

Vermont Yankee Decommissioning and Stakeholder Engagement: Assessment Findings and Recommendations
Consensus Building Institute and Social and Environmental Research Institute
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I. Introduction

The Consensus Building Institute (CBI) and the Social and Environmental Research Institute (SERI) contracted with the Vermont Public Service Department to conduct a situation assessment around the closure and decommissioning of the Vermont Yankee nuclear plant. We spoke to 26 individuals who have been engaged in some way on the operation and closure of Vermont Yankee and provided a range of perspectives. Based on information collected through these interviews and our research and experience, CBI and SERI offer recommendations on the structure and ingredients of a robust public and stakeholder engagement process to support well-informed and well-supported decisions

What is a situation assessment?

A situation assessment takes a fresh and unbiased look into who are the interested and affected parties and what are their concerns and ideas for a public and stakeholder engagement process, examines the landscape of concerns and interests to identify points of contention and consensus, and proposes a process design for public and stakeholder engagement.

The key elements of a Situation Assessment typically include:

- Neutral, objective evaluation. The Assessment looks at all perspectives from a viewpoint that is not biased towards any particular interest or outcome.
- Confidentiality. Input is gathered via interviews and surveys with interested public and stakeholder groups. Confidentiality helps ensure people speak openly and honestly.
- Identification of issues that are appropriate for different levels and types of collaboration and public engagement.
- Identification of critical factors shaping the performance of a public and stakeholder engagement process. Reaching consensus is one, very high benchmark for success, but success can also be measured by creating better informed and trusting stakeholders, infusing the decision making process with the values and concerns of the community and other stakeholders, reaching a shared understanding and finding areas for collaborative implementation.
- Recommendations on structure and process for stakeholder engagement tailored to the situation.

throughout the decommissioning and site restoration process.

II. Background on the Vermont Yankee Decommissioning Process and Citizen Advisory Panel

Entergy Corporation (Entergy) operator of the Vermont Yankee nuclear power station (VY) announced last year its plans to close the plant by the end of 2014. The shut down and decommissioning process will have economic, health, social, cultural, and environmental implications for the plant owner, the employees, the town of Vernon and its surrounding communities, as well as the State of Vermont. The impacts of the closure and decommissioning are also likely to be felt in Massachusetts and New Hampshire where employees of the plant also live.

Over the coming months and years, a number of the critical decisions will be made including: what decommissioning approach will be implemented and how soon the process will begin, safeguards for worker and community safety during the process, what level of cleanup is needed, how much these activities will cost and how they will be funded, how to manage the economic impact on the near-by communities, how to ensure long-term stewardship of the site, the disposition of the spent fuel at the site, and how to begin planning for the land's reuse.

The State of Vermont and Entergy signed a Memorandum of Understanding (MOU) for the closure of the plant. The Vermont Public Service Board approved the MOU in March 2014, which outlined among other things the following:

- Agreement to resolve Vermont Supreme Court pending litigation between the parties;
- Agreement that Entergy will make a filing with the Nuclear Regulatory Commission (NRC) requesting authority to begin radiological decommissioning within four months after Entergy has made a reasonable determination that the funds in the Nuclear Decommissioning Trust are adequate to complete decommissioning and remaining spent fuel management activities that the federal government has not agreed to reimburse. In addition, once this authority is received from the NRC, Entergy VY will promptly commence, pursue and complete as soon as reasonably possible radiological decontamination and dismantling activities;
- Commitment by Entergy to prepare, two years earlier than required by NRC regulations, a site-specific cost evaluation study and site assessment related to all plant conditions and to decommissioning, including an evaluation of the costs of prompt decommissioning;
- Acknowledgment that the state of Vermont will have jurisdiction over site restoration after radiological decommissioning is complete. This includes a commitment to negotiate terms of site restoration which address removal of structures and level of radiological exposure after site restoration is complete;
- Agreement to seek from NRC the release of portions of the site for reuse as appropriate, and agreement to give the State a right of first refusal to purchase the site or any portion thereof as may become available;
- Payments to the State are outlined as follows:
 - \$5.2 million for the Clean Energy Development Fund (CEDF), at least 50 percent of which will be used under CEDF criteria for renewable energy projects in or benefitting Windham County
 - \$10 million for economic development in Windham County, payable \$2 million per year for 5 years
 - \$5 million for transitional payments to the Tax Department in 2015, after cessation of operations, to ensure that the State has an opportunity to evaluate and implement any appropriate taxation related to the site thereafter; and
- Agreement to create a new Site Restoration Trust through initial payments totaling \$25

million (\$10 million in year one, and \$5 million for three years thereafter), plus an additional parent guaranty, to ensure that separate funds are available if needed to return the site to a greenfield so that the site is available for re-use without restriction.

