

PURPOSE

On June 23, 2016, the Department of Energy's consent-based siting initiative hosted a public meeting in Tempe, Arizona at the Marriot Phoenix-Tempe Conference Center. 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 Tempe 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

- There are many stakeholders who should be included as part of a consent-based process, yet they should not have equal votes: the true local community vote is much more important than the distant players.
- Those who should be considered stakeholders goes well beyond the immediate community (i.e., all residents and businesses within 50 miles of a proposed site). Other stakeholders might include those who are farther downwind (in the event of aerosol release), farther downstream (in the event of leakage to watershed or aquifer), or businesses operating or transiting in the area, aircraft flying over the area, or non-local jurisdictions that overlap the community, etc.
- Although all stakeholders should be involved in the consent-based voting process to some extent, local voters should outweigh the distant ones. Perhaps a weighted approach could be adopted (e.g., $1/R^2$, where R^2 is the squared radius distance to site).
- County commissioners are elected for road maintenance, not elected for turning community upside down by making decisions about nuclear waste.

- County judges are looking for ways to help them make their budgets.
- Commissioners cannot give consent for public.
- Need publicly funded elections to opt out.
- The issues need to be well publicized.
- This needs to be a ballot issue.
- Need good representation to disseminate information in honest unbiased manner.
- Fear public will be left out of consent process.
- Avoid old model of approaching politicians first and ignoring public (e.g., public did not know of Andrews City Council approval of high-level waste storage facility).
- Consensus is needed within in the scientific community about nuclear waste storage/disposal.
- People need to be educated about nuclear wastes and for what they are signing up.
- Is there time to pursue a consent-based siting process?
- Fundamental disagreement between scientific risk and emotional component of the risk issue.
- Suggest building transparency by being open to the public. For example, the Paolo Verde site can be toured.
- Familiar risks are less scary.
- Need to consider security risks and the timeframe that guards and other security barriers will be required.
- Do you need different facilities for different types of waste?
- Nuclear waste can be moved from one site to many sites following federal regulations.

A FAIR PROCESS

- A consent-based siting process can have a template or standard process, but must be highly tailored to each community considered. Some of the unique aspects of a particular community might include:
 - Ability to handle a wide-spread emergency problem, including availability of a trauma center/medical reserve corps, emergency response capabilities, nursing capabilities, hazardous and/or nuclear waste response training of first responders, etc.
 - Geology, including seismic activity, substrate
 - Geography, including watershed
 - Regional weather conditions, including air quality, prevailing winds, severe weather, ability to handle severe weather
 - Nature of the nuclear wastes, type of material, type of storage. Must not be free liquid state.
 - Electromagnetic conditions/interference
 - Air traffic (flights passing over the site)
 - Tourism (e.g., likelihood that many non-locals might be in the area and would not be aware of the site and its risks).
 - Community economics

- Businesses involved
- In order for a community must become truly and fully informed information provided should:
 - Encompass full access to information and resources, including information known by corporations, environmental associations, environmental justice groups, etc.
 - Be tailored to the community (e.g., it may need to be provided in the local predominant languages, such as Spanish, local tribal languages, etc.)
- These meetings need to be held in communities that are affected.
- Access by all is required for these meetings. Consider locations so people can come if they want.
- All meetings need to be accessible via public transportation and easy to get to.
- Leverage technology for these meetings to allow more people access.
- Sometimes technology doesn't get the message across like face-to-face does.
- The process must now become very fair, and to do so, must be open, honest, and transparent to all stakeholders. All stakeholders should have full access to all the information that others have. A corporation that wants to handle, transport, manage, monitor, build the waste site, etc. must openly, honestly, and transparently disclose their information to public. No secrets. No surprises.
- Potential host sites should be responsible for their own well-being including (1) right of refusal, (2) having and understanding statistics about risks/accidents/incidents, (3) being involved in educating local population, (4) choosing the percent of the community required to achieve consent (e.g., a community may consider a supermajority vote as the required percent of the community).
- To ensure process is fair, everyone in community must be involved. Don't just go to the elected representatives; include everyone on that land. Community = tri county, local + state + tribal + everyone that could be impacted. This includes the tri-county area, radius of potential hazard area, people on transportation routes, and areas downwind.
- Engage the entire community of a potential host site. Go into the community not just once but repeatedly for ongoing organic conversations. But do not talk down to them and do not use jargon and acronyms that they may not know.
- The people in potential host communities need a sense of ownership in the process. Ownership is participating in decision making process with the same weight as government.
- DOE could announce in advance a "drop dead time" to give advance notice of when waste must be moved so potential host sites can plan ahead. Some people question what is the rush and the answer need to be provided as to why we should start now discussing it.
- Keep the waste where it is now.
- Move the waste from the current sites. In New England we were promised the waste would move and it wouldn't be long term. In New Mexico we were promised we wouldn't be a high level waste state. But when we don't put it in permanent disposal, you are forcing it on others. How do you make a political system that doesn't break promises?
- Create safeguards, including a trust fund if things don't go as promised.
- Possibly create more than one way monitor the situation at a site. Develop local industry, a local nuclear economy around the sites. Create an institution of knowledge that stays there for a long time. Grow valuable institutions in the communities around a site; then it sort of organically keeps growing

