

MEETING MINUTES

San Onofre Decommissioning Community Engagement Panel Meeting

Meeting Time/Date: 6:00 – 9:00 p.m. on March 25, 2014

Location: San Clemente Community Center, San Clemente, CA

I. Community Engagement Panel Member Attendance

- a. Present: David Victor (Chairman), Rich Haydon (California State Parks), President John Alpay (Capistrano Unified School District Board of Trustees), Larry Rannals (Camp Pendleton), Mayor Lisa Bartlett (Dana Point), Valentine “Val” Macedo (Laborers International Union of North America Local 89), Dan Stetson (Ocean Institute), City Council Member Jerome M. “Jerry” Kern (Oceanside), Garry Brown (Orange County Coastkeeper), Donna Boston (Orange County Sheriff’s Department), Supervisor Pat Bates (Orange County), Gene Stone (Residents Organized for a Safe Environment), Mayor Tim Brown (San Clemente), Supervisor Bill Horn (San Diego County), Mayor Sam Allevato (San Juan Capistrano), Jim Leach (South Orange County Economic Coalition), Dr. William Parker (University of California, Irvine)
- b. Absent: Ted Quinn (American Nuclear Society, San Diego Chapter)

II. Opening comments

- a. Welcome from Panel Chairman David Victor
 - i. Chairman Victor has made a career of studying highly regulated industries, including the energy industry.
 - ii. The Chairman, his wife and two kids live in San Diego and are part of the community affected by the plant.
 - iii. The Community Engagement Panel was formed as a way to open a conduit between the community and the decommissioning participants (Southern California Edison, San Diego Gas & Electric, and the Cities of Anaheim and Riverside).
 - iv. The decommissioning-related decisions that need to be made will benefit from community participation. The decommissioning process is an enormous engineering effort that appears as though it will be as technically challenging as the construction of a nuclear power plant itself.
 - v. The 18 Community Engagement Panel volunteer members consist of a broad set of stakeholders. Each member recognizes the importance of the panel and wants the decommissioning process to go safely and smoothly, with healthy community engagement. The Panel should act as a model for other decommissioned nuclear power plants.
 - vi. Future CEP agendas will be based in part on topics raised during today’s meeting.
 - vii. The tone of the decommissioning process & CEP is one of complete transparency.
- b. Ground rules and public comment (Chairman Victor)
 - i. Three main points to keep in mind:
 - 1. The decommissioning process is moving quickly. The plant closure was announced less than one year ago and the CEP was announced only one month ago in an effort to open the channels of communication as quickly as possible. Yet at the same time, this is a long-term project involving around 20 years of major engineering activity. We must make sure to focus on the process in a practical manner and with civility.
 - 2. We need your help on future agenda items. What do you want to know more about? What do you want to focus deep dive workshops on?

