draft EIS EPA Rating: LO) Supplemental Environmental Impact Statement for Surplus Plutonium Disposition at the Savannah River Site, Aiken, South Carolina Cost: \$10,000,000 Time: 58 months

Western Area Power Administration

DOE/EIS-0408 (80 FR 24915, 5/1/15) (Draft EIS EPA Rating: LO) *Upper Great Plains Wind Energy Programmatic EIS*, Iowa, Minnesota, Montana, Nebraska, North Dakota, and South Dakota [DOE and the US Fish and Wildlife Service were co-leads; DOE cost was \$1,889,000.] Time: 80 months

DOE/EIS-0417 (80 FR 32110, 6/5/15) (Draft EIS EPA Rating: 3)

South Mountain Freeway (Loop 202) Interstate 10 (Papago Freeway) to Interstate 10 (Maricopa Freeway) Final Environmental Impact Statement and Section 4(f) Evaluation, Phoenix, Arizona EIS was adopted; therefore, cost and time data are not applicable to DOE. [Federal Highway Administration was the lead agency; DOE was a cooperating agency.]

DOE/EIS-0450* (80 FR 24915, 5/1/15)

(Draft EIS EPA Rating: EC-1)

TransWest Express Transmission Project, Wyoming, Colorado, Utah, and Nevada EIS preparation cost was paid by the applicant; therefore, cost data are not applicable to DOE. [DOE and the Bureau of Land Management were co-lead agencies.] Time: 52 months

ENVIRONMENTAL PROTECTION AGENCY (EPA)
RATING DEFINITIONS

RATING DEFINITIONS
Environmental Impact of the Action
LO – Lack of Objections
EC – Environmental Concerns
EO – Environmental Objections
EU – Environmentally Unsatisfactory
Adequacy of the EIS
Category 1 – Adequate
Category 2 – Insufficient Information
Category 3 – Inadequate
(For a full explanation of these definitions, see the EPA website
at www.epa.gov/compliance/nepa/comments/ratings.html.)

18 September 2015

NEPA Document Cost and Time Facts¹

EA Cost and Completion Times

- For this quarter, there were no EAs completed for which cost data were applicable.
- For this quarter, the median and average completion times for 2 EAs for which time data were applicable was 23 months.
- Cumulatively, for the 12 months that ended June 30, 2015, the median cost for the preparation of 8 EAs for which cost data were applicable was \$180,000; the average was \$752,000.
- Cumulatively, for the 12 months that ended June 30, 2015, the median completion time for 15 EAs for which time data were applicable was 16 months; the average was 20 months.

EIS Cost and Completion Times

- For this quarter, the cost for the preparation of 1 EIS for which cost data were applicable was \$10,000,000.
- For this quarter, the median completion time for 3 EISs for which time data were applicable was 58 months; the average was 63 months.
- Cumulatively, for the 12 months that ended June 30, 2015, the median and average costs for the preparation of 2 EISs for which cost data were applicable was \$5,740,000.
- Cumulatively, for the 12 months that ended June 30, 2015, the median completion time for 6 EISs for which time data were applicable was 53 months; the average was 55 months.

¹ For EAs, completion time is measured from EA determination to final EA issuance; for EISs, completion time is measured from the Federal Register notice of intent to the EPA notice of availability of the final EIS.

Questionnaire Results

What Worked and Didn't Work in the NEPA Process

To foster continuing improvement in the Department's NEPA Compliance Program, DOE Order 451.1B requires the Office of NEPA Policy and Compliance to solicit comments on lessons learned in the process of completing NEPA documents and distribute quarterly reports.

Scoping

What Worked

- *Having sufficient time for NEPA*. The initial decision to move the proposed implementation date for the project back one year allowed sufficient time to conduct the NEPA analysis.
- *Interactive GIS*. Interactive GIS stations were used to provide project site-specific visuals to respond to stakeholder proximity questions and concerns.

Data Collection/Analysis

What Worked

- Use of best available data. Since conducting site-specific cultural and biological surveys on over 2,400 miles of alternatives was infeasible, best available data were used to support impact analyses.
- *"Corridor approach.*" A "corridor approach" was used to help inform right-of-way siting based on the results of impact analyses. The approach of narrowing an initial 2-mile wide study corridor to a 250-foot right-of-way provided flexibility for avoiding sensitive resources.

What Didn't Work

- *New endangered species identified*. During the EA process, new species of concern were added to the Endangered Species List, resulting in the need for additional data collection.
- Changes to list of threatened and endangered species *list*. Several pertinent changes to the list of threatened and endangered species occurred during development of the NEPA document, each time requiring substantial revision to portions of the document that were already drafted.

The material presented here reflects the personal views of individual questionnaire respondents, which (appropriately) may be inconsistent. Unless indicated otherwise, views reported herein should not be interpreted as recommendations from the Office of NEPA Policy and Compliance.

Schedule

Factors that Facilitated Timely Completion of Documents

- *Monthly conference calls with project sponsor*. Monthly conference calls with the project sponsor kept everyone aware of EA schedules and progress.
- *Weekly project staff calls*. Weekly project staff calls ensured progress continued throughout the EIS drafting process and facilitated timely completion of the document.
- Senior management staff support. Senior management support and occasional prods, especially in the later stages of the EIS review, kept things moving.
- *Contractor availability*. The availability of contractor employees for unscheduled conference calls helped resolve problems as they arose and facilitated timely completion of the EIS.

Factors that Inhibited Timely Completion of Documents

- *Lack of control*. As a joint-lead agency, DOE did not have control of schedule management. This inhibited timely completion of the EIS.
- *Coordinating with other agencies*. Coordination among 50 cooperating agencies was challenging. Since each agency had its specific goals and ideas about the NEPA process and the program itself, coming to consensus on decisions took longer than anticipated.
- *Lack of integration.* The NEPA EIS process was not integrated with the project planning process. This caused some delays in information distribution.
- *Staff resources*. The project was delayed due to the unavailability of staff support at land management agencies.

