Thursday, May 11, 2017, from 5:30-8:30 p.m. PDT in Laguna Hills, California Meeting Minutes and Action Items

1) Community Engagement Panel (CEP) Member Attendance

- a) Present: Dr. David Victor (CEP Chairman/University of California, San Diego), Hon. Tim Brown (CEP Vice Chairman/San Clemente City Council), Dan Stetson (CEP Secretary/Nicholas Endowment), Glenn Pascall (Sierra Club), Hon. Pam Patterson (Mayor Pro Tem, San Juan Capistrano City Council), Hon. Jerome "Jerry" M. Kern (Oceanside City Council), Hon. Lisa Bartlett (Supervisor, Orange County, 5th District), Rich Haydon (California State Parks), Tom Caughlan (Camp Pendleton), Donna Boston (Orange County Sheriff's Department), Jim Leach (South Orange County Economic Coalition), Ricky Smiles (filling in for Val Macedo, Laborers' International Union of North America, Local 89), Hon. Martha McNicholas (President, Capistrano Unified School District Board of Trustees), Marni Magda (Sierra Club)
- b) <u>Absent:</u> Hon. Bill Horn (Supervisor, San Diego County), Valentine "Val" Macedo (Laborers' International Union of North America, Local 89), Ted Quinn (American Nuclear Society), Hon. Paul Wyatt (Mayor Pro Tem, Dana Point City Council), Garry Brown (Orange County Coastkeeper)
- c) <u>Guests</u>: Bruce Watson (Branch Chief, Nuclear Regulatory Commission), Ray Kellar (Region IV Branch Chief, Nuclear Regulatory Commission), John Heaton (Vice-Chairman, Eddy-Lea Alliance LLC), Pierre Oneid (Sr. Vice President & Chief Nuclear Officer, Holtec International)
- d) <u>Southern California Edison (SCE) Representative</u>: Tom Palmisano, Vice President Decommissioning & Chief Nuclear Officer

2) Meeting Convened by Chairman Victor at 5:40 p.m.:

- a) The focus of tonight's meeting is on both the Nuclear Regulatory Commission (NRC) Oversight of Decommissioning and Consolidated Interim Storage (CIS) Development Projects
- b) Chairman Victor reminded the audience that the CEP was created to improve communications with the communities and open a two-way flow of information between SCE and the public; the CEP is not a decision-making body nor an oversight body
- c) The presentations from tonight can be found on <u>SONGScommunity.com</u>, as well as live streaming, meeting documents, links for signing up for public walking tours of the plant site, and more
- d) SCE information booths, staffed by SCE personnel, are available before the meeting and during the break, as well as two community booths
- e) A structured public comment period follows the presentations. Comments may be submitted any time to nuccomm@songs.sce.com
- f) Chairman Victor introduced Bruce Watson and Ray Kellar from the NRC, John Heaton from Eddy-Lea Energy Alliance LLC, and Pierre Oneid from Holtec International
- g) Chairman Victor announced Glenn Pascall's retirement and departure from the CEP and thanked him for his service. Glenn Pascall's farewell address included 1) the value of the CEP, 2) the Sierra Club positions on nuclear waste, and 3) the introduction of Marni Magda as his Sierra Club replacement (the farewell address was provided in hard copy)
- h) Chairman Victor discussed the context of this meeting, including the issues at hand, such as environmental responsibility, safety, respect for the local communities, safe fuel movement, safe storage of spent fuel, and removing spent fuel from the site; future meetings will include aging management, or defense-in-depth, and a strategy for accelerating moving the fuel off-site; tonight is focused on learning about viable sites for used fuel storage

