

## **PURPOSE**

On June 2, 2016, the Department of Energy's consent-based siting initiative hosted a public meeting in Boston, Massachusetts at the Hyatt Regency Boston. 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 Boston, 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**

- The consent-based siting process should not be pushed from the Federal straight down to the communities, but should more directly involve the states, and then proceed to a more local level.
- Appropriate authorities in each state—including state government and U.S. Senators and Congress members representing the states—should be engaged.
- A letter should be sent to the governor of every state inviting their potential support, to be used as a process of elimination. This will help identify candidate states to pursue further development of a workable repository site (i.e., to avoid a repeat of the Yucca Mountain type situation).
- State and local support is critical, as well as private industry capability, and the communities should be aware of where this support lies.
- Potential for state-level or citizen advisory panels to be involved.
- Communities need to know to what they are consenting; the DOE needs to have a plan for community to consent.

- Before a community would consider consenting to host a site, they must know that the waste will be safely transported from its source to the disposal site. Although the community does not need to scrutinize the transportation process itself, the community would need to know that process and each alternative route would have been properly vetted, viable, and approved. For a community to consent to host a site without such knowledge, the community would be complicit, and might be potentially allowing endangerment along the transport routes.
- The consent-based siting process needs to be developed such that:
  - Discussions are not dominated by anti- or pro-nuclear groups or perspective, and they cannot exclude those who live around a potential site and those afraid to be involved in the dialogue.
  - Engagement includes a better representation of the community and not just the extreme edges.
  - All representatives with different opinions/voices/ages/economics/etc. are heard in order to have consent.
  - Includes a diversity of representation.
- If we have not heard from entire community (or a fair representation of that community) we don't have consent.
- In order to reach a decision on hosting, the process should include performance measures or standards, not only on the technical and scientific siting information needed but also "social/community" performance standards on the amount of community engagement provided and the transparency of the process.
- Consenters must be informed and fully understand.
- Anti-nuclear activists should be included to help inform other viewpoints.
- Consenters must have good facts including the impact on health. Facts seem to be in short supply - such as impact of the radiation on health. Communities want to have information about what could go wrong.
- Have polls - to ask them what they know/understand. Ask them where they got their news from. One person's informed is not the same as another's.
- Ultimately we cannot define consent for everyone. Try your best, but you may not have valid consent. We do live in some manner of democracy: it's majority rule. So is this consent a simple majority or a supermajority? How do you quantify it? There must be some democratic process, but consent has to be decided and given by the actual community. This leads to the question around "who is the community that gives consent?"
- Who gives consent?
  - Geographic - as large as could be impacted by a worse case scenario. We've seen the impacts of Chernobyl and Fukushima and the devastating effects on communities. So consent must be given by as large a community as would experience a worst case scenario.
  - Consideration for people closer to the site - give them a greater say.
  - Those who are closer proximity to the facility might have more incentives. But look at Yucca Mountain - this was top down with lots of incentives.

- People from prior devastated, damaged communities should be involved.
- Current “host” communities should also be included.
- Build in consent protection for future generations. This includes negotiating with a specific host and the things to negotiate may vary by host. All the agreements will look different - no one size fits all.
- Involve multiple generations. Engage pre-Ks and schools or have advocate organizations for kids; also include colleges.
- Tribal Nations may have a different view of inter-generational; this should be considered.
- It may be interesting to go back to current hosts communities and ask them what would it take to have them agree to keep it. It may make sense to have them store the material in the interim, however in many cases the truth has changed, or new safety concerns have arisen making some of these sites not ideal as storage sites.
- Criteria must be scientifically founded and peer reviewed. Specific criteria include things as such as the panel mentioned: arid climate, sparsely populated, adequate transportation including rail cars that don’t look like targets for terrorists.
- Criteria are part of the transparency. People don’t want to be lied to. Criteria was bent at Yucca and that will break trust
- Criteria must be constantly re-evaluated over time and re-communicated because it does change. You cannot inform people only once. This impacts renewed consent.

## **A FAIR PROCESS**

- In order for trust to be engendered, the parties involved in future processes for siting a facility need:
  - the power and authority to negotiate
  - resources to hire their own independent experts
  - a community-based education process
  - state and company agendas need to be clear and understood
  - it should be a phased process
  - mediation should be used to resolve disputes
- A wide range of viewpoints all need to be factored in to the consent-based siting process – minority, majority, and proximity to the location.
- Buy-outs of property owners close to the proposed site need to be provided. If people are displaced by the facility, they need to be taken care of. Some participants believed that host communities in the past have not been able to participate in the NRC licensing process (i.e., there was a lack of due process and limited access to information). However, the NRC adjudicatory process was cited as a process where communities, given the resources, could participate effectively, and influence the siting decisions.

## **RISKS AND OPPORTUNITIES**

- State, local, and specific communities, and the public at large should have full access to information, resources, and funding in order to be adequately informed, in order to make decisions.
- Information and available expert resources should be fully disclosed and funded.
- Communities should have access to opposing views, such as:
  - Different storage solutions
  - University and National Laboratory as experts, researchers, knowledge providers, studies, etc.
  - Different industry solutions
  - Alternative solutions, including non-approval
- Must have transparency to the host communities and taxpayers. This is important to the siting process because it has to do with transparency and trust.
- Who pays for the sites and the costs of executing the process? Right now it's taxpayers and rate-payers. To be fair, everyone pays their share. Perhaps those who have profited should pay more.
- Transparency on who benefits - there are corporations who have benefited hugely. Perhaps there should be limits on profits. High profits weaken trust and make people cynical.
- Early and ongoing estimates of costs to bid, secure, and maintain the site. People need to know what it's going to cost and really is costing-- they may change their minds.
- Disclose who benefits - for-profit or non-profit organizations maybe involved. It may or may not be realistic to think this could be a non-profit exercise. Non-profit is a misnomer.
- Contractors and insurance companies should be liable.

