

PURPOSE

On July 14, 2016, the Department of Energy's consent-based siting initiative hosted a public meeting in Boise, Idaho at Boise Centre. 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 Boise, 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

- Need to value Idaho's non-consent. Non-consent was voted on by a statewide ballot and could only be changed by statewide ballot.
- Idaho is a non-consent state. That needs to be understood and respected before the creation of a consent-based siting process.
- Engage the community every step of the way. If the community doesn't want it, it is a non-starter.
- The “Consent Framework” must be developed, presented, and understood before asking communities for consent.
- “Consent” should have a legally enforceable document with recourse.
- Transparent, informed consent will include laying out the options with all “pros and cons” even if there are options that some think are not viable. This process is to gain trust and be respectful to all.
- Consent must happen in terms of meeting commitments.

- Courts are an entity that could get involved. In Idaho, the courts approved the non-consent agreement and played a role.
- Consensus needed in a community to host a facility might be difficult to achieve because the term is not defined. One definition may be that consent to a decision “is one that you can live with.” Another definition maybe that “you have been listened to.”

A FAIR PROCESS

- Step one should be that the community hires their own panel of experts: a broad, sector-wide, independent panel not affiliated with the state or federal government or the DOE, but rather consisting of people like scientists, nuclear engineers, geologists, hydrogeologists, social scientists. No billionaires. These panelists should represent a diversity of views.
 - Subject matter experts will trust each other as professionals, so the question of integrity within a panel of subject matter experts would be less of a concern.
 - The panel would make assessments on safety and propose recommendations to the potential host site community and other impacted stakeholders.
 - It would be important to determine how to select a panel that is balanced and can be trusted when they say “this is safe.”
 - Both “sides” should choose their participants on the panel.
 - Strong need for transparency around how panelists are selected.
 - Recommendations to use subject matter experts and leaders in their field to help select the panel.
 - There is some concern about protecting and maintaining the integrity of subject matter panel once selected.
 - The panel should exclude those with vested interests either for, or against, siting.
 - The panel and the panel selection process itself needs outside oversight. Creating a citizen advisory board to help select the panel might provide outside oversight of it.
 - The independent panel would help clarify who the “voting stakeholders” should be when assessing the potential impacts.
- Who should take that first step, the community or the government?
 - This should be revisited; perhaps the government should make the first move. If the government (DOE or new agency) moves first, then they could first conduct an assessment, primarily based on the physical sciences (geology, geography, etc.) to identify regions that meet certain minimum, qualifying thresholds of criteria and therefore would be potential candidates. This assessment could be provided to the public.
 - Communities that might be considering hosting a site for the economic benefits alone and do not qualify otherwise could avoid the time and expense of pursuing a site, by knowing in advance that they are not qualified.
 - Communities whose location may qualify could be alerted to the opportunity and benefits. In this case, the community could leverage the opportunity by knowing, in advance, they are a potential candidate. They could then proceed with other consent-based siting process steps.

- Include things that would be deal breakers. For example: if you don't have this geological condition, it won't work. This will save the federal government money and time on sites that would never work even if they have local community consent.
- Create an advisory board that would include local government and private foundations with resources from federal databases.
 - This board would be a second-level of independence within the consent-based process. Its purpose would be to ensure the panel is not influenced politically or financially.
 - Provide resources to interested communities to pay for this type of panel.
 - The panel could be leveraged to help explain the potential impacts of the site as well as identify those who would be impacted and potential stakeholders.
 - The panel would deliver their site-specific findings and relevant information to the stakeholders in multiple ways such as print, presentations, webinars, and live events.
- Must have community buy-in to the process or people won't participate. Need a broad selection of the population to weigh in on the discussion.
- Use a tiered approach with all stakeholders. A small entity should not be able to make the decision. Needed broader consent.
- Involve stakeholders based on their objectives (e.g., assess familiarity with issues, proclivity to be for or against nuclear power and storage, etc.).
- Identify the relevant stakeholders for the specific facility.
- Involve anyone who wants to be involved.
- Fair is defined by providing access to information to support free debate and informed consent.
- A key question that must be answered is "who gets veto power?"
- It is possible that there is disagreement even within state government?
- A consent-based siting process will be complex and unique per state. There should not be a "one size fits all" national standard.
- Statewide referendum should be a requirement.
- Stakeholders' votes should be weighted proportional to their risk. Those closer to a site may have more influence than those farther away. For example, in siting WIPP, Santa Fe opponents received concessions.
- Communities must have access to experts who should be non-DOE persons (university professors, NIH scientists, etc.).
- The community that will potentially host a site must be involved in setting standards of safety and environment.
- A community can be defined by a number of environmental factors to include water, wind, seismic qualities, etc.
- Must be an inclusive process that defines all terms and levels such as "impacted community" and "stakeholder." Agendas and interest must be put on the table so everyone understands where others are coming from.