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- 3) Decommissioning Update, Tom Palmisano [Please refer to the *Decommissioning Update* presentation on SONGScommunity.com]
 - a) Hon. Tim Brown asked for clarification of the environmental impact review
 - Tom Palmisano stated that the plant is on Federal land so the final state of the land is dependent on the U.S. Navy; California Environmental Quality Act (CEQA) looks at the state requirements and National Environmental Policy Act (NEPA) will look at the federal requirements
 - ii) Tom Palmisano will provide a more detailed discussion at a future CEP meeting
 - b) Chairman Victor asked that when the time is right the U.S. Navy provide an explanation of the NEPA process they will follow
 - i) Tom Caughlan expressed that the Navy's intent is to return the land to the U.S. Marine Corps (USMC) for training purposes; the Navy is looking at the site parcel-by-parcel, starting with the parcels on the east side of the I-5 freeway
 - ii) Tom Palmisano clarified that the land on the east side of the I-5 freeway is not included in the NRC license and the process for returning the land to the U.S. Navy is therefore different than the plant site
 - c) Dan Stetson asked for feedback regarding the Native American input to this process discussed at the last CEP meeting (2/16/17)
 - i) Tom Palmisano explained that in 2016, several outreach efforts were made to Native Americans by both SCE's full-time Native American liaison and California State Lands Commission that has a requirement to notify local tribes
 - ii) Tom Palmisano agreed to post the entire list of tribes notified on SONGScommunity.com
 - d) Dan Stetson asked for clarification on the NRC Insurance Exemptions
 - i) Tom Palmisano explained that the insurance requirements are different between an operating nuclear plant and a decommissioning plant
 - ii) Tom Palmisano agreed to talk about this in more detail at the next CEP meeting
 - e) Chairman Victor shared that he, Hon. Tim Brown, and Dan Stetson planned to meet next week with personnel from the Electric Power Research Institute (EPRI) regarding cask research, with the intent of having a future CEP meeting on current research
 - f) Chairman Victor asked that Tom Palmisano review Pacific Gas & Electric's Diablo Canyon off-site emergency responder funding and provide an update at an upcoming CEP meeting
 - Tom Palmisano has already started these discussions and will provide the CEP with an update at a future meeting
 - g) Hon. Pam Patterson asked if Tom Palmisano was familiar with the \$2 million fine imposed on Holtec
 - i) Tom Palmisano stated he was familiar with the issue and that he would discuss this once again at the next CEP meeting
 - h) Hon. Martha McNicholas asked for clarification on number of canisters ready for shipment
 - Tom Palmisano agreed to post information on each canister's transportation readiness on SONGScommunity.com
 - i) Tom Caughlan asked about transportation route approvals needed

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- i) Tom Palmisano agreed to have transportation expert, Jack Edlow, return to make a presentation on the process at a future CEP meeting
- j) Chairman Victor reminded the audience that he, Hon. Tim Brown, and Dan Stetson wrote the California Energy Commission (CEC) asking that they develop a California plan that includes transportation of spent nuclear fuel

4) NRC Decommissioning Oversight, Bruce Watson and Ray Kellar [Please refer to the presentation on SONGScommunity.com]

- a) Hon. Pam Patterson asked if the conditions at the San Onofre Nuclear Generating Station (SONGS) were ultra-hazardous
 - i) Bruce Watson explained that once the fuel is removed from the reactor and placed in the spent fuel pool the plant is in a much safer condition; the risk is reduced and the safety is manageable
- b) Hon. Pam Patterson asked if Bruce Watson could explain what was going on in Washington
 - i) Bruce Watson explained that the NRC does not regulate the Hanford Nuclear Waste Site, the Department of Energy operates and regulates the site
- c) Hon. Pam Patterson asked what involvement Bruce Watson had with the Holtec bribe situation
 - i) Bruce Watson had no knowledge of the situation
- d) Hon. Pam Patterson asked why there was no long term plan for spent nuclear fuel
 - i) Bruce Watson explained that Washington policymakers are responsible for this issue
 - ii) Tom Palmisano added that the Department of Energy (DOE) is responsible for removing spent fuel from nuclear sites and suggested the DOE make a presentation at an upcoming CEP meeting
- e) Chairman Victor asked Ray Kellar if the documents on Agency-wide Documents Access and Management System (ADAMS) are in plain English
 - i) Ray Kellar responded in the affirmative and stated that the inspection reports identify what was inspected, the results of the inspection, and any violations noted
 - (1) Chairman Victor took an action to take a look at the inspection reports
- f) Marni Magda asked about the monitoring system for the new Independent Spent Fuel Storage Installation (ISFSI)
 - i) Bruce Watson explained that heat load monitoring would be performed as well as dosage rate at the site boundaries using Thermo-Luminescent Dosimetry
- g) Marni Magda asked about the protection of the staff responsible for monitoring the ISFSI and gave the example of a firestorm
 - i) Tom Palmisano described the new hardened Security Facility including a control room (for use by Operators and Security force) so the staff will be protected from natural events
- h) Marni Magda expressed concerns that the DOE and the NRC do not keep fuel inventory records
 - Ray Kellar explained that dual records must be maintained until the DOE takes ownership of the used fuel; the licensee is responsible for maintaining the records, the licensee provides the records to the DOE, and the NRC inspects the records
 - ii) Chairman Victor took an action to contact Steve Maheras of the DOE to obtain a summary explanation of the DOE process for maintaining fuel inventory
- i) Hon. Pam Patterson asked who at the NRC is responsible for investigating the bribery of quality assurance inspectors
 - i) Ray Kellar responded that the NRC's Allegation Program would handle those issues