## **NEW ORGANIZATION**

- The basic building block for the organizational framework would be a citizen advisory board or panel ("board") at the local level, with state-level participation. However, the board should not be chartered by the company and should not be controlled by the state.
- The potential host community should be in charge and should set the agenda. This process should occur before a license application is submitted to the NRC for an interim storage facility.
- The board should have the resources to hire independent advisors and experts. Performance measures would be used to guide the process and to evaluate whether the process was fair. These performance measures could be established on a national level by an organization like the National Academy of Sciences.
- In order to gain trust, a new, independent agency should be established, one with no conflict of interest that can review the science, remain impartial, lacks a vested interest, and can include all viewpoints. Maybe the new agency would include people who do not know anything about nuclear.
- Participants disagreed on the level of involvement of the government.
  - Some believe government must be removed from this process completely.

- Others believe it needs to get out of the lead on this process—still participating but not as a decision maker.
- Some believe it is impossible for the DOE or NRC to divorce themselves completely from the industry and this process.
- Others believe there must be no conflict of interest, stating the government can't both promote the industry and regulate it.

## **EDUCATION**

- Conduct workshops for high school students and younger generations
- Include multiple demographics
- Give more people a voice in what's happening
- Public doesn't know it's an issue so don't come to meetings to learn and advocate
- People freak when they hear “nuclear”
- Share risks and benefits of nuclear energy
- Can't just focus on safety
  - Include history, how nuclear was developed
  - Has been fear-driven in the past, include risks and benefits
- Include technical people
- Gain trust through building multi-disciplinary education pipeline focused on consent-based siting.
- Communities should be told how much spent fuel would be stored at the facility, how many other communities are being considered as interim storage sites, how much total spent fuel will need to be disposed of, and how many facilities will be needed.
- DOE “units of measurement” versus those of the NRC are hard to reconcile. For example: Celsius vs. Fahrenheit. In communities where waste is generated they speak the language of the NRC. This makes it difficult for communities to translate. Education needs to include translations of various measurements.

## **MODELS OR EXAMPLES**

- The Prairie Island Indian Community's intervention in the licensing proceeding on an Independent Spent Fuel Storage Facility. Current sites where spent fuel is stored were not asked to consent and we need to think about how current sites can be compensated for the spent fuel stored there.
- A license application for a facility to store spent fuel in West Texas was cited as an example of a community not giving consent and not having the resources to evaluate whether a facility should be located there.
- The process used to consider siting a “bio lab” facility in Boston should be evaluated, as well as the process used to consider a repository at Yucca Mountain.

- The Yucca Mountain experience demonstrated that a top down process, basically forcing a facility on a state or community doesn't work and is not viewed as a fair process.
- The communities of Plymouth and Wiscasset, where the Pilgrim and Maine Yankee plants are respectively located, were cited as examples of where the communities were never asked for consent.
- NYC "We Act" – Dealing with superstorms like Sandy
  - community based
  - developed action plan
- NYC "Street Fight" – Engaged the public to make communities pedestrian-friendly
- Boston
  - 1 of 4 cities chosen to host national infectious disease Bio Level 4 lab
  - Citizen Advisory Board
  - Government approved funding and told BOS that it was hosting the lab, no consent
- WWII – everyone rallied around the issue and worked together to solve it
  - Need education so people understand about the waste and storage questions
  - Needs to be top-down – President can make the public aware
  - Follow with brainstorming ideas of what to do, including scientists, using top-down, bottom-up, and in-the-middle

## **OTHER APPROACHES AND CONSIDERATIONS**

- DOE is addressing a consent-based siting process, but it is not fully clear to the public where the focus, nor the priority, lies. Although the eventual intent is for permanent, geologic repository, the consent-based siting process should address all of the following:
  - Current on-site storage of active plants
  - Stranded storage of closed/retired plants
  - Interim storage
  - Permanent repository
  - Transportation between the sites
- Interim storage should be the primary focus, and the first to have an approved consent-based siting process. Interim storage may continue for a long time as the only approved site(s) with consent, while waiting much longer for a final approval and development of a permanent repository.
- The license for each power plant defines that the fuel is owned by the plant licensee. The nature of the fuel itself, and its waste, can vary from plant to plant, and its unique nature, and the ownership of the fuel, must be taken into account in the siting process.
- Move waste to interim storage from shut-down facilities now
  - Add top 5 producing sites that are at risk

Consent-Based Siting Public Meeting  
Small Group Discussion Summary  
June 2, 2016  
Boston, Massachusetts

- Host a public forum including DOE, NRC, EPA, Entergy (including all government decision makers), local governments, and citizens
- What about solutions other than interim storage/permanent disposal?
  - Reprocessing spent fuel
  - Using advanced technology to find other alternatives
  - Getting an expert panel together to discuss other solutions
- Hardened On-Site Storage (HOSS) seems to be a solution
  - No moving of waste required
  - Reduced danger
- If the decision is to keep waste where it currently is as an "interim" solution:
  - There needs to be a local discussion/decision
  - Start with informal discussions but realize that there will be a lack of knowledge of what's happening with nuclear waste
  - Need to stop generating waste now since there is no way to store or dispose