(“**BREAKING: State allows Vermont Yankee to operate through 2014**”; Mar. 28, 2014, <http://www.vermontbiz.com/news/march/breaking-state-allows-vermont-yankee-operate-through-2014>)

In addition to the MOU, the legislature passed a bill in May creating the Nuclear Decommissioning Citizen Advisory Panel or CAP. The CAP will replace the Vermont State Nuclear Advisory Panel (VSNAP) that included state officials, legislators and two members of the public to serve in an advisory role during the operation of Vermont Yankee. The new CAP will also be an advisory group, but its membership has been expanded. The 19 CAP members will be drawn from four State agencies, the public, Entergy, the IBEW union, the House and Senate committees on Natural Resources and Energy, the Windham County Regional Commission, the town of Vernon, and individuals selected to represent affected communities in New Hampshire and Massachusetts.

The legislation outlines the following responsibilities for the CAP:

“To advise the Assembly, and the agencies of the State and the public on issues related to the decommissioning of the VYNPS, with a written report being provided annually to the Governor and to the energy committees of the General Assembly.”

“To serve as a conduit for public information and education on and to encourage community involvement in matters related to the decommissioning of the VYNPS and to receive written reports and presentations on the decommissioning of the Station at its regular meetings.”

“To periodically receive reports on the Decommission Trust Fund and other funds associated with decommissioning of or site restoration at the VYNPS, including fund balances, expenditures made and reimbursements received. “

“To receive reports regarding the decommissioning plans for the VYNPS, including any site assessments and post-shutdown decommissioning assessment reports; provide a forum for receiving public comment on these plans and reports; and to provide comment on these plans and reports as the Panel may consider appropriate to State agencies and the owner of the VYNPS and in the annual report [...]”

III. Summary of Findings on Issues and Stakeholder Process

CBI and SERI interviewed 26 individuals in-person or by phone in the following categories:

- Entergy employees and management – 4 individuals
- Environmental NGOs – 5
- Local or Regional Government – 6
- State Agency officials – 4
- Legislators – 4
- Other – 3 (public members of VSNAP, former state officials)

Each scheduled interview covered these topics (the full list of questions asked can be found in Appendix 1):

- What are the issues of greatest interest to you or your organization around the closure and decommissioning of VY?
- What role(s) would you or your organization want to have in the decisions that will be made on these and other issues?
- What do you think should be the role of the Citizen Advisory Panel recently created by legislation?
- Who else should be consulted or engaged and in what ways?
- What information and sources of information do you need in understanding these complex issues?

All interviewees understood that the information and opinions they shared would not be attributed, but would be used in aggregate to determine areas of agreement or disagreement around these topics and opportunities for deliberation and consensus building. In this section, we summarize what we learned from the interviews.

A. Timing of decommissioning and site restoration

Most of the stakeholders we spoke to expressed a lot of passion about the need to begin the decommissioning process as soon as possible and to complete the process before the required 60 years allowed by NRC. A few of those interviewed argued that it is better to wait for radiation to decay 10-12 years to reduce worker and community exposure during the dismantling phase. (For background on the decommissioning process and options see: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/decommissioning.html>)

There is a general understanding that the decommissioning fund must be adequate to cover the estimated costs before dismantling and removal of the reactor can begin, that this must be approved by NRC, and therefore, the plant will first be prepared for Safe Storage (SAFSTOR) until the decommissioning fund increases significantly.

The stakeholders we interviewed recognize that there is a relationship between the start date for decommissioning and a number of other issues of concern to them, including:

- workplace health & safety risks
- industrial and environmental accidents
- community environmental risks
- economic impacts based on jobs retained or created
- lost opportunities for reuse of the land
- cost of decommissioning

It was clear from our interviews that there is not enough information at this point to understand what the options or trade-offs might be.

Widespread concern of stakeholders:

- That there will not be adequate information shared to independently evaluate the options and impacts of different decommissioning plans.

Observations and Findings:

- The CAP could be the forum for verifying the adequacy of the decommissioning fund, the estimated costs, and possible start dates of dismantling the plant.
- Transparency will be critical to building public trust about the management and uses of the decommissioning fund, and the projected costs of SAFSTOR, decommissioning and site restoration.

B. Environmental and Health Risks and Level of Site Cleanup

There is a strong desire by all stakeholders to see the site restored to a level that allows reuse as an industrial or commercial site. A number of individuals suggested that a new generating facility would be appropriate since the transmission and substation infrastructure already exists. Others placed priority on new jobs, taxes and economic benefits generated by reuse. Most of the stakeholders interviewed recognized that the reuse of the site will depend in large part on how much land will be developable with spent fuel remaining on site, and were aware that the spent fuel stored on-site would require a security buffer.

