

PURPOSE

On April 11, 2016, the Department of Energy's consent-based siting initiative hosted a public meeting in Atlanta, Georgia at the Georgia Institute of Technology's 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 Atlanta, public participants self-selected small groups in which to participate. Discussion group composition was relatively diverse with representatives from state and local government, advocacy and community groups, and the nuclear industry. There were three to eight 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.

“Most important” considerations and grouped themes are listed below:

CONSENT

- Need to define "consent"
- Need “earned-consent” and trust by DOE or an independent agency
- DOE should not assume that the site will be approved
 - Instead of “assumed-consent,” DOE must become fully engaged with the community and address its site-specific issues to achieve “earned-consent”
 - This can be achieved through a trustful and realistic process, to provide a lasting, durable solution
- Consent must be pursued differently for each community, given that their needs and issues are site-specific and unique
- Consent may look different in various communities
- Consent-based siting should not be too specific

TRUST DEFICIT AND A NEW AGENCY

- In lieu of DOE, an independent agency may be a better fit to ensure ongoing trust and “enduring consent”
- Integrity and lack of trust are current issues to deal with
- A fundamental issue is that many do not trust the DOE and the nuclear industry
 - An example of a time trust was violated was the Waste Isolation Pilot Plant (WIPP)
- A non-DOE entity must be created as a first step to establishing and, more importantly, executing a consent-based siting process
- Agree with the Blue Ribbon Commission (BRC) that a new entity must be foundational for any consent-based siting process to succeed
- Need to have a new organization (independent separately funded) dedicated to oversight and management of waste
- Implementation may require a new, independent agency, which is also independent of politics, to build the trust and earned-consent of communities, and to maintain and monitor the site
- DOE has lost credibility with the community and any attempts by it to solicit input would be seen as less than authentic
- Trust in DOE is low to non-existent and an independent, federally chartered corporation with access to funds is needed to create/manage this process
- History has shown that it does not work out the way they say it will; sometimes this is due to a change in administration or economic conditions
- The DOE needs to prove they will deliver what they promise through every step of the process
- DOE may be the right agency to develop the CBS process
- While there is value in the DOE beginning the public solicitation for the purposes of creating a consent-based siting process, only the newly formed entity can truly perform this task
- Use an unbiased "watchdog" during the process to ensure that stakeholder interests are being taken care of
- A (new) organization needs to have balanced and diverse viewpoints (e.g., not just loaded with Georgia Power people) and should not involve people who have been in charge of nuclear waste to date
- The organization must include and engage viewpoints that truly represent communities of color, lower education, lower economic status, etc.
- Building trust in the new organization will take time and needs to start at the local level
- The new entity would be able to attract a larger number of public persons to participate because it would have a greater level of trust and credibility than the DOE
- The entity would be responsible for several key tasks:
 - Establishing clear host site requirements (scientific) for both storage and disposal
 - Educating local communities as to the benefits and risk of becoming a host site

- Providing funding to potential communities to evaluate their qualifications as a host site
- Establishing and executing the consent-based siting process
- Entering into binding contracts with each local host site

COMMUNITY-SPECIFIC PROCESS AND ENGAGEMENT

- The consent-based siting process should not be a one-size fits all process, but a template-based process that is then adapted to each community. For example, the following can be included:
 - Awareness and education
 - Facilities already in the region and or under development, including current and shuttered nuclear power plants, nuclear disposal, nuclear raw material mining, refinement, transportation, and other “all things nuclear”
 - Experience of the community of all things nuclear
 - Political and jurisdictional aspects, boundaries, and authority, as well as the long term political stability to support the site
- Need flexibility from one state to another and to be able to engage impacted states and/or communities to find out what is important to them
- Communities should consider the risks and nature of the storage
- Communities need to be clear about what they are doing and getting
- The community and/or county should be informed and educated on:
 - The background and issues of nuclear waste and its long term storage or permanent disposal, including costs, risks, as well as benefits
 - Manner in which the county or community will not “be stuck” with costs, risks or other issues not originally disclosed, or those that emerge over time
- Assurance that an ability to make progress is essential; progress must be made over time in accruing direct benefits, indirect benefits, and various opportunities
- Meaningful community engagement is frequent, routine, transparent, fully integrated, diversified across age groups, different areas of the country and metro vs. rural

FAIRNESS AND VOLUNTEERING

- Fairness needs to include the sites currently hosting waste that had no input into decisions, e.g., existing DOE sites
- The site should volunteer for the duty, not be "rushed," "pressured," or "bribed" into the decision
- Communities need to volunteer for it
- Looking for volunteer communities has a downside—encouraging communities to volunteer because of benefit considerations without considering technical and social equity issues
- Mechanisms of backing out—“off-ramps”—need to be figured out giving prospective communities the option to opt out at any point in the process