Questionnaire Results

What Worked and Didn't Work (continued from previous page)

- *Joint-lead agency agreement ineffective*. The joint-lead agency arrangement was not very effective; the joint leads had different needs and sometimes opposing goals, which contributed to delays in the completion of the document.
- *Loss of institutional knowledge*. Retirements, transfers, and additions of new staff members occurred at many points during preparation of the EIS. Subsequently, loss of institutional knowledge slowed EIS completion at various points during the process.
- *Differing opinions*. Differences of opinion between and within the joint lead agencies about risk to listed species, risk to agencies, risk to developers, and the financial ramifications of conservation measures led to substantial delays.

Teamwork

Factors that Facilitated Effective Teamwork

- *Good coordination*. Good coordination among team members was instrumental in resolving potential "road blocks" in the EIS process.
- *Good communication with project sponsor*. Project sponsor maintained good communication with NEPA staff to keep them aware of project changes.
- *Bi-monthly telephone calls*. Bimonthly telephone calls between DOE and the developer allowed for project updates to be communicated and facilitated the identification of potential problems before the EA process was too far along.

Factors that Inhibited Effective Teamwork

- *Communication with contractor*. In accordance with the joint-lead agency Memorandum of Understanding, DOE's co-lead agency had control over contractor direction. DOE would have benefited from a direct line of communication with the contractor.
- *Misunderstanding on EA status*. The developer put the design portion of the project on hold but wanted to continue the EA process. Some team members assumed that because the design was on hold, the EA was also on hold. This resulted in people not working on the EA until clarification was conveyed to them.
- *Joint-lead agency approvals problematic*. Approval authorities at one lead agency would occasionally request changes to final documents that were already

signed by approval authorities at the other lead agency, leading to several rounds of revisions before the signature process was completed.

• *Widespread team.* The team of contributors was large and geographically widespread, making meetings and sometimes conference calls difficult to schedule; at times, critical decisions could not be made when key individuals were unavailable.

Process

Successful Aspects of the Public Participation Process

- *Open-house public meetings*. Open-house style public meeting with GIS stations created meaningful and effective opportunities for public involvement.
- *Good scoping comments*. The comments received during scoping helped focus document review on the portions of the EIS needing revision. In several instances, the public comments resulted in the review and revision of sections of the document that the management team felt were already clear and complete.
- *Strong EIS support*. Public support for the document was very strong. The most frequent comment DOE received was some variation of "hurry up and get the PEIS done so we can use it."

Unsuccessful Aspects of the Public Participation Process

- *Public not really interested in NEPA*. The public meeting was well attended, but the attendees were more interested in getting the project construction started than completing the NEPA process.
- *Length of NEPA process*. Attendees at the public meeting voiced frustration about the length of time necessary to complete the EIS process.

Usefulness

Agency Planning and Decisionmaking: What Worked

• Development of a Programmatic Biological Assessment. The management team developed a Programmatic Biological Assessment (PBA)

Questionnaire Results

What Worked and Didn't Work (continued from previous page)

to accompany the Programmatic EIS (PEIS). A comprehensive list of conservation measures was developed for each of 28 Endangered Species Actlisted threatened and endangered species, and a review and approval system was developed to ensure the PBA would be followed by developers of projects tiering from the PEIS. The joint-lead agencies developed a consistency evaluation form, essentially a checklist of required conservation measures, for each listed species considered in the PBA. As long as developers agree to implement the applicable conservation measures as stated on the forms, they will receive coverage under the PBA and the Endangered Species Act Section 7 consultation process for their project.

• *Facilitate informed decision*. The PEIS will facilitate informed and sound decisions on tiered projects in the future. Developers are already using the early planning tools developed in the PEIS, especially with respect to siting and wildlife surveys, on several tiered projects.

Enhancement/Protection of the Environment

- *Resource protection*. The NEPA process identified resource issues and constraints that have been used to inform corridor narrowing and will ultimately inform the location of site-specific rights-of-way.
- *Mitigation of environmental impacts*. Conservation and mitigation measures were developed during the EIS process to address potential adverse impacts to natural resources.
- *Protection of environment.* The EA process helped identify sites that were not environmentally appropriate for the proposed project.

Other Issues

Guidance Needs Identified

• *Clarification on the tiering process*. Clarification on the tiering process was identified as a need, however

the Council on Environmental Quality's December 2014 guidance on programmatic documents and tiering resolved the issue.

Effectiveness of the NEPA Process

For the purposes of this section, "effective" means that the NEPA process was rated 3, 4, or 5 on a scale from 0 to 5, with 0 meaning "not effective at all" and 5 meaning "highly effective" with respect to its influence on decisionmaking.

For the past quarter, in which 2 EA and 2 EIS questionnaire responses were received, 3 respondents rated the NEPA process as "effective."

- A respondent who rated the process as "5" stated that the EIS provides a template for avoiding or minimizing negative environmental impacts during design of wind farms. Many of the measures developed in the document are already being used by developers to avoid sensitive wildlife entirely in their internal planning, before signing lease agreements and committing to parcels of land that would otherwise be problematic.
- A respondent who rated the process as "3" stated that while the NEPA process has provided a wealth of information to work with, overall effectiveness cannot be measured until the participating land management agencies identify mitigation measures.
- A respondent who rated the process as "3" stated that the EA project was already focused on environmental improvement.
- A respondent who rated the process as "2" stated that the EA was for connection to an existing DOE project. No new environmental impacts were identified.