ECA Meeting Summary

Building a Business Case and Identifying Economic Opportunities

for Consent-Based Siting
July 17-18, 2024
Washington, DC

In July, Energy Communities Alliance (ECA) brought together over sixty state legislators, local government officials, Tribal members, federal officials, nuclear industry leaders and experts to consider elements of consent and economic development opportunities related to hosting a consolidated federal interim storage facility (CFIS). ECA's meeting "Building a Business Case and Identifying Economic Opportunities for Consent-Based Siting," the second ECA has hosted this year as one of the U.S. Department of Energy's (DOE) thirteen consent-based siting consortia, focused on assisting communities – broadly defined to include local, state, and Tribal governments – to build a vision based on lessons learned, input from existing sender and receiver sites and subject matter experts, and to facilitate interaction across all the parties that will need to provide "consent."

Discussions considered how to create value and build a business case for potential host communities considering hosting a CISF. Potential benefits could range from investment in infrastructure, co-locating industrial facilities or reprocessing facilities to create new fuel for advanced reactors, from creating community benefits packages or developing an energy hub to seeking direct payments.

Key Questions for Discussion:

- **Who is your "community"?**
- **What is your community vison?**
- **Why volunteer?**
- **What does a community want or need to host a nuclear waste mission?**
- **What are the potential economic benefits of hosting a CISF?**
- **What potential DOE/Federal missions "fit" your community vision?**
- **What potential private sector missions do you want to attract?**
- **Who needs to support the community vision?**
- **How do you work towards consensus?**

ECA Opening Remarks: Creating a Community Vision: Priorities and Opportunities (link to presentation)

Kara Colton, Nuclear Policy Director, ECA, opened the meeting by providing context and history on the consolidated federal interim storage facility (CISF) mission, outlining priorities,

challenges and opportunities that come with siting and hosting the facility, and the need to ensure all impacted parties have a voice in developing the path forward.

Opening Remarks: Office of Nuclear Energy, U.S. Department of Energy (link to presentation)

Marla Morales, Acting Director, Office of Consent-Based Siting and **Juan Uribe, Senior Program Manager, both from DOE's Office of Nuclear Energy** provided an update on DOE's mission "*to construct one or more federal interim storage facilities, using a consent-based siting process, ready to receive commercial spent nuclear fuel as soon as practicable*." Morales presented recent changes to the CBS process and provided detail about what had changed since the Department's previous efforts in 2017. She noted DOE has now incorporated wider public feedback and insights, there is greater emphasis on equity and environmental justice, and an expanded role for potential host communities to develop site assessment criteria. One major difference is DOE can now have specific funding opportunities to support public engagement and the Consent-Based Siting consortium. Morales noted that since last year, there have been 75 consortia public engagements, 5 sub-grant programs issued, 9 tribal engagements, and 16 government engagements (ranging across local, state, Tribal and federal levels).

Bringing Communities to the Table: Lessons Learned from Past and Current Efforts

To highlight lessons learned that should be considered as part of this consent-based siting initiative, **Rick McLeod from Atomic Advice**, and **Kristen Ellis, Associate Principal Deputy Assistant Secretary for Regulatory and Policy Affairs in DOE's Office of Environmental Management** addressed their work with potential host communities to develop a vision around new DOE missions, including the Global Nuclear Energy Partnership (GNEP) and DOE's Asset Revitalization Initiative/Energy Parks. They addressed what did not work, namely the failure to have alignment at the local, state, Tribal and federal levels; as well as what did work, such as providing resources to communities to work together towards a shared vision. Ellis also cited DOE's Cleanup to Clean Energy Initiative and how DOE has been able to work across program offices to site solar projects on federal lands at Hanford, Idaho Falls, the Savannah River Site, and the Nevada National Security Site.

