

PURPOSE

On May 24, 2016, the Department of Energy's consent-based siting initiative hosted a public meeting in Denver, Colorado at the Embassy Suites – Stapleton. The purpose of this meeting was to hear from the public and stakeholders on important elements in the design of a consent-based siting process. A consent-based siting process will support the development of facilities needed to manage spent nuclear fuel and high-level radioactive waste, including consolidated interim storage facilities and permanent geologic repositories.

During the public meeting, participants engaged in facilitated small group discussions on a variety of topics related to consent-based siting and integrated waste management. These small group discussions provided the opportunity for frank and open conversations on key topics that will inform the design of a consent-based process.

Leadership Strategies (LSI), an Atlanta-based facilitation company is a subcontractor of Allegheny Science and Technology in support of the Department of Energy (DOE) consent-based siting public meetings and provided professional facilitation of the small group discussions. The small group discussions are part of a broader effort by DOE to listen and gather input, and the summaries below are not DOE positions on any given topic, but a summary of what was discussed by the meeting participants.

SMALL GROUP DISCUSSION PROCESS

Leadership Strategies facilitators are impartial and objective third-party facilitators. Their role is to effectively facilitate a one-hour discussion with public meeting participants by:

- Establishing an open and candid conversational atmosphere to engage participants
- Asking the primary question to initiate the conversation: “What is most important for DOE to consider in designing a consent-based siting process?”
- Asking secondary questions to further engage, clarify and probe for the identification of consent-based siting process considerations important to the public:
 - How can the Department of Energy ensure that the process for selecting a site is fair?
 - What models and experience should the Department of Energy use in designing the process?
 - Who should be involved in the process for selecting a site, and what is their role?
 - What information and resources do you think would facilitate your participation?
 - What else should be considered?
- Responding effectively to ensure participants are heard and feel respected in the discussion
- Recording participants' summary responses, concerns and questions or comments pertaining to the primary and secondary questions on both chart paper and detailed notes
- Validating and prioritizing participants' input in preparation for small group discussion report out session
- Leading small group discussion report out session
- Writing session summary notes

SMALL GROUP DISCUSSION PARTICIPANTS

In Denver, public participants were randomly assigned to small groups in order to purposefully create diverse groups with representatives from state and local governments, advocacy and community groups, and the nuclear industry. There were no less than five public participants in each small group discussion. Not all session attendees chose to participate in small group discussions. Several participants joined the discussion in progress or left the group before the discussion ended.

In addition to public participants, select DOE staff listened to the small group discussions. The objective was to understand and appreciate public responses, concerns and questions or comments related to the consent-based siting process. Note takers were assigned to each small group and took hand written, detailed notes to supplement what LSI facilitators summarized on chart paper.

Responses, questions, and comments or concerns were not attributed to individual participants.

CONSIDERATIONS AND THEMES

Participants identified “considerations” in response to the primary and secondary questions. Responses were recorded and grouped with similar contributions in “themes.” Themes were identified by participants.

Participants’ responses were summarized during the small group discussions and, where possible, responses were recorded as stated. Facilitators also asked all participants to validate that the summary notes reflected the discussion and were inclusive of grouped themes at the end of the small group discussion.

Facilitators and small group note takers reviewed both summary comments recorded on chart paper and hand-written detailed notes to confirm that the notes were clear and complete. A few contributions listed below have been revised for clarity and readability.

At the end of the small group discussion, each small group reported out and identified the “most important” considerations that were identified in the discussion that the small group wanted to share with the larger group. The report out was led by an LSI facilitator to ensure adherence to scheduled time, but the most important considerations were identified by public participants.

Considerations and grouped themes identified by the meeting participants are listed below.

CONSENT

- Informed consent: Communities may not be aware, affluent, or fully informed of all risks and long-term issues. Adequate funding should provide the means for the community to be fully informed prior to consent. The information provided must be unbiased, and therefore present opposing sides to the issue. Adequate time must be allowed to access and assess the information.
- Model for “free, prior & informed” consent: This includes access to information, funding, people/experts as well as resources. These resources might include the people or organizations with expertise.
- Who has a vote: This requires a thorough, definitive list of players. Community/public, legislative, jurisdictional and cooperative authorities, zoning, local/regional/state, tribal regions, economic regions, etc. This must also include those communities that might be downstream, downwind, etc. and might be impacted in the event of leakage.
- Threshold: Consent must be defined with a minimal threshold. Fifty one percent or majority rule is not sufficient. The threshold, for each key stakeholder or representative body must be defined. This

threshold may need to be different for each party, such as local vs. downstream communities having a different threshold.