3. We need to be realistic in this process. There are some areas where we can provide input that will be critical to what the Southern California Edison (SCE) does. There are some areas where the CEP will have less ability to influence.
- c. Opening Comments from SCE's Vice President of Decommissioning, Chris Thompson
 - i. Thompson is responsible for overseeing the various elements of San Onofre's decommissioning for SCE, including financial, regulatory, and legal matters.
 - ii. The San Onofre participants (co-owners SCE, San Diego Gas & Electric, and the City of Riverside, as well as former co-owner City of Anaheim) decided to create the CEP because they all value community involvement.
 - iii. The CEP is a two-way channel of communication, and SCE will take input from the panel very seriously. It is important to recognize that the CEP is just one source of input. The decommissioning participants will also be taking input from the NRC, the California Public Utilities Commission, and other stakeholders.
 - iv. SCE approaches the decommissioning of San Onofre with three core principles in place:
 1. Safety. Above all else, San Onofre will be decommissioned safely. SCE considers the safety of the workers at the plant, the safety of the surrounding communities, and the safety of the environment.
 2. Stewardship. Approximately 30 years ago, SCE and the other decommissioning participants established trust funds to pay for decommissioning. SCE has a duty to spend the trust funds wisely, recognizing that all left over funds will eventually get returned to ratepayers.
 3. Engagement. SCE and the other decommissioning participants place a high value on public engagement. For instance, SCE has conducted more than 100 presentations on San Onofre to community groups over the past couple of years.
 - d. Opening Comments of the Community Engagement Panel Members
 - i. Council Member Kern: Given the wide regional interest in the decommissioning of San Onofre, the CEP meetings will get moved around throughout the region.
 - ii. Gene Stone: Thanks to SCE for his selection as a CEP member, especially given his role as an anti-nuclear activist. Stone will ensure that SCE does everything in its capacity to live up to the decommissioning core principles previously outlined. While cost is an important topic, safety will be the primary concern. Decommissioning will have many important issues worth watching, such as the "canning" of all high burn-up fuel for extra protection, the storage of all high burn-up fuel on-site behind higher tsunami walls and berm upgrades, recognizing that safer storage is a safer California. Additionally, as a CEP member, Stone would like to see SCE's plans in the event of an emergency with regards to the dry cask storage. Stone also wants to know if SCE will sub-contract any portion of the decommissioning work, or if it will be conducting the work itself? Does SCE have the appropriate decommissioning experience? If so, why isn't the San Onofre Unit 1 decommissioning complete? Also, the first CEP workshop should have a dual purpose: 1) understand the common pitfalls of other decommissioned nuclear plants, and: 2) a discussion of high burn-up fuel with NRC and other industry experts. Finally, in the words of Sitting Bull, let us work together for the sake of our children.

- iii. Mayor Brown: Welcome to all visiting San Clemente, and thank you to SCE for putting this panel together.
 - 1. Two items in the charter really spoke to Mayor Brown: 1) The CEP as a conduit of communication, and 2) The focus of this effort on public education and awareness.
 - 2. The CEP will work to educate & and act as a conduit of information to our citizens
 - 3. Mayor Brown is grateful for this opportunity, and hopes to find a common understanding that will make decommissioning a positive experience and establish a standard for the rest of the nation to follow.

III. **Briefing on San Onofre Decommissioning Planning and Activities by SCE Vice President and San Onofre Chief Nuclear Officer Tom Palmisano**

a. Introduction

- i. Tonight's meeting marks the start of an important, lengthy & complicated process, and through all of decommissioning, SCE intends to stick to its core three principles:

1. Safety

- a. Supervisor Bates question regarding Department of Energy acceptance of spent nuclear fuel.
 - i. Answer from Tom Palmisano: The Edison Electric Institute, the Nuclear Energy Institute, and Utilities in general have been involved in talks with the federal government regarding a permanent spent fuel repository.

2. Stewardship

- a. SCE intends to leave San Onofre better off than it was before the plant was built, and SCE is proud of its history of involvement in the communities surrounding San Onofre. Additionally, it is important that SCE and the other decommissioning participants spend the decommissioning trust fund money wisely.

3. Engagement

- a. The CEP is a great opportunity to engage with the public throughout the process, and should lead to a better, more well informed decommissioning.
- b. Question from Dan Stetson: what is the current value of the decommissioning trust?
 - i. Tom Palmisano answer: Trust balance currently is \$3.9 billion.

b. Current status of San Onofre

- i. The plant has been defueled since July 22, 2013. This is important because it modifies the terms of the NRC license. San Onofre now has a 'possession only' license since it will no longer generate power. Additionally, San Onofre staffing levels are currently below 500 people. This is an example of the trust fund stewardship.
- ii. Three phases of Decommissioning. It is important to note that the decommissioning participants have up to 60 years to decommission and return the site to unrestricted use according to NRC rules. SCE does not intend to take 60 years.
 - 1. Phase 1: Decommissioning Planning
 - a. San Onofre is current in the middle of decommissioning planning. The plant has ceased operations, notified the NRC, and defueled reactors. The next

major step is to submit a Post-Shutdown Decommissioning Activities Report (PSDAR). This filing includes a site-specific Decommissioning Cost Estimate (DCE), a detailed decommissioning work plan, and a spent fuel management plan. SCE cannot begin major decommissioning on San Onofre until the PSDAR is submitted and public review is complete. Plans are to submit the PSDAR later this year.

