

**Decommissioning at San Onofre:  
The Community Engagement Experience**

Testimony to the Nuclear Regulatory Commission

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Thank you for the invitation to testify to you on the process of nuclear decommissioning. I am Chairman of the Community Engagement Panel at the San Onofre Nuclear Generating Station (SONGS). More than a year ago the co-owners of SONGS decided to shut permanently units 2 and 3 of the facility. (Unit 1, much smaller, had already been decommissioned.) This decision marks closure of the largest civilian nuclear power plants in the United States. The plant, like many in the United States, has had an uneven relationship with the local communities. It has been a huge source of employment, investment, electricity and revenue for these communities. It has also attracted considerable opposition on diverse fronts. Thus in tandem with the decision to close, the co-owners also focused on how the communities might be engaged in that process. One result was the Community Engagement Panel (CEP).

I testify today as Chairman but not formally on behalf of the Panel. By design, the Panel is not a decision-making body. We don't take votes and we don't formally develop particular points of view. That limits what we can do, but it also makes it much easier for our Panel to focus on issues that matter for the community without the need to devote time and other resources to making and overseeing particular decisions.

We do not have formal oversight authority in large part because there are many other bodies, including the Nuclear Regulatory Commission, that provide extensive oversight. Instead, the Panel is a two-way conduit designed to provide information to the communities about the decommissioning process and vice-versa. We have 18 members drawn broadly from the community—mayors, members of city and county councils, organized labor, the military (which owns the land under SONGS), police and state parks, environmentalists, activists, scientists and people who have worked in the industry. Everything we do is in the public eye. That includes posting full video of every meeting and workshop, transcripts from formal meetings, and every document circulated to the Panel.

When the co-owners established the Panel they were not following any particular model, but my sense is that they looked for inspiration in two areas. One was a similar panel that had helped with public engagement during the Maine Yankee decommissioning. A second was EPRI's best practice guidance for decommissioning, which calls for an explicit community engagement process. In addition, I think everyone knew that without the right community engagement that decommissioning could become stalled and more expensive—perhaps with even more layers of formal oversight that don't actually benefit the community.

The Panel was formally established in February 2014. We held our first meeting in March and are meeting quarterly. Each formal meeting is paired with a workshop to allow more in-depth discussion, especially of technical issues. We are moving very quickly because we want to be sure that there is adequate community input into a handful of crucial regulatory filings that the co-owners are drafting—the Spent Fuel Management Plan, the Decommissioning Cost Estimate, the Post-Shutdown Decommissioning Activities Report, emergency preparedness and the like. Already it is clear to me that if future plants use a CEP-like process that they should establish the CEP as early as possible so that, as at San Onofre, the communities are involved at the outset.

We are very young, just 6 months old, and thus a proper assessment of the Panel is highly premature. Nonetheless, let me share two broad perspectives on what we have done, with a special focus on issues that could affect how NRC interacts with decommissioned plants.

## **REMARKS RELATED TO DECOMMISSIONING**

Based on our work so far, I have five impressions about how the decommissioning process has unfolded.

First is the need to keep perspective on the broad portfolio of activities involved in decommissioning. While SONGS is at the early stages of decommissioning, it is already clear that the most vocal and organized public attention will focus on a handful of issues—in particular, storage of nuclear waste. I will talk more about that in a moment. However, I expect that the emphasis will shift as other topics, including job creation during dismantlement of the facility, noise, transport of debris and emergency preparedness, come into focus. As Chairman of the CEP I view one of my central tasks as keeping perspective on all the inter-related issues and not becoming overly focused just on spent fuel. It would be helpful for NRC and other regulators and stakeholders to reinforce that broader perspective as well.

Second, on the topic of nuclear waste storage and disposal, I am concerned that ongoing controversies might lead to unhelpful paralysis. For example, a particular focus of some CEP members and community members has been so-called

high burnup fuel (HBF). I do not know at this stage whether the presence of a large number of HBF fuel assemblies in the fuel ponds at SONGS will have a material impact on the decommissioning process and timing. My personal view—informed by a large number of conversations with experts and community members—is that HBF will be an important issue to track and, over time, it could lead to any number of changes in engineering and practice. It could affect the choice of casks, inspection procedures, and almost every other aspect of spent fuel storage and ultimate disposal.