The stakeholders want to understand the health risks to workers and the community of the radiological and non-radiological contamination of the site and the different decommissioning and site restoration options. There was a divergence of opinion and understanding about the remaining risks associated with the tritium leak and the recommended remediation actions, but general agreement that additional testing will be needed. A few of those interviewed raised the question of risks associated with transporting materials off-site.

Entergy and the state agreed unequivocally in the MOU that the state of Vermont has jurisdiction over site restoration, and state agencies have the authority “to require standards for site restoration commensurate with the standards most protective to the environment as employed at similar sites nationwide or required by law.” As part of the MOU, Entergy also agreed to provide a site assessment in advance of its required Post Shut Down Decommissioning Report (PSDAR) that will provide a preliminary estimate of the cost of decommissioning and site cleanup. Because an interim site assessment is not required by NRC, the scope is being currently being negotiated between Entergy and the state. Stakeholders had a wide range of expectations for the site assessment, and some expressed concern that the interim assessment and the PSDAR may not be widely viewed as credible and trusted without verification by the state or a third-party independent expert.

Widespread concerns of stakeholders:

- Whether there will be adequate land available for productive reuse
- Whether standards for radiation cleanup are adequate for the preferred future uses or acceptable to the public

- That there may be inadequate attention to non-radioactive hazards and contamination
- Whether excavation or decontamination of the soil will be deep enough to satisfy the public that the site is safe to redevelop

Observations and Findings:

- The interim site assessment would be a logical first issue for the CAP to take up after it has formalized its working protocols and priorities. This report will provide important publicly available information about the scope of the decommissioning and cleanup, and will likely draw much attention and many questions from the broader interested public.
- Options for site restoration and reuse are other important topics that should get early attention.

C. Decommissioning Fund

There is a general understanding that the decommissioning fund must continue to grow to fully fund the decommissioning process (including SAFSTOR), and cleanup and restoration of the site. Information is not yet available on how the fund is managed, how quickly it is likely to grow over time, or the possible costs of decommissioning and cleanup commensurate with potential reuse. Stakeholders raised concerns about these uncertainties and particularly their implication for the timing of the process. Entergy has also indicated it intends to ask for a waiver from NRC to temporarily use the decommissioning funds to cover the cost of transfer of the spent fuel from the pool to casks. Entergy proposes to recover the funds from DOE and repay the borrowed money. This proposal has triggered additional questions among stakeholders about how this will impact overall growth of the fund and some stakeholders commented that there may be risks associated with the plan to recover the funds from DOE. Finally, some stakeholders suggested that the decommissioning fund could be used for a number of other activities, such as maintaining the emergency preparedness and monitoring capabilities of the local and state government. This raised the concern by some that continued negotiation over the use of the funds would create uncertainty around the amount that would be available for actual decommissioning and site restoration activities.

Widespread concerns of stakeholders:

- Whether there will be adequate money in the decommissioning fund to support the level of cleanup required for reuse of the site
- How the money in the fund is being managed by Entergy
- The financial and environmental risks for Entergy and the state of Vermont, if the fund does not grow sufficiently to meet the costs
- Appropriateness and impact of Entergy's proposal to use a portion of decommissioning fund to pay for moving spent fuel to casks

Observations and Findings:

- The management and use of the decommissioning fund was one of the more pervasive concerns among stakeholders. The lack of information clearly fueled

speculation and fear around this issue and should be addressed early in the process. As one stakeholder said, much of this concern can be put to rest by a better understanding of the “numbers.”

D. Spent fuel pool and dry casks

There is strong consensus that the spent fuel remaining in the pool should be moved to dry casks as soon as possible, and a general understanding that there is a minimum period of time needed to make the transfer safely. There is also a general acknowledgement that the dry casks will likely remain on the site indefinitely and a concern about the long-term security and stewardship of the stored spent fuel. A few people raised the issue of the current safety of the fuel stored in the pool and during the transition to casks.

Entergy has indicated that it intends to reduce or eliminate the Emergency Planning Zone (EPZ) after moving remaining fuel in the reactor to the spent fuel pool (15.4 months after shut-down) and discontinue funding for state and local resources to monitor and respond to emergencies. Most stakeholders feel that the EPZ should remain in place at least until the fuel is in dry casks. Some feel strongly that Entergy’s funding of local and state monitoring and emergency response should continue at some reduced level throughout the decommissioning process because of the remaining risks of accidents.

Widespread concerns of the stakeholders:

- The current location of the dry cask pad and vulnerability to flooding or terrorist attacks
- The location of additional pads and the impact on the reuse of the site, including the necessary security perimeters
- The impact of eliminating funding for emergency planning and monitoring and reducing or eliminating the EPZ

Observations and Findings:

- The majority of the individuals we spoke to were very worried about both the near-term and long-term disposition of the spent fuel and its impact on the safety and the reuse of the site.
- The site assessment expected by the end of this year will provide important information about the proposed timing and the siting of the long-term storage of dry casks, nevertheless it would be helpful to share this information sooner with the CAP and the public if possible. Early discussion of the concerns we heard could lead to a better understanding of the risks and options under consideration.