2. Phase 2: Major Decommissioning
 - a. This phase of decommissioning involves the decontamination and dismantlement of the plant, the transfer of all spent nuclear fuel out of the cooling pools and into dry canister storage, and the demolition of all plant structures not required for the purposes of spent fuel storage. While the NRC allows 60 years for this work, SCE will complete it safely in a much shorter time-frame.
 3. Phase 3: License Termination
 - a. At the end of the dismantlement of the plant, the San Onofre license will be terminated, and only dry canister storage and the associated necessary facilities and personnel will be left on site. Given the reality of the current state of affairs with the federal government and a lack of a permanent spent fuel repository, there is currently nowhere to ship spent fuel.
 4. Question from Mayor Brown: Would SCE re-purpose the site in order to build another power plant?
 - a. Answer from Tom Palmisano: SCE has no plans to repurpose the site, though the switchyard (located on the eastern side of I-5) might be a different story given its role as a major interconnection point for both the SCE and SDG&E systems.
 - b. Answer from Larry Rannals: It is critical to note that the Department of the Navy owns the San Onofre property, and so the Navy has the final word regarding any future use of the site.
 5. Question from Gene Stone: What is the end radiation level on site per the Navy's agreement with SCE?
 - a. Answer from Larry Rannals: the end-state radiation levels are set by the NRC, not the Navy.
 - b. Follow-up from Tom Palmisano: Beyond end radiation levels meeting NRC requirements, the easement and lease specify site conditions as directed by department of Navy.
 6. Question from President Alpay: Is the switch-yard part of the decommissioning plan?
 - a. Answer from Tom Palmisano: SCE must include the switchyard station in the decommissioning plan, but the switchyard isn't part of the nuclear portion of the facility.
- c. Upcoming Decommissioning submittals, timeline, spent fuel storage, and trust fund
 - i. SCE is preparing several upcoming submittals relating to the decommissioning of San Onofre:

1. Post Shutdown Decommissioning Activities Report (outlined above).
 2. Irradiated Fuel Management Plan (IFMP), which details how spent fuel will be stored, managed and funded over its life on the site.
 3. Question from Gene Stone: What is the plan for handling dry cask storage? Is there an emergency response plan?
 - a. Answer from Tom Palmisano: This should be topic of discussion at a future CEP workshop or panel.
 4. Site-specific Decommissioning Cost Estimate (DCE), which estimates total decommissioning costs at San Onofre, and is more tailored to San Onofre as compared to the cost estimates that have been submitted to the California Public Utilities Commission every three years as part of the process to ensure appropriate trust funding levels.
 5. Permanently Defueled Emergency Plan (PDEP). Now that reactors are de-fueled, emergency plan needs to be revised. The focus will now be placed squarely on the spent fuel and the dry cask storage.
 6. Permanently Defueled Technical Specifications (PDTS).
 7. The PSDAR, IFMP, and DCE will be submitted Q3 2014.
 8. Question from Dr. Parker: This timeline for the PSDAR is challenged, and it is going to be hard to collect substantial community feedback in such a short amount of time
 - a. Answer from Tom Palmisano: These are target dates. The documents won't go out the door until we get appropriate feedback from the CEP.
 9. Defueled Emergency Plan and the Permanently Defueled Technical Specifications are targeted for Q1 2014.
 - a. The PDTS has already been submitted to the NRC, starting the 12-month public feedback process. The PDEP is almost ready to be submitted, and once submitted, will also enter into a 12 month approval process.
- ii. SCE plans to finish the major decommissioning activities in 20 years or less
1. Work to finish draining, de-pressurizing systems, and reducing hazards is well under way. By January 2016, the plant will go 'cold and dark' (an industry term that indicates the facility is ready for the start of major dismantlement). It is important to note that SCE is obligated to continue to modify its license as the plant status and condition changes.
 2. One important piece of work that needs to get done along with the major dismantlement is the expansion of the dry fuel storage system in order to hold the fuel once it is removed from the wet storage pools. It will take approximately five years to move all the spent fuel out of the pools and into the dry canisters storage.
 3. SCE projects a 10-year period to actually dismantle the plant. In benchmarking, the best comparison is Maine Yankee, a one-unit, 850 megawatt pressurized water reactor (PWR) that was dismantled in seven or eight years. By comparison, SONGS is a dual unit, 2.2 gigawatt pressurized water reactor, which is much more complex than a single unit. Hence the expectation of a slightly longer dismantlement time-frame.