- Communities can be defined as those that bear the risks.
- Communities must have the option to pull/opt out of the agreement.
- Benefits must be clearly stated for communities that are considering hosting waste.
- Financial penalties must be clearly posted and communication to all affect parities if the facility fails (this is currently being done at the state level but not the federal).
- Any agreement between a community, stakeholders, and the regulation entity must be enforceable. Namely, there must be financial penalties for not meeting agreement milestones.
- The process must answer a lot of specific questions, including:
 - What does site selection mean?
 - What is interim? When is the end of interim?
 - Why have interim?
 - What defines final disposition?
- Affected communities include everyone in a watershed.
- Need to consider technical and intergenerational needs.
- Task number one should be independent science and independent scientists to help inform communities.
- Develop and use public-private partnerships to leverage lessons learned and address concerns during the process. A partnership would also be the mechanism for funding independent research and understanding “self-interests” and the impact on the process. The partnership would include neutral parties who could help bring and manage different and opposing views.
- The process should be chaired by community leaders, not government officials, industry or their staff.
- The process must be well supported and funded. Most activities and meetings should be held in person. Someone outside the community and government must manage the process so it is respectful, non-attributable, values different viewpoints, remains civil, and seeks common interests. Those who manage the process must be good listeners, understand and leverage group leaning, help build trust, help others make decisions, and keep people involved.
- The process must balance different needs and desires, must educate citizens at the grass-roots level, involve everyone at every step, and identify what has been learned at each step to use in future steps.
- Communities may be “gullible.” For example, they might be convinced to accept a facility that would not be in the long-term interest of the community, but meets certain short-term needs.
- Process must address NIMBY – “not in my backyard.” Storage will impact a large area that includes air, watershed, and other geography. In addition, considerations such as environmental and physical health must be addressed.
- Siting criteria must by identified first, then get interested parties to validate and narrow as much as possible to ensure focus, accountability, and up-front involvement.
- Provide geological parameters and site criteria and requirements for wet and dry siting.
- Stakeholders might be beyond state geographical boundaries.

- Impacted communities should recognize and include aquifers.
- Site needs to be an appropriate and suitable geological site; not just fair. Consider proximity to population centers and aquifers.
- When dealing with material that needs to be protected in perpetuity, look beyond local government and local community. This is not a local issue. It has a much broader scope and needs a tiered approach to avoid distrust.

TRUST AND TRANSPARENCY

- Trust must be established. One way is to not have people who have a stake in the outcome be the ones that educate a community. It must be objective and neutral.
- Trust can be built on honoring current commitments and making real progress on current efforts.
- A phased approach can build trust. Start with an interim storage facility and ensure that all commitments made in the agreement are met. Then begin to roll out more facilities and ultimately a repository.
- Federal Government has promised and not delivered. Needs to deliver.
- DOE needs to demonstrate that the public can trust them.
- Government and industry have been doing a bad job for 60 years.
- Need to follow through on agreements.
- Need access to facts first. Process needs to be as transparent as possible. Understanding the why: risks and pros/cons of options. Need a clear rationale for moving material twice.
- Need transparency with contractors, as well as private industry connections to government.
- CDC information needs to be checked for accuracy and timeliness of data sharing. Consider having third parties verify to maintain scientific integrity.
- Need to be able to trust communication by understanding who controls and provides information.
- There's always new and updated information based on new scientific methods or technology capability. This needs to be considered and incorporated into decision-making.
- Civics reminder: DOE does the will of Congress and the administration, thus we need to reflect the trust issue on Congress for providing clear direction and resources to keep commitments.
- Must balance privacy with transparency.
- Key is who controls and enters information.
- Information could be made available to everyone via libraries, universities, etc.
 - People who are interested can sign in and query about topics
 - Issue is who controls the information going in and out of this information system
- DOE or another organization must focus on building, rebuilding, and continuing to build trust to overcome damage done in the past with real or perceived violations of trust. They might:
 - Make all announcements “official announcements” with no leaks prior to the announcement
 - Ensure participation in the process is not “a waste of time”

- Factually answer “hard questions” and let those impacted decide
- Ensure process does not feel like a “shell game”
- Transparency would include having grass-roots public participation in all steps of the process.
- Transparency and independency needed in these areas:
 - What potential site communities are empowered to do or to have
 - Incentives
 - Risks and direct/indirect benefits
 - Outside panels to support potential sites (scientific/subject matter experts)
 - Storage technology for the potential site
 - Best geological requirements for storage
 - The entire site selection process
 - The definition of “consent”
 - The legal agreement and recourse of the “consent”
 - Independent and double-oversight entities
 - What decisions the affected community can participate in
 - What control, oversight, and influence they will have
 - What areas are negotiable?
 - What can they make legally binding?
 - What milestones are important?
 - How and when can enforceable penalties be used?
 - When along the process can they say no?
 - Why consider volunteering? What are possible incentives as well as indirect benefits? Need maximum clarification and transparency on benefits
- Transparency in incentives is important and should include direct and indirect benefits
- Taxpayers may feel taken advantage of. There should be transparency in the deal making portion of this process.