because that's where the activity is. This gives the community what needs to monitor the situation over the long term. Engaged people will monitor the DOE. You can create a whole industry that delivers not just short term benefits including technology development/advancement and knowledge locally, but also local industry related to manufacturing, stores, etc.

- Community needs to have a right of refusal or approval.
- Future generations. Who is going to guard these sites? Understand the technology?

TRUST AND TRANSPARENCY

- How to regain trust
 - Independent organization
 - Bring in third party arbitrator
 - Include mediators
 - Include environmentalists
 - Need proper checks and balances built into the process
- Need enforcement and oversight. Who do people trust?
- People trust OSHA.
- Office of Technology Assessment was a trusted local/state organization defunded in 1996 with no replacement. Would love to see the return of it as it is needed to inform policy.
- We trust airlines. We all fly. Airlines are a good model for safety as the FAA is a trusted organization that checks airlines for safety.
- Yucca Mountain did not go through because of prior dishonesty. Nevada didn't like being told what to do. That is the reason for this consent-based siting process.
- If DOE is listening and has neutral facilitators, they won't regain all the trust but if they listen long enough, trust will build. For instance, DOE accommodated San Onofre yesterday by meeting with them.
- These meetings and the process of consent-based siting are flawed
 - We fear we won't be listened to
 - Believe that a New Mexico site is a done deal
 - Believe DOE is telling lies about environmental impact, cancer rates
 - There is no trust
 - Baseline studies were interrupted after Three Mile Island
- We are concerned that "we" won't be part of consent process.
- We want a real consent-based solution.
- DOE is clueless.
- Seems decisions like this are based on going to community leaders that can be bought off: need to change that pattern.

- Transparency is required.
 - There should be no backroom discussion or deals.
 - Check out California - Brown Act, which only allows you to talk to one city council member at a time which is ineffective.
 - County commissioners cannot have secret discussions.
 - Must show funding sources.
- Have some stakeholder events and be prepared to share honestly and acknowledge past problems to facilitate movement forward. Create more constructive, human, honest interactive experiences for stakeholders.
- DOE must be honest in discussing the risks (both known and perceived), as well as the benefits to those most interested. There have been WIPP accidents, where 12 people were exposed to health effect. Consider Helen Caldicott's study. The problem is the DOE won't tell you all the statistics on risk. This is not all communicated.
- No secrecy. Openness includes listening to people at a potential host site (not just talking or presenting to them). DOE has a culture of secrecy and needs to be more open and be able to just admit if they don't know something. Openness needs to occur - listening sessions help.
- Involve an independent agency. However take caution: even "independent" agencies have been influenced through political or economic links that can make them not truly independent.
- Give potential host communities the ability to hire for themselves an independent group to educate them on the risks and how it all works. This group should have the right/ability to say good and bad things.
- People/individuals in a potential host community should have ownership and participate directly in the decision making.

ENVIRONMENTAL JUSTICE

- Minority communities should have an equal voice. These meetings should go out to Navajo and Shoshone that have already expressed problems.
- EPA has recognized and has an environmental justice program.
- Uranium issues on reservations: nuclear waste, contamination of water and soil and health effects. Nuclear waste problem has not been taken care of on Navaho Reservation.
- Broken promises by federal government; Salt River project – running water promised 25 years ago and still not there.
- Uranium waste comes under consent-based siting. Uranium mine trail on riverbank – not good; it's unjust. "I recognize what happened to you" and reparation.
- Tribal Nations are more vulnerable, in part because of displaced locations, multiple jurisdictions, multiple languages, customs, traditions and for complex procedures used for each of their tribal councils, etc. There cannot be a one-size-fits-all approach for all Tribal Nations. When a Tribal Nation is potentially impacted, the Nation must be approached to determine a tailored approach to gain their participation and possible consent.