It is really important that the important discussions on HBF not lead to paralysis—especially paralysis induced by regulatory uncertainty or delay. The May 2nd letter from Chairman Macfarlane to Priscilla Starr and other members of the Coalition Against Nukes (including one member of the SONGS CEP) was particularly helpful in clarifying NRC's perspective on these issues for me, and I have circulated that material to the full CEP. In my view, this is like many other regulatory issues where the facts are not all in—it is important to make decisions that don't lock the wrong processes into place and then evaluate those decisions along the way. The CEP, along with other forms of public oversight, can help make sure that evaluation and updating actually occurs. At the same time, it is important that we all learn the right lessons from history. There has been a massive amount of experience moving HBF around the world as part of the European reprocessing program—none of which, according to reliable testimony at one of our workshops, has led to adverse outcomes. Much more germane to the issues at San Onofre and other locations that will have long-term on-site storage is the ongoing research on aging of HBF assemblies—an area where legitimate concerns have been raised and where new empirical research will help to resolve those uncertainties. We also need to understand that other plants have “canned” HBF more out of regulatory uncertainty than fears that the fuel is unstable in long-term storage—that is my understanding of the logic behind the decision at Zion to can all that fuel.

It would be extremely helpful for NRC to give periodic guidance about the larger strategy it is following for fuel storage and how it views the tradeoffs. In my view, there are big tradeoffs between storing fuel in low assembly casks (possibly within cans) and in denser more modern cask designs. The former may allow for easier dissipation of heat; the latter can take advantage of modern designs to dissipate heat and also allow for a smaller spent fuel pad. Smaller is not just less expensive but less unsightly and easier to protect. I worry that all the talk about HBF has not allowed community members and regulators to focus on these fundamental tradeoffs. NRC could play a very helpful role in making the tradeoffs much clearer.

Third is the issue of long-term disposal of spent fuel. That topic looms large in the community, as it does, I am sure, in most communities. And it should. As a matter of national policy, it is insane for us to be accumulating fuel at many dozen sites scattered around the country rather than at a handful of centralized sites. The insanity of that policy has been known for a long time, but at decommissioned

plants the issues have become particularly stark. If it were possible to make a credible commitment to the local communities to remove the spent fuel from the site over some reasonable time period, I think that would make a tremendous contribution to relations with the communities. Of course, nobody can make such a commitment. In the 6 short months of our Panel's operations I have been struck by how many members of the community have learned that stark fact through the CEP process and are not happy with that reality.

Fixing this problem—which is not unlike many other large, difficult policy problems the nation faces—is not within the hands of any single agency or political body. That's one reason why it is hard to solve. Having studied this issue now in some detail, including through the work of the Blue Ribbon Commission on America's Nuclear Future—we had a member of the Commission testify at workshop in May—I am deeply pessimistic that long term repository options will be available any time soon. That reality puts a premium on consolidated interim storage—especially for decommissioned reactors. I do not know at this stage what NRC can do on this front and would welcome your advice on what we in the SONGS community can do. (We are planning to articulate a perspective on this matter, perhaps in the form of a white paper, and to convey that to our state and federal political leadership.) One obvious solution is to encourage private solutions with large payments to communities that host the fuel—exactly that was tried with Private Fuel Services (PFS) and the stalemate outcome was not encouraging. I am mindful that nobody is really “in charge” of this issue, but NRC could play a more conspicuous role perhaps in organizing some strategies.

Fourth, I have been concerned that there isn't a clear long-term regulatory strategy for decommissioned plants. As a person who has observed this process from the outside and now, suddenly, is thrust into the middle of the decommissioning process I have been struck that every plant seems to be feeling its way through the process. Issues arise and there isn't an obvious plan or set of expectations for how they would be resolved. Thus we have Spent Fuel Management Plans that are extremely broad and short while cost estimates are packed with details. We have efforts, such as recently by some Senators, to halt NRC's use of waivers for some emergency preparedness procedures at decommissioned plants for which there isn't an obvious standard procedure—a point that NRC, in that case, has helped to clarify with its June 26<sup>th</sup> letter to Senator Markey. It is my understanding that the NRC had sought to create an integrated decommissioning strategy with its June 2000 memo on rulemaking in this area (SECY-00-145) but that plan was eclipsed by other priorities. My view is that NRC should undertake a special effort to articulate a serious strategy that addresses every major front in decommissioning—fuel storage, shrinking of the licensed site, dismantling, emergency preparedness, and other key topics.