E. Economic Impacts and Redevelopment

The economic impact of closing the plant is clearly on the minds of all stakeholders and was one of the issues addressed in the MOU. The Agency of Commerce and Community Development will be managing the distribution of the \$10 million Economic Development Fund funded by Entergy and has begun to meet with local and regional stakeholders to get input. The four regional economic development agencies in the area have also begun to

meet among themselves to coordinate their activities. There was a divergence in opinion about whether the CAP should have some input into the use of the funds, but the predominant sentiment was that the funds be used in a way that has long-term benefits beyond the 5-year investment period.

The job and other economic impacts during the decommissioning period is not well understood by non-Entergy stakeholders, particularly the issues of how many and which of the current jobs will be retained and how many new jobs will be created. Entergy personnel interviewed had a much clearer picture and felt they were well-informed about the changes in the work force over time. The local stakeholders and policy-makers are well aware that loss of Entergy employees from the community may have an outsized economic impact because the salaries tend to be higher than the state average. There was also concern that loss of Entergy personnel cannot be measured only in economic impacts. Many Entergy employees serve their local communities in a variety of ways.

Among local community stakeholders we spoke to there is a fear that housing values will depreciate, which will transfer economic losses from the plant closure to non-employees. Local government is concerned they will be challenged by increased numbers of property tax appeals, which creates a burden for volunteer town officials. There is also a concern that animosity among town residents will grow as town services decline and property taxes increase, particularly if residents feel property assessments are not fair.

Reuse of the plant site is generally viewed as an economic opportunity for the community, but not enough information is available to understand the potential options and their economic impacts.

Widespread concerns of stakeholders:

- Lack of information about the economic impacts of closing the plant and transitioning to decommissioning
- That the \$10million economic development fund will not be used to in a way that creates a sustainable impact on the economy after the funds are depleted.

Observations and Findings:

- The CAP should decide early on what role it should have in the use of the \$10 million Economic Development Fund. At a minimum, the CAP could help gather information about the jobs related to SAFSTOR and the dismantling and clean up of the site, as well as the economic impacts of alternative site uses.
- The local community has been divided over VY for decades and many recognize this as an opportunity for the community to heal. But not everyone is ready to start with the healing process. The CAP members themselves may bring very different emotions about the closure of the plant to the process. It will be important for the CAP to spend some time talking about the impact this might have on how will work together and how it should be managed.

F. Level of Trust Among Stakeholders

Stakeholders' perceptions of the company's transparency have improved over time, particularly regarding issues around the closure. But prior interactions, where members of the community felt their concerns were not acknowledged, and where Entergy and others felt there was unfair company "bashing," has contributed to lingering distrust on both sides. All those who were interviewed understand that Entergy will be the primary source of information throughout the decommissioning process, and therefore, trust among the members of the CAP and the public that the information is accurate and complete will be important. The CAP should address this issue explicitly early in the process. It may be necessary to have an independent reviewer of highly technical information to help establish trust among the parties.

There is very little confidence among the public and state policy makers in NRC's oversight or its trust-worthiness as source of information. It is not clear whether this lack of trust can be repaired, but it will be important for the public to understand the important regulatory role of NRC in approving some of the decisions that will be made throughout decommissioning.

The state's efforts to independently monitor the plant site during its operation are seen by most stakeholders as credible and helpful to verifying information reported by Entergy. Some stakeholders feel the state has not been consistently neutral in its positions on the operation of Vermont Yankee over time, and for that reason, questioned the state's ability to represent all stakeholders' interests in direct negotiations with Entergy.

Observations and Findings:

- As we discuss later in the recommendations, two of the fundamental ingredients to building trust are creating a culture of transparency by sharing information freely, and selecting sources of information and experts that are seen as credible by the stakeholders.
- Trust by people outside of the CAP in the credibility and openness of the process will be as critical to success as trust among the members of the CAP. There are many examples of processes where the core participants had excellent trust, but the broader public did not trust the process. This is known as the problem of in-group and out-group relations. To help establish public trust in the process, the CAP should be transparent about all sources (from the Public Service Department and elsewhere) and uses of funds to support its activities.
- The CAP can become the hub for sharing information with the public and jointly developing and analyzing new information needed to answer many of the questions that have been raised by this assessment.
- If outside experts are seen as critical to building the understanding and conducting the analyses or verification around certain questions, the CAP could be responsible for finding experts that have credibility with most stakeholders. Over time, the CAP should become seen as the trusted place to go for reliable information.