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- (1) Bruce Watson added that the NRC's Office of Investigations would conduct the investigations on reported allegations
- (2) Hon. Pam Patterson expressed a desire to obtain the documentation on the Holtec bribery allegation
 - (a) Chairman Victor explained that the CEP spent a lot of time looking at this situation and he personally organized all the information and shared it with the CEP members, including Hon. Pam Patterson; Chairman Victor took an action to resend the information

5) CIS Development Project: Waste Control Specialists, Tom Palmisano [Please refer to the presentation on SONGScommunity.com]

- a) Hon. Pam Patterson asked for the name of the city nearest the site
 - i) Tom Palmisano clarified that the site is located in Andrews County, Texas, and that the nearest cities are Eunice (3 miles away) and Hobbs (15 miles away), both in New Mexico
- b) Chairman Victor commented that this project shows that the public benefits from having multiple options and to encourage diversity in the market

6) CIS Development Project: Eddy-Lea Energy Alliance LLC (ELEA), John Heaton and Pierre Oneid [Please refer to the presentation on SONGScommunity.com]

- a) Jim Leach asked what is meant by short term
 - i) John Heaton said "short term" is undefined but in his opinion it's 80-100 years
 - (1) Jim Leach stated he was impressed by the local support for this project but asked if there was also Federal support
 - (a) John Heaton explained that there were some that were neutral and some that were supportive, but that due to the fact this is a private facility, the Federal government would not be involved; however, Senators have asked ELEA to make presentations throughout the state for education purposes
- b) Hon. Martha McNicholas asked about the Waste Isolation Pilot Plant (WIPP)
 - i) John Heaton explained that WIPP does not accept this type of used fuel at this time
- c) Chairman Victor asked that Per Peterson's material (5/6/14 CEP Meeting presentation) be shared with John Heaton
- d) Dan Stetson asked how the original purchase of the land was funded
 - i) John Heaton stated the counties and the cities funded the land purchase but the land would be transferred to Holtec eventually
- e) Hon. Pam Patterson asked about the zoning in the area of the site
 - i) John Heaton was not aware of any zoning for the area
- f) Hon. Jerry Kern asked if the 1,000 acres is expandable
 - i) Pierre Oneid stated that originally 30 acres was needed but 500 acres were licensed and can be expanded
 - ii) Hon. Jerry Kern asked if the NRC sets the prioritization of the fuel movement
 - (1) Chairman Victor believes the answer is ambiguous and Pierre Oneid believed the DOE sets the criteria
 - (2) Chairman Victor asked that Marni Magda share with Hon. Jerry Kern the standard contract work she's done on fuel movement priority
- g) Hon. Pam Patterson asked Pierre Oneid to explain the \$2 million bribery fine

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- i) Pierre Oneid said he has all the details of this 2001 issue and would be happy to share all the details with her in a one-on-one meeting
- ii) Chairman Victor asked that if Pierre Oneid and Hon. Pam Patterson meet that they please share details of their meeting; Chairman Victor will share the documentation he put together on the issue with Pierre Oneid
- h) Hon. Lisa Bartlett presented information regarding the Nuclear Waste Fund and discussions she had recently with Washington legislatures; until enabling legislation is in place no progress can be made
 - i) Hon. Lisa Bartlett encouraged the public to support Congressman Darrell Issa's HR 474 that amends the Nuclear Waste Policy Act of 1982 to define CIS and allows the Secretary of Energy to enter into contracts and provides some funding
 - ii) In the recent meetings, Hon. Lisa Bartlett met with Congressman John Shimkus from Illinois, a Senior member of the House Energy and Commerce Committee and Chairman of the Environment Sub-committee, and he will be calling a lot of the shots regarding moving the project forward; Congressman Shimkus will not support a CIS bill that does not incorporate a permanent repository
 - iii) Hon. Lisa Bartlett also met with Congressman Darrell Issa, who is very intent on pushing the legislation forward to obtain CIS and getting the spent fuel off-site
 - iv) Hon. Lisa Bartlett encouraged the public to contact their legislatures in Washington, DC to encourage legislation that will allow these projects to move forward
 - (1) Contact Senator Feinstein to ask her to reconsider Yucca Mountain as a permanent repository
 - (2) Contact Congressman Issa and support his HR 474
 - (3) Contact Congressman John Shimkus and ask that he consider CIS without mandating a permanent repository
 - (4) Contact Hon. Lisa Bartlett's Board office in Santa Ana for correct legislature mailing addresses in Washington, DC