Fifth, and finally, after just 6 months I am concerned that nearly all the major topics in decommissioning—from casking to emergency preparedness—have the potential for large amounts of emotive language and amplified fears that do little but

make people agitated. We on the CEP, for example, have already fielded a large number of questions about the seismic integrity of the long-term storage site only to find that the seismic integrity of the casking systems is far greater than any plausible seismic activity in the area. Yet I continue to hear the same issues raised, including in public comment periods, even though substantial and serious attention has gone into examining them and making serious answers highly transparent to the public. All of us in this process have a larger responsibility to help people from diverse backgrounds—most of them not experts on nuclear matters—understand the real risks and tradeoffs. At the same time, all of us have a responsibility to focus on the areas of real risk and uncertainty and not on chimeras and red herrings. I have no illusion that this is easy, for it is one of the ongoing challenges in any democratic society that manages complex modern technologies.

### **SOME REMARKS RELATED TO THE COMMUNITY ENGAGEMENT PROCESS**

Mindful that the Panel is just 6 months old and any assessment is premature, I would like to suggest four observations about how our work has unfolded so far.

First, we were established voluntarily by the co-owners—not by the community. When a full assessment of the CEP experience is done I am sure that there will be debates over the best strategy for creating CEP-like mechanisms and how CEPs of the future can assure that they are truly independent. But one thing is already clear, which is that a process led by the co-owners allowed the CEP to be created and spun up quickly. That is of special importance if there is to be community engagement during crucial regulatory filings that are due quickly after a decision is made to close a plant.

Second, the membership of the CEP is a blend of public officials and selected members of the community. That blend is important for ensuring a diversity in viewpoints as well as skills. We have members of the CEP who can do technical calculations; others who are well linked to critical constituencies; still others have a special ability to anticipate how the public will react to key issues. Perhaps because I am not an elected official I have especially appreciated the participation of elected officials not least because their experience with the public comment and disclosure parts of our work.

Third, I have been struck that on many fronts essentially all the stakeholders have the same goal: a diligent and quick decommissioning that runs as rapidly as is safe. Part of our job, I think, is to remind all of us of that overlap. So far, however, we haven't yet faced any major barriers to swift action. My guess is that those barriers will come in the form of regulatory uncertainty. I look forward to working with NRC on that matter where we in the CEP can be helpful.

Fourth, one of my concerns about the evolution of the CEP is to ensure that we make tangible progress and have a real impact on the process. So far, we have

opened a conduit for information and that has been extremely useful. But to keep the attention and engagement of the extraordinarily impressive group of citizens who are CEP members, we need to make sure we keep moving to new topics and focus on where we can make a difference. I would welcome the insights from stakeholders at other plants on where their community engagement processes have mattered most. I suspect that some of the benefits are not visible—they take the form of more adversarial, formalized and perhaps less constructive oversight mechanisms that might be adopted if not for the presence of the CEP. Maybe that is enough; I suspect not. Vice Chairman Tim Brown (mayor of San Clemente) and I are in the midst of an effort to poll each CEP member individually for their views about the process; Secretary Dan Stetson (President of the Ocean Institute) is working with us to document every major issue that has arisen in our meetings and identify how we have handled each one. My overall impression is that the job of running a CEP effectively is a bigger one than I had originally managed—in part because success in this process requires clearly and transparently responding to comments on a huge number of issues, including issues that are far outside the scope of what the CEP was created to handle.

Related to the issue of tangible progress is community expectation. Many members of the community do not understand that the CEP is, by design, not a decision-making body. Our meetings have become focal points for many grievances that members of the community have with lots of other institutions. Other than repeatedly clarifying our real role I don't see a practical way of avoiding this problem, which is one that is intrinsic to many public institutions.