- Options: Communities might be swayed to consent in order to provide immediate economic benefits without considering other, alternative, non-nuclear options of economic solutions. An analysis of alternatives should be included in the process prior to consent.
- It is important to recognize the difference between “consent” and “consensus.”
- Let the community decide what consent means through:
 - Multiple ballots, referendums
 - The local ballot issue process (e.g., get enough signatures to get it on a ballot)
 - DOE technical support
 - Educational and informational support
- Need to expand the definition of “community consent.” States need to be involved. Could be a multi-state agreement (states with transportation corridors). Could include neighboring towns.

A FAIR PROCESS

- The best way to ensure fairness, trust, and transparency would be to establish a new organization to manage the consent-based siting process. DOE is too weighed down by the baggage of the past, and any federal agency probably would be. In addition, one participant noted that the legislative process in the United States is “broken” and nothing sustainable can get done.
- To see which communities are interested, consider sending an email to every local government asking them if they are interested. Include:
 - We need help on where to put this waste!
 - What do you think is the first step?
 - Do you want to be part of this?
- Have interested communities approach DOE
 - Send out an Request for Proposals on what should be done. This will map out the solution space, helping to find unidentified processes and new ideas.
 - Pay for the solution.
 - Send out two different Requests for Proposals:
 - What to do to resolve the waste issue?
 - Where to do it? (Which communities want to host?)
- Communication must be community-specific because each community will want to engage differently.
- DOE must go to “their table” and communicate in ways that work for the community, not just the way that is easiest for DOE.
- Need third party/peer review for vetting information that is provided to interested communities so it can be verifiable and repeatable.

- Consider a round-robin review where you pass research among the different groups to have each validate and verify.
- Engage with local universities to help build the consent-based siting process.
- Equity is a major issue.
- Federal-state relationship is a huge block. When you look at other countries, they do not have this structure.
- New Mexico is one of the states that said they wanted waste (referring to the Waste Isolation Pilot Plant, or WIPP). Some programs were run by the state for WIPP oversight, which gave states power/veto authority. This lent credibility and trust to DOE and trust to states.

RISKS AND OPPORTUNITIES

- DOE must examine and report the risks, and the communities considering hosting sites should be fully informed on every opposing side of these issues and their respective risks, including:
 - Real and perceived risks
 - Known and unknown, and/or not fully understood risks
 - Present risk as well as long-term risk (maintenance, monitoring)
 - Contingency risks, during site development, waste loading, transport, interim storage, deposit, sealing, etc.
 - Contingency risks in the event of failure, leakage, etc.
 - Risks associated with each stage and each location of the source, transfer stations (i.e., between road and rail), and the entire route of transportation

NATIONAL CONVERSATION

- Need to recognize that this is an unprecedented problem, needing unprecedented solutions.
- This is not about politics, it's about humanity.
- The nation needs to come together as a community to address the issue of nuclear waste.
- Crowd source the entire nation about what we should do with the waste.

NEW ORGANIZATION

- DOE doesn't have a good track record, even with contractors. Hire a different agency to implement consent-based siting process.
- Hiring the right contractor—not one that has been fired by DOE in the past or relieved of duties—is important.
- DOE doesn't have a good history of hiring the right contractors. Even contractors who haven't been fired may not be best contractors.
- DOE doesn't have credibility or trust among many communities. Another organization or agency is needed.

- A new nuclear waste management independent organization needs to be created. One of the questions that may need to be raised is: What is DOE doing now (with consent-based siting) if a new organization hasn't yet been created?
- A quasi-public corporation would be able to avoid the ups and downs of the election cycle and would be able to design and implement a long-term strategy. In order for the corporation to be successful, it should have:
 - A well- articulated charter
 - A “clean” (no strings attached), independent funding source, such as the federal Nuclear Waste Fund
 - An expert staff in all the disciplines needed to manage a consent-based siting process
 - An “inviolable” charter and relative immunity from electoral politics
 - A board composed of a cross-section of experts in various disciplines and national stakeholder organizations that have an interest and concern in the process. Some of the examples given were:
 - Scientific and technical experts
 - International experts
 - Archeologists
 - Risk management analysts
 - Local community advocates, e.g., the Energy Community Alliance
 - Communications experts
 - A utility representative
 - An environmental representative
 - A historic and cultural expert
 - In terms of how the members of the board of the quasi-public corporation are selected, various options were suggested, including the Presidential appointment with advice and consent of the Senate, an open application process, or a G-7 type group.