- The “off-ramps”, exit-plans, terms of divorce, or other contingencies in the event of the site failure, or the revelation of new, emerging, or previously hidden information
- How would the community be able to change their mind, stop the development, etc.?
- Must have the ability to create legally enforceable agreements
 - Need to determine when and how cities and states can get out of their agreements
- The process should be a “bottoms up” process rather than a “top down” process like the Nuclear Waste Policy Act of 1987 that designated Yucca Mountain in Nevada as the preferred site
- Bottoms up, grassroots approach with benefits, responsibilities, timelines, and ownership
- Communities can change over time and because the siting of a nuclear waste storage/disposal location is a long-term decision, a legally binding agreement must be established that takes into account the changing dynamics of a local community and protects the integrity and sustainability of the siting solution
- Establishing a contract between the local community and the federal entity that is bound together through state laws demonstrates an equitable, fair, and open process

ENVIRONMENTAL JUSTICE

- Environmental justice is important but must be balanced with self-determination
- The history of state and federal decisions seems plagued with environmental justice issues and the participants want Executive Order 12898 to be enforced and considered when developing and implementing the consent-based siting process
- Communities must not be excluded simply to avoid environmental "injustice"
 - The process needs to allow for self-determination by a community
 - Ensure communities truly understand the details involved with becoming a storage site
- Earlier “volunteer” sites admitted that facilities like the Savannah River site did bring economic benefits to the community, although residents in the surrounding community still had fears about nuclear explosions
- Take environmental justice seriously
- Addressing needs of vulnerable populations/environmental justice
- Using equity as a guiding principle to avoid disproportionate impacts

WHO SHOULD BE INVOLVED

- Binding contracts between the new entity and the local host site must be established and ratified by the state legislature where it is located
- Decisions must be made by more than just the local people; must go beyond to regional or state line
- Involve people who have legal enforceability at local, regional, and state levels
- Involving private companies might help support financially
- Consider if private companies should put up an escrow in the case they walk away (\$10M?)

- Need to involve anyone who might have a role in preventing this from taking place
- If legislatures are a part of this, decisions should not be made during election years
- State and Federal congressional representatives would be the “voice of the people” in ensuring that the contract was being followed
- Role definition is needed for the DOE, State, Community, etc.
- Name the players and who is responsible for what part
- Multigenerational ownership: Who is the entity?
- Full integration of communities, and how community boundaries are defined
- Communities of color need to be included
- Need to identify exactly who the stakeholders are and will be
 - Might include anyone in the water table, and anyone growing food in the area or eating food from the area
 - Who are the truly affected communities and "rightful" stakeholders?
 - Some might not really be stakeholders.
 - For example if they come from Alaska to protest, are they really stakeholders?
 - Are people who live on a transportation route really stakeholders? They might be, and might not (pay taxes, etc.).
- Those who attend meetings tend to be biased, how do we balance that out?
- What if there aren't any or enough communities willing to do this?
- Bring divergent communities together to “drive” problem
- Not all advocacy groups are adversarial, but all are critical to the success of a program such as this
 - Ensure that they are invited and included
- The process needs to manage extremism on both sides
- Hear from both sides (currently it is industry-centric)
- Process driven by a broad group of stakeholders, not by industry, but including industry
- Avoid the “Company Town” syndrome (which is biased) and get all voices

NATIONAL CONVERSATION

- The consent-based process should be a truly national process, involving many communities and many ordinary citizens
 - The existing DOE process is not truly “national,” as in all-inclusive
 - The current process does not involve as many local communities or average citizens to be considered a truly “national” process
- A community or state's belief that they were helping to solve a national problem should not be minimized

- It can't be assumed that this belief would not play a role in bringing a volunteer site forward
- Whatever process we design needs to be adequate and include full and open public participation

COMPONENTS OF THE "INTEGRATED WASTE MANAGEMENT SYSTEM"