The WIPP Business Case – 25 Years in Review

Continuing with lessons learned, **JJ Chavez, Mayor Pro-Tempore, City of Carlsbad, NM**, **Ryan Flynn, ESH Manager, SIMCO, WIPP**, and **Justin Marble, Director, National TRU Program in DOE's Office of Environmental Management,** each provided their local, state, contractor and federal perspectives on the siting, development, and operations of the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico. There was a strong emphasis on how much education and outreach had to take place – iteratively and over decades – before there was community and state acceptance. That education and outreach remains ongoing to maintain support today. Chavez highlighted the importance of transparency and regular communication when working with the community, and the benefits of the local, county, state, Tribal and federal government working as "partners" to determine and build acceptance for transportation routes, state and community benefits and waste acceptance criteria. Marble provided examples of how DOE works today with

the City of Carlsbad to address emergency response, program funding, training, and support. They also spoke about the $11.7 million awarded by DOE to Southeast New Mexico College in Carlsbad. Over the next five years the college along with WIPP will develop employee training programs, which benefits the local community by providing new educational opportunities and onsite workforce training (which in turn, means jobs in New Mexico and skilled workers for contractors and DOE).

Federal CISF: The Blueprint (link to presentation)

Dr. John Shultz, Storage Program Manager, Assigned CISF Federal Project, Director Duties in DOE's Office of Nuclear Energy presented a technical overview of the current reference design concepts and construction of a CISF, including an overview of the status of spent nuclear fuel (SNF) at commercial nuclear power plants (NPPs) and current storage examples. He explained that as of 2024, over 90,000 metric tons of SNF is in storage at NPP sites. That includes 53 commercial NPP sites with 93 operating reactors and 20 NPP sites that are shutdown. It is estimated that by 2060 the U.S. will have approximately 140,000 metric tons of SNF.

Dr. Shultz also provided an overview of the Atlas Railcar and SNF transportation equipment (Atlas Railcar Video); as well as multiple ongoing studies and research and development (R&D) projects supporting the CISF project. DOE is looking to have a social economic model for the CISF in FY-25.

Dr. Shultz concluded by explaining that the CBS process will come together with DOE's project acquisition process once one or more host communities are selected. This process is internal to DOE and known as the Critical Decision (CD) process. There are four phases; DOE completed **CD-0 – Approve Mission Need** in May 2024.

Why Volunteer?

A key discussion during the meeting focused on what would bring a community, Tribe, or state to the table. What are the potential benefits and drawbacks of volunteering? What are the potential short and long-term opportunities that can come with hosting a federal interim storage facility? **Robbie Bennett, President and CEO, Savannah River Site Community Reuse Organization (SRSCRO)** provided insight on the potential economic impacts hosting a CISF mission could have for a locality, a region, and a State, emphasizing that each community must consider their own value proposition and the direct and indirect benefits. This cost-benefit analysis will be easier once DOE releases an economic impact study for the CISF.

In addition, Bennett advised communities that while they may have land and acreage for a CISF, it is important to consider if they have the space and resources for the industrial complex that comes with supporting this mission.

Identifying Incentives for Potential Host Communities

As local, State, and Tribal governments evaluate whether to host a federal nuclear waste facility, their considerations will not only be on ensuring public safety, health, and the environment, but that their communities benefit from accepting this national mission. **Phil Niedzielski-Eichner, President, Governmental Dynamics**, facilitated a discussion of incentives a potential host community should consider based on what has been offered to host communities, states and Tribes in cases like Yucca Mountain and WIPP. These incentives included direct payments, payments in lieu of taxes (PILT), tax credits/revenue, infrastructure investment, establishing new R&D facilities within the host community, or supporting development of new nuclear technologies. Much like "consent," there is no one-size-fits-all and each community is likely to have differing wants and needs to agree to host these multi-generational projects. **Matching DOE Missions and Community Visions for a Facility**

One potential incentive identified was siting an additional federal mission in the host community/state or Tribe as part of consenting to host a CISF. **Stephanie Weir, National Technical Director for Consent-Based Siting, Idaho National Laboratory**, outlined some of the DOE missions that could match a host communities' vision for a facility, and encouraged potential hosts to consider the resources they have and what federal mission, from clean energy development, fuel fabrication, or future reprocessing facilities, they would want to be part of a consent-based siting agreement to host a federal nuclear waste mission.