7) CEP General Updates, Chairman Victor

- a) Gary Headrick and others have raised questions about whether there's a program to understand how high burn-up fuel ages; Chairman Victor researched the issue along with SCE and staff from the DOE; a high burn-up fuel (HBF) demonstration project has just gotten underway that will eventually allow casks to be opened and the fuel examined to seek understanding of how HBF behaves in storage; the CEP will share information with the public as the program develops
- b) Future CEP meetings:
 - i) August 31: Spent Fuel Transportation and Spent Fuel Management & Defense-in-Depth
 - ii) October 26: Easement & Leases, Department of the Navy, and End-state of Land
- A number of groups have asked questions about the geology surrounding SONGS and a meeting is scheduled with Dr. Neal Driscoll tomorrow morning to answer technical questions; information from that meeting will be shared on SONGScommunity.com

8) Chairman Victor Facilitated the Public Comment Period

- a) Public Comments were made by the following individuals:
 - i) Daryl Gale: sea level rise
 - ii) Gene Stone (ROSE): real discussions in the community needed

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- iii) Yosh Yamanaka (Our Revolution, Long Beach): insecurity of bio-hazard
- iv) Gary Headrick (San Clemente Green): waste
- v) Angela Mooney D'Arcy (Sacred Places Institute for Indigenous Peoples): Native American representation
- vi) Aron North: earthquake preparedness
- vii) Kaila Higgins (Public Watch): nuclear power
- viii) Judy Jones (citizen of San Clemente): amendment to Nuclear Waste Policy Act Amendment
- ix) Bob Pope (Public Watchdogs): engineering issues with canisters
- x) Kevin Higgins (Public Watchdogs): burying nuclear waste
- xi) Russ Tanton: study of stress corrosion cracking of 316 SS containers
- xii) Nina Babiarz (Public Watchdogs): San Onofre waste
- xiii) Roger Johnson: San Onofre waste
- xiv) Karen Hadden (SEED Coalition, TX): San Onofre waste
- xv) Ray Lutz (Citizens Oversight): Environmental Impact Statement; shipping experience
- xvi) Torgen Johnson (SLF): Fukushima lessons learned
- xvii) Nathan Gibbs (South OC resident): need to educate local youth
- xviii) Karl Aldinger: identify plan to detect radiation in drinking water
- xix) Mary Beth Brangan (EON): post complete report on why Yucca Mountain is not viable
- xx) Daniel Beeman (Freedom Please Org): can't we keep the waste off the beach!
- b) Dan Stetson and Hon. Tim Brown facilitated dialogue based on themes conveyed during the Public Comment Period:
 - Public has requested a response to questions regarding procedures in the event of a criticality event
 - (1) Tom Palmisano responded that the spent fuel pools and dry cask storage facility are designed to prevent criticality; this response requires a longer response in writing
 - ii) Public asked about the seismic design specifications for the Holtec canisters, including a partially cracked canister
 - (1) Tom Palmisano clarified that the spent fuel pools and the power plant itself are designed for a .67 peak ground acceleration, and the canisters are designed for a much higher peak ground acceleration of 1.5
 - iii) Public asked if there have been any cracks in Holtec canisters and if so what is the probability of them withstanding an earthquake
 - (1) Pierre Oneid responded no, there have been no cracks in canisters, and the aging management program will cover future years
 - iv) Public asked about the details of burying the nuclear waste at SONGS
 - (1) Tom Palmisano explained that the fuel is not buried directly in the sand and described how the Holtec system is designed
 - v) Public asked what risk assessments had the NRC performed in regards to the Emergency Planning and why change the Emergency Planning
 - (1) Bruce Watson responded that exhausting studies have been performed on the risk associated with spent fuel and the safety of spent fuel in both wet and dry storage and those studies are available on the NRC website