- The storage/disposal result seems decided; will alternatives be considered?
- The "result" has already been decided for nuclear waste disposal: pilot, interim, permanent disposal
- Leave the spent fuel where it is until a repository is available
 - Leaving spent fuel where it is at the many locations around the country is avoiding any potential hazards of transporting the waste to an interim storage facility
 - There are economic reasons to not move it off of multiple sites
- Considerable benefit to consolidated interim storage facilities as part of an integrated waste management program, including technical, economical, and societal
 - Recommend consolidation to reduce safety, security, and community concerns
 - Storing waste at multiple sites exacerbates safety, security risks, as well as deprives the existing communities of opportunities for economic development at a "cleaned up" site, or continuing psychological worries that some residents have of being near what they perceive as a dangerous operation
 - Reduce the potential "targets:" Storing wastes at multiple sites for a considerable length of time and even if we do have volunteer sites, there will still be a lot of waste remaining at many sites
- No common agreement that an alternative is to work with existing storage facilities to become permanent disposal sites using the Nuclear Waste Fund to support program
- Institute dry storage at reactor site and accelerate commercial transfer to dry to have "event" that will bring diverse communities together
- Something should be done for on-site storage now
- Need two permanent sites: Yucca Mountain is not large enough now to store all the waste
- Determine if interim storage will still be linked to ultimate disposal
- Any community considering storing needs linkage to a permanent repository and an active process to get one
- Pilot should be able to move forward without linkage
- Is transportation a "wrench" we want to throw into the process?

OPPORTUNITIES AND RISKS

- A site brings risk, it also brings significant and long-lasting opportunities, which may also be site-specific.
 - Opportunities may include:

- R&D by scientific, industry, and university participants
 - Fuel conversion, which can become a game-changer
 - University to become a recognized Center of Excellence
 - Regional economic benefits
- Need to provide jobs for the community, not just contractors who come and go
 - Potential financial incentives are important—what are the long term financial incentives to a community for:
 - Developing a site?
 - Delaying the development of a site?
 - Maintaining an approved and functioning site?
 - All benefits, risks, liabilities, costs should be identified and balanced in the design of a consent-based siting process
 - All risks, impacts, liabilities, costs, and benefits should be evaluated in designing a consent-based process or in enacting legislation to establish a process
 - The difficulties of balancing these costs and benefits are important, as the benefits are widely spread through the country as a whole, whereas the costs usually are narrowly imposed on a community or region
 - DOE should let people know what sorts of things they are willing to offer the host community
 - Some suggested that only incentivize the communities that are willing to go forward; others suggested the incentive money should be used to provide education for the communities considering becoming a site
 - This incentive money would educate about geology, how much employment would occur, train loads, water tables, etc.
 - Need to be artful in designing incentives to be sure people are not disingenuous to waste taxpayer dollars
 - Concerned that some communities might want incentives from Step 1 but won't go forward from there.
 - It's hard to find the balance between "buying" and volunteering

COMMUNICATION

- Communication is critical to the success of this process
- That includes early and detailed communications about this meeting as well as others as the process progresses
- DOE must ensure that the consent-based siting process is fully transparent with easy and open access to the public
 - Documents and other information are currently hard to find
 - This should include full disclosure of the risks and potential impact to surrounding regional environmental and health concerns, for each respective community and site

- All communication must be clear and understandable by all participants, including a detailed meeting purpose, what's in it for me? and a point of contact to call (not email, not a web link) to get additional information
 - This will help include more "regular" citizens (some who may not have or use internet) in these and future meetings
- The sooner communication can be distributed, the better
 - Last-minute communication about events such as this public discussion gives off an appearance that the DOE doesn't really want that many participants and adds to the diminishing trust in that organization and this issue
- Establish and execute a communication plan
- Inform, involve, integrate with integrity and inclusivity
- Actively inform any stakeholders about what is happening
- Need humility from all organizations with good communication, especially the DOE; explain, don't "look down"
- TV and radio ads to inform to reach the community
- Need to publicize information in an understandable and accessible manner—some do not have internet access
- Talk to churches, communities, schools, etc.
- Communities need information on safety after siting as well

EDUCATION

- Need deep education on risk
- Deep education is needed beyond “lay stuff”
- Identify educational components:
 - Public, politicians, regulatory, government officials, governors
 - Mayors, city councilmembers, zone of impact
- Framing the challenge so it is understood by local citizens
- Problem well enough identified to have a broad suite of alternatives
- There is little knowledge among the general population about nuclear related risks/exposure/etc.
- “What is the worst thing that could happen” needs to be addressed
- Education needs to:
 - Happen early
 - Discuss the effects of radiation
 - Deal with media scare tactics
 - Address fears
 - Lay groundwork for further education needs

- Define the terms for the public in easy language
- Basic education needed on:
 - What is radiation?
 - What are the effects?
 - What are the risks?
 - How to identify issues
 - What is the problem and how big is it?
 - Who pays the cost of moving it? This is an education point
- Beware of scare tactics vs. education: The audiences have fears and do not trust the government and some audiences are not informed on all the issues
- Education at the site should be proactive, with a lot of outreach
 - Should be balanced with information from all viewpoints
- Adequate funds need to be allocated to education