Breakout Discussions - *What Potential DOE/Federal Missions "Fit" Your Community Vision*? Historic nuclear communities like those around SRS, Hanford, or Idaho Falls have an existing workforce and nuclear familiarity that would allow them to co-locate a potential DOE or federal mission. Co-location could generate additional jobs and opportunities around a multi-generation facility. Potential hosts should consider the resources they have (existing workforce, education/training programs, or existing infrastructure) to work towards their community vision.

Identifying Opportunities for Private Sector Partnerships (link to presentation)

Just as potential host communities are encouraged to consider federal missions, they might be interested in hosting along with a federal interim storage facility, they may also want to attract private-sector projects. To better understand the opportunities, **Benton Arnett, Senior Director, Markets and Policy, Nuclear Energy Institute** (NEI) outlined potential private-sector partnerships, speaking to both current and future nuclear development opportunities that exist.

As of 2024 the nuclear industry is contributing $60 billion to the U.S. economy each year; 475,000 direct and indirect jobs; and $12 billion in federal and state tax revenues. An SMR plant will create 240+ direct jobs with significant coal job retraining opportunities; a median wage that is significantly higher than the national average; an estimated annual community contribution of $10 million through state and local taxes; and an estimated 90% share of that economic impact stays in the local community.

Arnett spoke about the new opportunities that advanced nuclear technologies could bringing to communities, such as data centers and AI. For communities with decommissioning coal facilities undergoing energy transitions, SMRs can be sited at these sites, saving jobs, providing economic

diversity, and capitalizing on existing infrastructure while helping to meet public and private-sector carbon reduction goals.

Breakout Discussion - *What private sector missions do you want to attract*?

Potential host communities may decide that hosting a CISF alone would provide a small, limited economic benefit. However, if a potential host community were to enter a partnership with the private sector to support the development of advanced nuclear technologies those projects could bring considerable benefits such as additional jobs, tax incentives, infrastructure, and housing. An alternative would be a partnership between DOE, a host community, and the private sector to site, construct, operate, and most importantly, help finance and offset risk for a first-of-kind advanced nuclear reactor.

Community Models for Engagement and Capacity Building

The definition of "community" can differ from person to person and region to region as can the values and priorities. It can be challenging, then, to develop a shared vision and consensus around it. The final discussion of the day was led by **Ann Verhey-Henke, Co-Founder, Campfire Gatherings**, on Integrating Socially Led Co-Design into *Consent-Based Siting of Interim Storage Facilities*. Verhey-Henke walked participants through the co-design approach, how it can be applicable to consent-based siting, and how it helps build mutual trust and public participation. Utilizing co-design as a tool facilitates a focus on community values, interests, and identity; it also allows key stakeholders to have a meaningful role in the design process, working with DOE to achieve collective goals.

Introduction to ECA CBS Community Grant Awardees

In July, the ECA Consortia announced community grants were awarded to three communities to build capacity around consent-based siting and building capacity on nuclear energy and nuclear waste management issues. Overviews of work plans were presented by the awardees:

- **The Associated Governments of Northwest Colorado (AGNC)**
- **The Savannah River Site Community Reuse Organization (SRSCRO)**
- **Tri-City Development Council (TRIDEC**)

Next Steps and Action Items

ECA plans to release the next round of applications for community grants later this summer and will have a rolling deadline. Planning for a third CBS meeting is underway. Notice of both will be posted in ECA server messages and in ECA's newsletter soon. To subscribe at no cost, email bulletin@energyca.org and make sure to visit the ECA CBS Consortia website for resources and updates on our activities at consentbasedsiting.com.

Information on DOE and other Consortium activity can be found at DOE's CBS website, energy.gov/consentbasedsiting.