COMMUNICATION AND PUBLIC ENGAGEMENT

- Create an interactive model to help highlight issues and facilitate understanding of the nature of the proposed storage process. Allow users to manipulate the model and perform “what if” scenarios. This will help engage and educate the public.
- Need to be aware that there will be people who will want to misinform or dis-inform the process.
- Denver posted their budget model online and let citizens play around with it. DOE must make similar communication models and make them user-friendly.
- Need to engage independent sources/experts (not government or ex-government). Need to invite public experts and create the platform for sharing.
- Don't have experts say “it is safe.” This waste is not “safe.” Instead have them describe what is being done to make the waste and the transportation/storage/disposal process safe.

- Use groups like PIRGs (Public Interest Research Groups) or NCSL to research and publish independent, accurate, credible reports.
- Need a broad spectrum of communication options for public comment and participation, including online, face-to-face.
- Public meetings
- Mailers
- Website
- Allowing access to all scientific data/finds
- Public records

EDUCATION

- A challenge of providing the information on the technical details and potential impacts of a facility is to communicate the facts clearly without overwhelming the laymen with technical information.
- Education builds trust.
- Consent can only be given after a community has received the proper education.
 - STEM
 - Self education
 - Understanding of the benefits and risks
- Thorium Energy Alliance is a good model for local education.
- WIPP is an example of a program with a high level of community education.
- Energy producers are good sources of education.

REPOSITORY-SPECIFIC AND TECHNICAL CRITERIA

- Support reactor technology to reduce nuclear waste
- LFTR reactor is a different type of nuclear reactor that should be promoted. Produces far less waste/less toxicity as it is a liquid fluoride thorium reactor that does not use uranium. LFTR solves all the problems we're trying to solve now. Developed in the 1960s, it needs final development as there were problems with plumbing materials, separations, and other things. LFTR can burn up waste from the current existing nuclear reactors. It solves the problem of cumulative waste we have to store.
- The radioactivity will determine how we need to store it.
- Whatever siting plans we deal with have to know how much waste there is.
- LFTR reactor makes less waste and you can burn up waste from current reactors.

MODELS OR EXAMPLES

- Naval Nuclear Power: When U.S. Navy aircraft carriers and submarines are refueled and/or decommissioned, which occurs at a shipyard, the Navy procedures now in effect provide for safe and secure containment, transport, and final storage at other locations.

- Canada Towns: A book authored by Barry Rabe, describes a process used in Canada for successful facility siting, and includes their community negotiation process.
- Colorado towns have used a process to consider mining, milling, and other industrial processes. This is a process that considers economic benefits, impacts, risks, etc. Some towns have used this to approve, as well as to disapprove, mining and milling.
- WIPP
 - Involved many years of educating public
 - Performed risk-assessment
 - Adequate storage containers
- Rocky Flats is an example of what not to do
 - No positive local control
 - Poor clean-up
 - No mandatory safety standards
- The Project Development Model used for energy projects (which DOE is familiar with) may serve as a starting point to provide structure and detail. It includes technical, economic, and sociological parameters.
- Clean Valley Community Energy project
 - A lawyer objected. Is it "fair" to stop progress because a single individual doesn't like it?
 - Used a Request for Proposals
- The Wild River Indian Reservation business council
- Thorium Energy Alliance
- The experience of other countries should be evaluated.
- The United Nations, the World Bank, the International Atomic Energy Agency all have wealth, knowledge, and power and can deal with this type of global problem.
- Engage and involve those communities that have gone through past clean-up program to document lessons learned.

OTHER APPROACHES AND CONSIDERATIONS

- NORMS (Nearby or Onsite Removable Monitored Storage) approach to siting
 - The idea is to build a facility where plutonium waste from Rocky Flats could be stored on the site and could be moved nearby, if needed. If there are dangers leaving it onsite, like flooding, then bring it out temporarily to the nearby storage. The structure would have to be terrorist-proof.
 - Rather than putting the waste on the road, why take the risk of moving it? This approach avoids transportation. I presented a paper on NORMS to DOE at Rocky Flats. Only one person at DOE said it was a good idea. The idea was dismissed.
- Once the process for consent-based siting is established, authorities at federal, state, and/or local levels should establish legislation, regulations, and adequate guaranteed funding to ensure the process

Consent-Based Siting Public Meeting
Small Group Discussion Summary
May 24, 2016
Denver, Colorado

is implemented and fairly administered. This could include guarantees of compensation to communities impacted.

- Currently there is no incentive for the utilities to solve the problem because the federal government is paying them to store the waste.