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- (2) Emergency Planning is reduced because of the reduced risk associated with the fuel no longer being in the reactor; after the fuel has decayed for a period of time it is impossible for an off-site release to occur beyond the site boundaries
- (3) Chairman Victor asked that the documents associated with the risk assessment and the need for Off-site Emergency Planning be pulled together for ease of reference
- vi) Public asked about the funding for the fuel pool insurance
 - (1) Tom Palmisano explained that SCE covers both primary and secondary insurance for an operating plant that is still in effect today; SCE will continue to have both primary and secondary insurance for the spent fuel that will cover both on-site and off-site actions; Tom Palmisano will explain the insurance exemptions at the next CEP meeting
- vii) Public questioned, once again, if the canisters were safer than the fuel pools
 - (1) The NRC's position is that both are safe
 - (2) Tom Palmisano added that for an operating plant there is a need for a fuel pool, however, SCE believes that for a decommissioning plant where the fuel has sufficiently decayed, the canisters are a more suitable mechanism as the system is totally passive and requires no electricity, water, or operator action, and therefore more reliable; suggested the public refer to the opinion of David Lochbaum, Union of Concerned Scientists
 - (3) Chairman Victor referred to a National Academy of Sciences study that leans strongly in that exact direction
- viii) Public asked about the NRC requirements for continued monitoring of radioactivity levels, both on land and water
 - (1) Bruce Watson responded that monitoring continues and is reported regularly and available on the NRC website
 - (2) Chairman Victor asked for a slide showing what that looks like (include the website link)

9) Meeting adjourned at 8:50 p.m.

10) Action Items:

	Action Item Description	Comments
1	Chairman Victor requested that US Navy representatives	
	attend the next meeting to present their side of the land	
	surrender issue and the process to be followed	
2	Tom Palmisano to post the list of Native American tribes	
	notified on SONGScommunity.com	
3	Tom Palmisano agreed to present NRC Insurance	
	Exemptions in more detail at the next CEP meeting	
4	Chairman Victor asked that Tom Palmisano review	
	PG&E's Diablo Canyon funding for off-site emergency	
	responders and provide the Decommissioning funding	
	strategy – provide feedback at an upcoming CEP	
	meeting	
5	Tom Palmisano agreed to revisit the subject of the \$2M	
	Holtec fine at the next CEP meeting	

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6	Post details of each canister's shipping availability on	
	SONGScommunity.com	
7	Tom Palmisano to schedule Jack Edlow to present used	
	fuel transportation, including DOT/NRC requirements for	
	route approvals, at a future CEP meeting	
8	Tom Palmisano to invite the DOE to speak at a future	
	CEP meeting	
9	Chairman Victor took an action to look at the inspection	
	reports posted on ADAMS	
10	Chairman Victor took an action to contact Steve	
	Maheras of the DOE to obtain a summary explanation of	
	the DOE process for maintaining fuel inventory records	
11	Chairman Victor to send Hon. Pam Patterson the	Chairman Victor provided documents to
	documentation on the Holtec bribe	Hon. Pam Patterson via email 5/22/17
	David Victor asked that Per Peterson's material be	Manuel Camargo provided John Heaton
	shared with John Heaton (Eddy-Lea Energy Alliance LLC)	and Pierre Oneid a link to the 5/6/14 CEP
12	, , , , ,	meeting presentation by Per F. Peterson,
		titled Current Status for U.S. Nuclear
		Waste Policy, via email 5/31/17
13	Chairman Victor asked that John Heaton and Pierre	,, ,
	Oneid provide feedback to the CEP about the statewide	
	educational meetings	
	Chairman Victor asked that Marni Magda share the	
14	standard contract work she's done on fuel movement	
	priority with Hon. Jerry Kern	
	Chairman Victor asked that if Pierre Oneid and Hon. Pam	
15	Patterson meet to discuss the Holtec bribery issue, that	
	the information discussed be shared with the CEP	
	members	
16	Chairman Victor asked that the references to documents	
	related to the NRC's risk assessment of spent fuel	
	storage as well as Off-site Emergency Planning	
	requirements be pulled together and available on the	
	website	
17	Hon. Tim Brown asked that Tom Palmisano provide an	
1,	explanation of primary and secondary insurance	
	coverage at the next CEP meeting	
	coverage at the next cer meeting	