ENVIRONMENTAL JUSTICE

- Criteria for environmental justice must be established.
- Environmental and social impacts should help determine the breath of stakeholders who are involved.

FUNDING

- An example of using funds is a tribe in Utah. They received funds, hired scientists to educate them on options, and made a decision based upon unbiased facts.

NEW ORGANIZATION

- There is strong distrust and lack of credibility in DOE's ability to be the implementer of a consent-based siting process for a variety of reasons. This is a very strongly held and widely believed view. Many examples were cited, including echoing comments made during the panel question and answer session. DOE gets credit for requesting public comment and beginning the process to address nuclear waste management head-on, but neither DOE, nor its subordinate, will be trusted to be the implementer.
- Agree with the Blue Ribbon Commission that DOE should not be the entity to lead the consent-based siting process.
- A new, independent organization must be established (e.g., an agency, commission, council, etc.).
- This new organization must be authorized, approved and funded by Congress, and have the requisite authority, accountability, credibility, and transparency to fulfill this role.
- The organization must be non-partisan, and include representatives from Federal and State Government, as well as Tribal Councils.
- New agency needs to know that it's not in the business of promoting nuclear energy.
- The task of implementing a consent-based process and developing sites for storage and disposal should not be left to DOE. All the promises made by a previous administration are reversed by the new administration. There is no continuity in DOE decision-making.
- A new organization is needed: a quasi- private corporation to manage the process, completely separate from DOE. The board of this organization should have representatives of all interests including local government organizations and environmental organizations and not just what one person called "the true believers." It should have an independent source of funding that insulates it from the politics of the appropriations process. It should have access to the federal Nuclear Waste Fund.

FUTURE COMMUNITY ENGAGEMENT, EDUCATION, AND COMMUNICATION

- Need more than just flyers and notices; need two-way communication.
- Need independent sources of information.
- In-person visits of current sites. One participant had toured Idaho National Laboratory with an engineer and got to ask questions.
- Make this a "national conversation" and emphasize that the problem cannot be "kicked down the road."

MODELS AND EXAMPLES

- The NRC licensing process was offered as an example of a fair, science-based process for siting and licensing storage facilities.
- An example of things not going right is Advanced Waste. It was supposed to be up and running 2012 but is still not working.
- Carlsbad.
- How the nation addressed Polio and Polio vaccinations. Lots of education but some requirements.

- Hazardous Waste sites are regional entities. Solid waste is dictated by a county. Regional entity is responsible for long-term success.
- Community right-to-know process.
- There are existing training modules on informed consent-based siting that should be examined.
- An agency specifically accountable to the community for making sure terms of consent are being met.
- Superfund site process may have some good mechanisms.
- Good process by Hans and Annamarie Bleiker: Strategic Development of Informed Consent. Give all stakeholders all the information, before the decision is made. Different people will look at the same risks and see things differently.
- Charrettes.
- The Land Use Planning Model.
- Getting BPA out of packaging. Peter Johnson wrote articles for Harvard Business Review. Looked at how to get the people involved successfully and people came out happy.
- Siting Greenfield hazardous waste incinerators. Found some for clean harbor facility in Kimball, Nebraska. Started by trying to find communities likely to accept it. Spoke with people with strong familiarity of the issues
- INL CAB is a successful example of a panel working to address a complex issue.
- Look at the history of Idaho's decision.
- Need to look at more than just the social side of site suitability. Look at the technology and transportation, etc.
- A "top down" model like Yucca Mountain was mentioned as a bad model, although an industry representative noted that the NRC's Safety Evaluation Report concluded that the Yucca Mountain site met the NRC safety and environmental regulations.
- Finland's process for selecting a site.
- Nuke-Net. European information system originally designed to notify of problems.
- Need to learn about consent-based siting-type processes used in other (non-nuclear) industries. How do other industries, or other countries, pursue community consensus for non-nuclear waste challenges?
- Mitosystems.com.