G. Nuclear Decommissioning Citizen Advisory Panel

We asked a number of questions about people's preferred structure and role for the CAP. Across the board, there is approval of the broader and more diverse make-up of the CAP and strong desire to see appointment of members that have some expertise or are willing to "learn what they don't know" in order to be effective representatives of the stakeholders. Stakeholders interviewed strongly supported Entergy as a member of the CAP. Stakeholders also expressed the desire that the CAP should have political independence.

There is widespread recognition that the CAP will not be a decision-making body, but the stakeholders generally agree that the CAP should provide input on decisions that will be made by Entergy, NRC and the State of Vermont. Many we spoke to see the CAP as an important filter/conduit for information to the general public, but also thought the CAP should create the forums for the public to have meaningful input to the decisions that will be made.

There were conflicting opinions about the tone of the CAP. Most want it to be cooperative and consensual, ("move beyond the past conflicts"); while a minority wants it to be the watchdog organization, taking an assertive position by challenging proposals made by Entergy. Everyone sees the CAP as the forum for public education and input, but would like to see it become more. A number of those we interviewed agreed that the CAP could work together to review information and make consensus-based recommendations. Over time, it could become the trusted source of information for the community, representing the interests of a broad set of stakeholders.

Observations and Findings:

- The creation of the CAP with broad representation creates an opportunity to improve the communication, transparency and trust between all the parties and with the public.
- To ensure that the CAP is seen as having real impact on the decision-making process, it will be important to establish in the charter its role as a deliberative body that could, by consensus, offer recommendations to the decision-makers.
- The CAP should revisit its membership and role after the first year to ensure that it represents the interests of all affected stakeholders and is viewed as politically independent by the public.

IV. Recommendations

Based on the interviews and our experience and research on effective stakeholder and public engagement, we offer the following observations and recommendations, which we have organized around five themes.

A. Role of the Nuclear Decommissioning Citizens Advisory Panel

The creation of the CAP sets the foundation for stakeholder input on a broad range of issues throughout the decommissioning process. In addition, the CAP could serve as the focal point for broad and robust public engagement. The Maine Yankee nuclear plant owners funded a similar Advisory Panel in 1997 to expand opportunities for the local

community to advise Maine Yankee on the issues of concern to them and to serve as a vehicle to obtain community and stakeholder input.

A report prepared by New Horizon Scientific for Electric Power Research Institute (EPRI) and Maine Yankee owners, *Maine Yankee Decommissioning Experience Report--Detailed Experiences 1997 - 2004*, noted that the owners felt the decommissioning project would have been delayed up to two years if they had pursued litigation rather than negotiated settlements. The authors also pointed out that this was one of the first agreements for license termination of a commercial nuclear power plant that included state officials and environmental activists.

Other experience and research in environmental decision making reinforces the expectation that early and inclusive engagement with the public can be very effective in improving the outcomes for the State, the plant owner, the workers and the impacted communities. The U.S. National Academy of Sciences concluded after extensive review of academic and practitioner experience that public and stakeholder engagement (PSE) around environmental problems creates the following benefits:

- leads to better quality decisions
- enhances public acceptance in decisions
- leads to a community with stronger democratic capacity
(NAS Committee Report, *Public Participation in Environmental Assessment and Decision Making* http://www.nap.edu/catalog.php?record_id=12434)

As the centerpiece for organized discussions around decommissioning, the CAP will have high public visibility. Stakeholders and the public will have high expectations for the CAP to represent their interests and provide forums for public input. For the CAP to be seen as legitimate and credible, and for the process to be effective, we recommend that the CAP:

- Operate as a dialogue-based, learning-focused, and consensus-seeking body that offers joint recommendations to decision makers
- Establish a policy of transparency and a robust public engagement process
- Create a formal charter codifying the CAP's structure, authority, goals, and operating protocols
- Include members who are willing and able to commit the time needed to become a trusted representative of the stakeholders' interests, to understand and apply the technical information to decision-making, to share their understanding and decision-making process with the public, and to work with the other members of the CAP in open-minded debate and creative problem solving.

The expectations for the CAP outlined below are ambitious. To avoid setting the CAP up for failure, the expectations, scope of work and time commitment must be agreed to and in line with the members' ability to follow through. The realities of a largely volunteer membership must also be reflected in how the CAP's role is explained to the public, so that there is not frustration with the limits of the issues they can thoroughly and effectively take on.

B. Creating a Deliberative and Consensus-based CAP

A dialogue-based, learning-focused, and consensus-seeking process has a greater chance of producing ideas and insights that are novel and unexpected, and being seen as producing legitimate outcomes that take into account the perspective of interested stakeholders. When stakeholders feel their interests have been heard, even when their ideas are not adopted, they are much less likely to take their disputes to the courts.