PLANNING AND SCHEDULE

- Need to balance getting the job done with informing and involving stakeholders—getting it done on time
- Need to do something about problems immediately; not doing something aggravates trust issues
- Need to address both urgency and time
- Don't rush
- What is DOE trying to achieve with the current effort to design a consent-based process?
 - Is there real commitment by DOE to truly follow-up?
 - Concern that the energy, resources, and time spent on designing a consent-based process is “squandering” an opportunity to implement the siting of the two “away-from-reactor” facility license applications in Texas and New Mexico
- Public input (this meeting) needs to be integrated into the plan
- The consent-based siting process must lead to a goal; the DOE sometimes confuses the process as the goal
- Consequences: Need to consider what's at stake? What is the cost of inaction?
- Do not let the methodology paralyze the project

COSTS AND FUNDING

- The “funding issue” must be fixed at the start
 - This would include the need to be transparent about how much money is in the fund and how the funds are to be used
- What are the costs?

- Which solutions provide cost-avoidance or savings?
- Look at “liabilities”: The judgment fund is an example
- All taxpayers bear the costs
- Money flowing to local communities so they can ascertain risks and benefits
- Minimize reliance on government funding
- Build medical coverage for potential damages into the cost of the site

SAFETY AND TECHNICAL CRITERIA

- DOE should identify the specific criteria that are unique when the site will be a permanent repository. This criteria should include:
 - Technically safe: Technical criteria for temporary storage vs. permanent disposal are different
 - Socially and culturally acceptable
 - Define the deciding jurisdictional authority
 - Current with oversight and quality assurance built in
- Technical criteria and standards for interim storage and geological repository sites must be established in parallel with the consent-based siting process
- Clear technical standards and criteria are needed for host sites for interim storage and geological repositories
- Be clear on what the constraints are from the beginning
- There should be an ever-present culture of safety, science, and sustainability
- Need to address concerns about transportation safety and not just blow them off
- Must be a monitoring system in place, to ensure the community remains safe
- After siting, sustainability is a must
- Need unbiased world-class geologists to find stable locations; we should begin by finding stable places
- Need to gain an accurate understanding of the health risks
- Health effects from nuclear waste can take time to show up

REGULATING AND PERFORMANCE MONITORING

- There must be a mechanism for the local site community to monitor (e.g., verification and validation) the terms of the contract
 - If any violations of the contract by the site are witnessed by the host community, then a response/enforcement by the Nuclear Regulatory Commission (NRC) to investigate would take place
 - This ensures that there is a necessary level of community well-being and transparency throughout the host process

- What changes would be required to NWPA, RCRA, and The Clean Air Act to address local control?
- How and when will the laws be changed to support consent-based siting and local control?
- Minimize reliance on the regulatory process
- State regulatory component
 - There might be disagreement on what a “state regulatory” role is or should be in the future
 - Should it be consultative? What should be the state’s role?
 - How involved? What would authority would it have?
 - No dispute with the need for state involvement; only how much in regulatory area
- How is non-performance by DOE compensated?
- Oversight of construction, management and funds (\$25B)

OTHER MODELS OR EXAMPLES

- The process that was used to establish the basis for the health care legislation in California
- Consider successes, failures as well as lessons learned in other sites, including those outside of USA; e.g., site in UK that failed
- The original Nuclear Waste Policy Act of 1982, that had a broad site selection process, might work much better; however, the nuclear industry may be able to manipulate the process
- What are other countries were doing to solve the nuclear waste problem? The Swedish example should be followed, where success was supposedly assured because Sweden has decided not to produce any more nuclear waste
- Look at France, Sweden, and Finland for best practices
- France did a good job in educating their communities early in the process
- Consider NRC's licensing process for getting public input (URENCO facility licensing in New Mexico is a good example)
- Oversight and accountability (i.e., NEPA)
- Use existing models and improve
 - NEPA hang a lot on this tree
 - CEIP
- Process design is collaborative, charrette-driven, and accountable
- Shouldn't try to reinvent the wheel—we have seen and encouraged requirements for a lot of things
- Collaborative problem solving models

OTHER CONSIDERATIONS

- What are the other alternative plans being considered if this site is not approved? Can that include an “analysis of alternatives,” including “no action?”
- Do we even want to keep producing more spent fuel?
- Stop making nuclear waste for a while to demonstrate that DOE is serious and we can trust you
- Conflict resolution should be built into process
- Nature of facility itself will shape how a community reacts to it and the commitment scope
 - Danger in lumping together repository versus temporary storage
 - The type of facility might impact the risk of the party walking away