OTHER APPROACHES AND CONSIDERATIONS

- The considerations and criteria of the consent-based siting process must address both aspects of physical science and community. These two aspects might need to be addressed separately or simultaneously, but they must be given equal effort, information, and resources in order to make a full and informed consideration. Perhaps, they should indeed be equally weighted, so that full consent must be independently achieved in both aspects.
 - Science includes these and other areas:
 - Geology, including seismic qualification

- Geography, including topography
- Biology, including forestation, wildlife, migration
- Biosphere
- Weather, including prevailing wind pattern & severe weather risk
- Watershed (surface water) & Aquifer (subsurface water)
- Community includes these and other areas:
 - Economics
 - Historical context (e.g., the state/region/tribe's past history for being supportive of nuclear power, waste and transport)
 - Social justice
 - Cultural issues (e.g., tribal councils)
 - Awareness of risks
 - Possible benefits
 - Incentives and disincentives
 - Safety, both real and perceived
 - Infrastructure (e.g., transportation)
 - Agriculture, livestock, etc.
 - Longevity of political/jurisdictional offices
 - Politics/political science
- The current stage is to identify the considerations for designing a consent-based siting process. Once the meetings are completed, the inputs considered, and a draft template created by DOE for the consent-based siting process, this draft must be made fully available for review, in several ways. This should include:
 - Independent scientific review
 - Analysis of both risks and benefits, physical science and community (e.g., much like an Environmental Impact Assessment must consider)
 - Review by current interim storage site managers
 - Open public review
 - Facilitated public meetings, similar to this one, to gain local input
 - Publication of the consolidated reviews
- This draft and review should be an iterative process, so a second (and subsequent) draft(s), having incorporated approved changes, is then again provided for review. This should repeat until such time as a new and trustworthy independent agency has been established, and there is a national-level consensus on the consent-based siting process.
- Information and criteria should be developed on what an acceptable storage or disposal site should look like and this should be based on the best scientific evidence available and should be undertaken by the new independent organization.

- The siting problem is too “big and amorphous” and the scope needs to be scaled down.
- Asking for a single yes/no decision will always result in a “no.”

OTHER CONSIDERATIONS

- Leadership is needed to create a complete plan for both nuclear production and waste disposal.
- Stakeholders considering consent should only be American citizens. Although some nuclear waste is sourced internationally, and/or managed by foreign-owned companies, “voting stakeholders” considering consent should only be American citizens.
- In presentations by the Boise panel and responses by panelists to various public questions, reiterated that the eventual consent-based siting process will start with a community self-selecting or volunteering to be considered, and that DOE is not currently proactively targeting any sites.
- Must use modern relevant data. Currently relying on “tobacco science” has to stop.
- The United States spends \$6 million a year on environmental cleanup that should be leveraged.
- Need independent evaluation of the need to transport spent fuel from reactor sites to interim storage site.
- Tension and frustration between supporting interim and permanent resides in the fact that we have failed in finding a permanent site. Nothing is getting done.
- Consider low-tech solution for first step.
- Put concept of need for interim storage and watersheds together.
- Once the consent-based siting process is established, it should be applied to Yucca Mountain. This might be used simply as a test case, to see what Yucca Mountain got right, and not right, and to identify any lessons learned. It could also be used to consider revisiting Yucca Mountain as a repository.
- There was a persistent concern expressed by many at the table that the DOE holding a meeting in Idaho was a sign that DOE was going to site a disposal site in Idaho. Another concern expressed was that the community around the site where the waste was generated has already “consented,” so let them take care of the problem (storage) they had consented to when they consented to waste generation.
- Skeptical that a consent-based siting process would ever work. The existence of different value systems make such a process problematic.
- Participants raised the call to stop making radioactive waste.
- Other participants emphasized the need to continue using nuclear energy as a carbon free, reliable energy source.
- Need to go back to reprocessing spent fuel.
- Until a repository is available, use the principle that waste must be stored as close to the source of generation as possible.
- Political leadership is needed to solve the nuclear waste problem. It’s not just one person’s job. There needs to be a plan to solve the whole nuclear waste disposal and production of nuclear material; not just where to put it.

Consent-Based Siting Public Meeting
Small Group Discussion Summary
July 14, 2016
Boise, Idaho

- The reason for talk of multiple sites is that defense waste is older and colder. Idaho has DOE Cold War defense waste and does not have commercial waste, which is newer and hotter. This bears on the argument of who is responsible for the waste and when assessing communities, who is likely to accept each kind of nuclear waste.
- Cannot go into negotiations if there is not an understanding of what you are negotiating. What type of waste, how much, and for how long?
- Define the objectives first; is it interim storage or a long-term geologic depository?
- Define what the facility is: pilot, interim, or permanent. Need clarity about what is being done and why. DOE could meet its obligations by taking possession of the current sites.