- Traditional resources of Tribal Nations include their wildlife animals, livestock animals, native and cultivated plants, sacred sites, sacred waters, etc. Tribal Nations consider the impact to these, as well as the impact to the people and their economy.

FUNDING

- In England/Canada, government funds grass roots causes.
- Use money to fund marketing and information dissemination.
- Unclear how the \$25 million new congressional appropriations would be spent.
- In Yucca, used funding to allow the community to:
 - Facilitate participation
 - Hire specialists, like hydrologists
 - Comment on environmental statement
 - Help the community know what was going on
- How would you distribute that money to cities on the transportation route?
- Need to use the money to training first responders like volunteer fire department
- Fund grass roots organizations to help identify means of public involvement

RISKS & OPPORTUNITIES

- Talk about the benefits, such as incentives, but also those beyond financial benefits.
- Benefits must flow to the people of the towns impacted. If they stay concentrated on elected representatives then you'll have an unhappy community. Develop a mutual aid agreement.
- Evaluate the risk vs. benefit. Risks should include adverse consequences. With DOE, don't have the sense they have honesty when talking about the issues/risks/adverse consequences. Include all perceived and known risks. This might be where a new agency comes in.
- Start with the DOE giving a map of the best rock/best land. Communities who want to consider this have the power to begin negotiating. This gives them a strong position early on. Putting the ball with the community first let's them have a stronger negotiating position.
- Community should have real bargaining power during the negotiations, including being able to "name their price"/terms and right of refusal. A participant noted that is how WIPP started and then potash prices fell and the situation changed.
- Historically, local communities got the jobs and benefits, but downwind areas and people got impacted without the benefits. They must also be included in this new process.
- Congress can come in and "bigfoot" the consent-based siting process.
- The Nuclear Waste Policy Act needs to be changed to make a consent-based siting process viable.

NEW ORGANIZATION

- Design a new organization:
 - Stop DOE apologists having key roles

- DOE knows community/tribal groups who are monitoring/questioning
- Include:
 - Navajo grandmother who saw her grandchild born with deformity
 - ground zero people
 - leaders of grass roots groups
 - native people
 - oppositionists

EDUCATION

- Public meetings need to be held so that:
 - Mayor is not in charge
 - No politicians are running it
 - There is no intimidation
 - Ties in with cultural events
- Need to inform people that might not feel impacted, like people in large cities, so they can join their voice
 - This takes money
 - Must push resources/information

MODELS AND EXAMPLES

- Carlsbad Community Park Mural with children.
- Grassroots efforts.
- See DOE public model for Santa Fe.
- Communities have educated themselves and monitor radiation between Palo Verde and WIPP radiation.

OTHER APPROACHES AND CONSIDERATIONS

- If it's interim now, leave it there, until a firmly consented final repository is decided. Do not move the waste from one interim storage site to another. Move it only once (to a final repository).
- Local New Mexico people have not been engaged.
- Andrews County looking for money now that oil and gas is down.
- Regulations are not protective.
- Site and pollution can cross state boundaries.
- Need to consider contamination, ecology, hydrology before licensing.
- EPA should monitor radiation levels and be transparent about the results.
- Government should fund community's training and monitoring of radiation.

- All communities should have public monitoring of radiation available, claim government shuts down monitors before increases occur for nuclear facilities.
- Frameworks exist but we don't enforce them.
- System of Governance is very complicated in the United States.
- The question is not 100% safety: stuff happens, intentional or not.
- Most institutions do work by and large. The 1% of time when they don't, they get media attention.
- I thought Americans would step up to provide solutions to Fukushima – disappointed as U.S. are technophobes. U.S. can offer help but can't just be there because of the political process.
- DOE should consider this in the CBS process design:
 - Much of the current rhetoric, conversation, website information, as well as the DOE and panelist presentations at this public meeting presents a view of ideal conditions, that everything is entirely safe, secure, and environmentally friendly. Risks abound, problems may occur, terrorism might occur, communities may change their mind, changes could occur (i.e., weather, geologic, etc.) which could have dramatic negative impact.
 - In lieu of assuming an ideal, best case scenario, a worst case scenario approach should be assumed. In this way, the criteria for design of either an interim storage facility, or a repository, would take these criteria into account.
 - Likewise, the process for gaining community consent, should consider the same worst case. The community wants more information, more proof, more assurances, more safety, more financial guarantees, etc. in the unlikely, yet possible event of a worst case scenario.
 - This may mean design for worst case scenario, or a design with many worst case contingencies included.
 - The community should be provided and educated on all of this information as part of considering their consent.