Dialogue-based means that participants speak from equal footing, there is respectful listening, participants can challenge each other's claims, and challenges are owed a reply.

Equal footing means that participants are accorded equal and sufficient opportunities (in terms of time and position on the agenda) to express themselves. It also means that every participant has an equal obligation to listen and hear what other people say. Each idea should be given due consideration and each participant ought to be able to challenge or ask for supporting justifications for claims that are made.

Learning-focused means that there are opportunities for people to learn about the science and technology and to learn about the concerns, perspectives, and needs of all interested and affected parties. It was clear from our interviews that there is a strong appetite for more information and a greater understanding of the implications of different options and decisions during decommissioning and cleanup. Much of the information will be highly technical and options under consideration may require in-depth analyses that are not easily digestible by the public. A critical part of the learning process will be to rely on experts in addition to Entergy who are accepted as credible by the CAP members. The legislation creating the CAP envisions both the need for experts and technical workshops to support this type of learning. The members of the CAP must commit the time and effort required to develop a deep and shared understanding of the information and options through this process of joint learning, so they can become the trusted representatives and conduit of information for the larger stakeholder community.

Consensus-seeking means that the group strives to find agreement among all members for key decisions. It does not mean that each member has veto power. Instead, the group makes a promise to clarify disagreements and try earnestly to work through them to reach agreement on options that everyone can "live with." Consensus does not mean that decisions devolve to the least offensive solutions. If managed skillfully, the process of building consensus can generate a better understanding of alternative perceptions of the problem, identify options for solving the problem that are innovative and have not been considered before, and create more value for all stakeholders involved. The concept of Mutual Gains Negotiation™ as a key component of successful consensus building has been documented and tested in a number of high-conflict, multi-stakeholder collaborations and should be part of the initial training of the CAP. The legislation creating the CAP states that decisions will be made by a majority vote of a quorum of members. We recommend that voting serve as the "back-stop" decision making process, when consensus cannot be achieved.

As outlined above, there are a number of issues the CAP could take on immediately, including review and input on the site assessment report, the proposals for management of the spent fuel, the uses of the decommissioning fund, and the role of the CAP on economic development impacts of the site cleanup and reuse. These are the issues of greatest concern to stakeholders we interviewed. The members of the CAP will need to prioritize what other issues are appropriate for deliberation and consensus building and what issues are important for broader public education and engagement.

A dialogue-based, learning-focused, and consensus-seeking process is more productive and efficient with a skilled facilitator. An independent facilitator can ensure that all members of the CAP have the opportunity to be heard, that their interests are considered in any decisions, that the ground rules and goals of the CAP are being met, and that best efforts are made to ground decisions in the information available and mutually acceptable.

C. Establishing Transparency and Openness

For the CAP to have public credibility, transparency is key. All meetings will be open to the public, but in addition, the CAP should ensure transparency about:

- The CAP's charter, process, scope of work and recommendations
- Sources and uses of funds supporting the CAP's activities
- Information and expert analyses used by the CAP
- How the public can have input and how the input is considered in recommendations
- How the CAP interfaces with other public bodies such as VT State Agencies and Commissions and the Nuclear Regulatory Commission

Being transparent about **all information** is central to acquiring trust and credibility. The CAP should make all of the information that it relies upon open and accessible to its members and to the public and ensure that sources of information and expertise are seen as credible. Rare exceptions where information is sensitive or proprietary should be clarified.

Being transparent about **deliberations and recommendations** of the CAP means that a public record is made available. Meeting summaries and/or recordings of meetings should be posted, dissenting opinions or areas of disagreement should be noted if votes are taken, the rationale for recommendations should be provided in writing, and opportunities for input should be provided in a number of different ways, including written comments and verbal comments at meetings or public forums.

The format and options for sharing information and gathering public input is critical to establishing a culture of transparency and openness with the public. There are a number of mechanisms for implementing this recommendation. First, the CAP should have a dedicated website where all materials are posted in a well-organized and easily accessible manner. The site could also host a community bulletin board where members of the public can post related meetings and organizational efforts involved in decommissioning and its

impacts. The CAP should create an electronic distribution or “listserv” for those interested in receiving meeting notices and materials directly.

It is also important to keep in mind that the “digital divide” is real. Public libraries can archive this information in print form, or librarians can be trained to help provide patrons access to the web site. Meetings should be announced in conventional (websites, newspapers and radio) and in non-digital ways (libraries and other community bulletin boards.)

Public forums should be designed to be both educational and interactive, so the public can not only learn from “experts,” but learn from each other by sharing their experience and local knowledge. This also creates opportunities for the CAP to understand how personal experience has shaped individuals’ perceptions of risk and how they interpret information. In addition, the CAP can consider allowing public input during each agenda item during their meetings rather than waiting until the end, holding special public listening sessions periodically to gather extensive public input, and reporting on how public input was considered by the CAP in its deliberations. The CAP should also consider preparing a “*We Listened*” document to explain what public input was heard and how it was considered. This level of transparency and openness to public input should apply equally to decisions made by Entergy, the NRC and the state.