4. Comment from Chairman Victor: The CEP will need a deep dive on the decontamination & dismantlement stage. It would be unwise to over-focus on spent fuel storage and ignore the other major work.
 5. Question from Mayor Bartlett: How long can spent fuel stay in dry canister storage?
 - a. Answer from Tom Palmisano: Systems are initially licensed for 20 years, and then must go through a license renewal process.
 6. Question from Mayor Bartlett: What is the earthquake requirement for the dry canister storage?
 - a. Answer from Tom Palmisano: The dry canister system is designed to withstand earthquakes at the same level as rest of plant. SCE will provide additional information on the seismic capability of the dry canister storage system.
 7. Question from Mayor Brown: Aggressive timelines are typically pushed out when it comes to major construction. Will SCE run into safety or other time-sensitive issues if work gets delayed?
 - a. Answer from Tom Palmisano: SCE is early in the decommissioning planning stage, but at first glance, there is nothing in the plan that will get SCE into trouble. However, SCE is always focused on the three guiding principles: safety, stewardship and engagement, and will make sure to follow them when considering the issue you raised.
 8. Follow-up from Chairman Victor: The CEP needs to understand where the schedule can move more quickly without sacrificing safety.
 9. Question from Jim Leach: Is the fuel removal totally dependent on federal government politics?
 - a. Answer from Tom Palmisano: Yes.
- iii. Overview of spent fuel storage
1. Current state of spent fuel storage: 2,668 fuel assemblies in spent fuel pools at San Onofre. Includes 50 canisters and 1,187 fuel assemblies in dry canister storage.
 2. Question from Dr. Parker and action item for Tom Palmisano: Can SCE provide radiological measures of each canister
 3. Future state of spent fuel storage: Expanded dry canister storage pad that can hold 150 canisters (as opposed to the current 50 canister maximum). Eventually, 3,855 fuel assemblies will be held in approximately 150 canisters prior to pick-up by the federal government.
- iv. Decommissioning trust fund and regulatory oversight
1. Decommissioning trust is overseen by five-member committee. Before SCE can withdraw trust dollars, interim access must be granted by the CPUC. Once the site-specific DCE is complete, the process of seeking full access to the decommissioning trust will commence. The NRC also controls portions of the decommissioning trust, in particular the portion of the fund that is meant to cover the work associated with the radiological dismantlement and the spent fuel storage. SCE will work with and report to both the CPUC and the NRC throughout the decommissioning process.
- v. Land easement and lease