D. Laying the groundwork for good process: The CAP Charter

The enabling legislation provides general guidance on some of the issues that the CAP should review, but very little guidance on how it should conduct its work together. The first meeting of the CAP should take up the task of drafting its Charter. The purpose of a Charter is to outline the purpose, authority, responsibilities and operating protocols of the CAP. While many of these items are defined in the legislation, there is an opportunity at the outset to expand and clarify a number of things. For instance, the charter can state the CAP’s intent to operate by consensus to the extent possible, its ground rules for engaging with each other during meetings, how members will handle media outside of meetings, and how it will establish work groups to carry out directives of the CAP between meetings. A well-written Charter also typically outlines how the leadership will be selected and the role of the chair or co-chairs, who is responsible for creating agendas, the role of the independent facilitator, how experts will be selected, how input from the public will be solicited and used, and what issues or scope of activities will be undertaken.

A straw proposal could be introduced to begin the process. The CAP could agree on the important elements that should be included in its Charter and appoint a subset of members to a working group to continue the drafting. The enabling legislation allows for the CAP to make recommendations in its membership or duties in its annual report to the Governor and House and Senate. We agree that it is appropriate and valuable for the CAP to revisit its Charter annually to evaluate whether changes are needed to improve the group’s effectiveness.

E. Issues for Public and Stakeholder Engagement

The CAP should also prioritize issues that it would like to address in the first 6 months. The **interim site assessment** would be a logical first issue for the CAP to take up. That report will provide important publicly available information about the scope of the decommissioning and cleanup, and will likely draw much attention and many questions from the broader interested public. The CAP could begin to establish its credibility as a deliberative working body by thoroughly vetting the report and working collaboratively with Entergy to outline the timeline for release of additional supporting information leading up to the PSDAR. The PSDAR is a critical document that will shape the decommissioning process. It is our understanding that Entergy will submit a draft PSDAR to the State of Vermont for comment. This would be an excellent opportunity to also gather the comment and input from the CAP and the public.

The CAP should decide early on what input it should have in the decisions about the use of the \$10 million Economic Development Fund. The Agency of Commerce and Community Development has this process well underway and will continue to manage the allocation process over the five-year period. Regional development agencies in the three states have also begun to meet regularly about this issue. If the CAP wishes to take on any role regarding the economic development impacts of decommissioning or the use of the Economic Development Fund, it should be in support of and not in competition with the ongoing efforts of the Agency and other regional entities already engaged. For instance, the CAP could help gather information about the jobs related to SAFSTOR and the dismantling and clean up of the site, as well as the economic impacts of alternative site uses if that would be welcome by the Agency.

The decommissioning process, the level and extent of cleanup, and the future site use are connected. The CAP should play a central role in considering the linkages and trade-offs. Some of the connections are synergistic; others are incompatible. Decommissioning, cleanup, and future use decisions are also infused with political, economic, and social implications; they are rarely technical issues alone.

Radiologic-contaminated sites are rarely completely “cleaned.” In addition, the spent fuel will remain on site for the foreseeable future. The site will likely require passive and active approaches to keep the spent fuel safe, the contamination isolated from the environment, to remove contamination from soils and groundwater, and to prevent exposures of the public and the on-site workforce to residual contamination. These activities will limit future site uses, at least for some period of time.

To facilitate discussions about the links between cleanup and future use, the CAP should:

- Create opportunities for broad discussions about what kind of future uses the nearby communities would like to see considered.
- Insist that future use contenders be considered at the earliest stages of cleanup,
- Consider how cleanup strategies can “lock in” future development pathways that may not be what the community wants.
- Explore the legal and institutional controls such as zoning restrictions, restrictive covenants, excavations bans, inspections, that are needed to ensure future land uses decades in the future will remain compatible with any residual contamination

- Understand the short-term vs. long-term economic costs of different cleanup strategies that trade stricter remediation with requirements for institutional controls. Pay particular attention to the costs that are imposed on local governments

V. Summary of Findings and Recommendations

The goal of CBI's and SERI's independent assessment was to gather information about the stakeholders' understanding and level of agreement about the Vermont Yankee decommissioning and site restoration process that will begin in January 2015. The assessment interviews highlighted a number of issues that stakeholders across a broad spectrum think are of concern because they will have economic, environmental and social impacts on the communities, the workers, Entergy, and the state. The individuals we interviewed also provided valuable input on the ways they would like to be engaged and the role of the Nuclear Decommissioning Citizen Advisory Panel in the decisions that will be made throughout the decommissioning process.