1. San Onofre and the supporting facilities are on Navy land. There are two different types of agreements with the Navy: an easement for the power plant and spent fuel area, and a lease for the land containing the support facilities (primarily located on the east side of I-5). The easement was established in the early 1960s, and SCE is currently in preliminary discussions with the Navy on the status of both the lease and easement. The end state of the land as outlined in the agreements is that clean-up will be done to NRC requirements, but to the ultimate interest of the Navy.
2. Question from Supervisor Horn: Has anyone ever dry-stored spent nuclear fuel before, and what is the life of these containers? We should be sure that the dry stored fuel does not adversely affect people 40 to 50 years from now.
 - a. Answer from Tom Palmisano: The dry casks were originally licensed for 20 years. Plants are now going through a re-licensing process and monitoring the dry storage casks to ensure safety.
3. Question from Mayor Brown: Why was there not an extension of the lease and easement built into contract original agreement with the Navy?
 - a. SCE to provide additional information.
4. Question from Dan Stetson: Has anyone else had issues with leaking casks?
 - a. Answer from Tom Palmisano: Not aware of any problems with leaking casks.
5. Remark from Gene Stone: The Navy can determine how far SCE has to go regarding clean-up.
 - a. Response from Gary Rannals: The NRC requirements will govern SCE's clean-up efforts.
6. Remark from Chairman Victor: Future panel topic should be focused on site clean-up.
7. Question from Mayor Brown: When did SCE start loading casks at SONGS?
 - a. Answer from Jim Madigan of SCE (seated in the audience): 1999.
 - b. SCE to provide additional information on when the high burn-up fuel start moving into dry canister storage?
8. Question from Supervisor Horn: Are SCE and other participants on the hook for all costs until fuel is moved off-site?
 - a. Answer: Yes.
9. Follow-up: workshop on fuel storage issues, including industry experts, EEI and others to go over the state of the art in terms of spent fuel storage.

IV. Public comment period (3 minutes per speaker)

- a. One hour has been allocated for public comment, with 30 people signed up, and only 3 minutes per speaker. The public will have to keep to time requirements in order to accommodate everyone.

[Note: public comments can be viewed in the video recording or meeting transcript posted on www.SONGScommunity.com. SCE did not want to characterize individual opinions and therefore omitted the public comment period from these minutes.]

V. Close-out and final words (Chairman Victor)

- Next Steps

- a. From here on out, the plan will be to focus on much more specific topics. We will use tonight's transcript to focus on more specific questions that the CEP members and the public have raised. We will also organize tonight's discussion into some sort of memo to distribute to the public. And we will collect feedback after every meeting.
- b. Possible workshop topics include fuel management, the decommissioning timeline, long-term storage, and updates on regulatory filings.
- c. Moving forward, the CEP will hand out hard copy agendas for all in attendance.
- Final Comments
 - a. Garry Brown: A key question is how the CEP will communicate, and how the decommissioning participants will communicate. The participants could do a better job than has been done in the past. This story will go on for a long time and it will be very complicated.
 - b. Donna Boston: Significant concerns around emergency planning. At some point along the way, there should be a workshop to discuss response operations work as well as the security plan at the plant.
 - c. Supervisor Bates: Legitimate concerns around decommissioning trust funds. This should be another follow-up item. For instance, what are the existing oversight mechanisms, and are they adequate?
 - d. Supervisor Horn: Regarding emergency response, there are evacuation routes out of San Diego. Additionally, Bill's first choice is to get the spent fuel out of here, but without that, San Onofre needs to have the safest spent fuel storage possible. The question of the radiation levels at various points around the plant needs to be answered.
 - e. Gene Stone: There are dry cask leaks occurring already at Hanford, so this issue is very concerning at San Onofre. But the community can all work together to solve a problem, and everyone now has the opportunity to reunite the nuclear waste disposal movement.
 - f. Larry Rannals: The spent fuel storage question should be subject of a near-term workshop. As should the topic of the Navy lease and easement plans. And it is worth noting that the Navy will return site to full use. Finally, a question: what is meant by greenfield condition?
 - g. Mayor Brown: The facts will win out. SCE has been very open and transparent, and has gone so far as to provide extensive supporting material, all of which is already in the public domain. Everyone providing contrary facts needs to provide the supporting evidence to back up their claims.
 - h. Dr. Parker: Low level waste disposal is another important area to focus on. The CEP can't focus solely on long-term spent fuel.

VI. **Adjourn** (Chairman Victor)