The recommendations are based on the interview data, research on environmental decision making and our direct experience with designing and facilitating collaborative processes to address complex, and high stakes environmental problems. We recommend that:

- The CAP will serve as the cornerstone of the public engagement process throughout the life of decommissioning, site restoration and redevelopment.
- The members of the CAP should work together as a deliberative and learning-based advisory group that represents broader stakeholder interests and provides consensus recommendations for consideration by Entergy management, the state, and the NRC. Training on mutual gains negotiation could provide the foundation needed to achieve consensus that creates added value rather than simply compromise.
- The CAP should create forums for innovative and interactive public engagement that support both education and sharing experience and knowledge of citizens, government and industry about decommissioning issues and options.
- An important role of the CAP is to build trust and credibility among stakeholders and the public, which will require a transparent and open process that makes information easily accessible, provides adequate opportunities for input and documents how the input has been taken into account in recommendations.
- The CAP should document its membership, leadership, role and operating protocols by creating a Charter and should reevaluate the Charter within a year.
- The CAP should identify issues of concern to stakeholders and prioritize those that it can meaningfully address in the near-term. The group should also consider how near-term decisions could impact long-term uses and stewardship of the property.

[Consensus Building Institute \(CBI\)](#) has a 20-year history of pioneering ways to engage stakeholders and citizens on important energy and environmental issues. Founded in 1993 by leading practitioners and theory builders in the fields of negotiation and dispute resolution, our experts bring decades of experience brokering agreements and building collaboration in complex, high-stakes environments. In 2007, CBI (in collaboration with Raab Associates) undertook an extensive public and stakeholder outreach effort to inform Vermont's Energy Future as the request of the Governor and legislature. [Catherine Morris](#) is a Senior Mediator at CBI.

[Social and Environmental Research Institute \(SERI\)](#) in Amherst, Massachusetts, was founded in 1995 to promote collaboration among researchers and practitioners in the field of public participation in controversial decisions about risk and environment. [Thomas Webler](#) is a Research Fellow at SERI.

Appendix 1. Vermont Yankee Decommissioning and Stakeholder Engagement Assessment Interview Questions

Questions about Goals and Issues

- *What are your or your organization's interests and goals around the VY closure and decommissioning? (e.g. restore a green field, maintain workforce as long as possible, minimize radioactive contamination, get fuel out of pools and into dry casks, worker safety, minimize costs, ensure long-term stewardship) or how would you describe a successful decommissioning process?*
- *What are the top 3-4 most important issues that need to be addressed to meet those goals? (E.g. train state regulatory officials, maintain Emergency Planning Zone (EPZ), lobby NRC,...)*
- *What are the top challenges to addressing these issues?*
- *What could help overcome those challenges?*
- *Where is the decision-making authority? (specific to the issues raised above)*
- *What are going to be the biggest points of controversy during decommissioning?*
- *What other individuals or organizations are likely to be aligned or in disagreement over these issues?*

Questions About Stakeholder Engagement

- *Are there existing forums in which the issues are being or could be discussed?*
- *Are you familiar with the VT State Nuclear Advisory Panel and their role? Should this organization be expanded to include other important stakeholders? If so, would you be comfortable having them represent citizen and stakeholder interests?*
- *How would you or your organization like to be involved in the decisions by the state or Entergy, the plant owner, about the decommissioning process?*
- *When or on what issues would it be appropriate for a citizen/stakeholder advisory group to engage with the public, with Entergy, and with State and Federal officials?*
- *Would you or your organization be willing to participate in broad stakeholder dialogue to reach agreement on some of these issues? If so, which issues do you think are most amenable to building agreement?*
- *What laws or regulatory policies might influence or limit what a citizen/stakeholder advisory group can do?*

- *What are the barriers to a stakeholder advisory group working effectively?*
 - *What are the differences in values, interests, cultural views, and perspectives among the parties? Are the participants polarized on these issues?*
 - *Are there substantial disparities across participant groups in their power to influence the process?*
 - *Are there significant problems of trust among the interested and affected parties? Is there a history of conflict between some of these stakeholders?*
 - *Are there incentives in this situation for the stakeholders to work collaboratively? (e.g. lack of alternative forums)*
 - *Are there more effective means for you or other key stakeholders to meet their interests, e.g. litigation, lobbying, coalition building?*

Questions about information

- *Is the available information on these issues adequate for supporting wise decisions? Do the various parties agree about this?*
- *Is the information mutually trustworthy?*
- *Where do you turn or who do you rely on for your source of information about the issues of greatest importance to you?*

Concluding Thoughts

- *Is there someone else you think it is very important we talk to?*
- *Do you have any other advice or recommendations about how you think stakeholders and the public should be involved in these issues?*