

**CALIFORNIA COASTAL COMMISSION**

45 FREMONT, SUITE 2000  
SAN FRANCISCO, CA 94105-2219  
VOICE (415) 904-5200  
FAX (415) 904-5400



# Th3a

**Staff Memo – Special Condition 7, CDP 9-15-0228**

**July 13, 2020**

**CORRESPONDENCE**



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

July 1, 2020

Mr. John Ainsworth, Executive Director  
California Coastal Commission  
45 Fremont Street, Suite 2000  
San Francisco, CA 94105-2219

SUBJECT: CALIFORNIA COASTAL COMMISSION JULY 2020 MEETING ON SAN  
ONOFRE NUCLEAR GENERATING STATION INDEPENDENT SPENT FUEL  
STORAGE INSTALLATION INSPECTION AND MAINTENANCE PROGRAM

Dear Mr. Ainsworth:

On behalf of the California Coastal Commission (CCC), Mr. John Weber invited the U.S. Nuclear Regulatory Commission (NRC) staff to participate in the CCC's July 2020 meeting to discuss the San Onofre Nuclear Generation Station (SONGS) Independent Spent Fuel Storage Installation Inspection and Maintenance Program (IMP). Mr. Weber also provided a list of questions that the CCC is interested in as an update to our responses at the October 2019 CCC meeting.

We understand that as a condition of CCC's approval of the Coastal Development Permit (CDP) regarding the SONGS Holtec International Storage Module Underground Maximum Capacity facility, the licensee, Southern California Edison committed to develop an IMP. Also, we understand that the due date for the IMP submittal for CCC review and approval was accelerated to March 31, 2020.

Regarding attendance at the meeting, Ms. Andrea Kock, Director, Division of Fuel Management at NRC Headquarters, who is responsible for development of the NRC's spent fuel licensing and oversight programs, and Ms. Linda Howell, Deputy Director, Division of Nuclear Materials Safety, of our Region IV office, who is responsible for implementation of the oversight of the NRC's spent fuel inspection program at the SONGS site, will be participating in the CCC's July meeting on my behalf. Consistent with NRC's mission, the NRC will provide oversight of SONGS' inspection and maintenance activities to ensure compliance with NRC's requirements. The NRC staff will not provide comment on the draft IMP document, but we will be prepared to answer CCC questions on the NRC's spent fuel storage and transportation licensing and oversight programs and requirements for aging management. Also, enclosed please find our written responses to the questions that Mr. Weber indicated were of interest to the CCC.

If you have any questions, please contact the Project Manager for the SONGS site, Ms. Amy M. Snyder, Senior Project Manager. She can be reached at 301-415-6822 or [Amy.Snyder@nrc.gov](mailto:Amy.Snyder@nrc.gov).

In accordance with Title 10 of the *Code of Federal Regulations*, Section 2.390 of the NRC's "Agency Rules of Practice and Procedure," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of the NRC's Agencywide Documents Access and Management System (ADAMS). The ADAMS site is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Sincerely,

John W. Lubinski, Director  
Office of Nuclear Material Safety  
and Safeguards

Docket Nos.: 50-206; 50-361; 50-362  
License Nos.: DPR-13; NPF-10; NPF-15

Enclosure:  
As stated

cc: SONGS Listserv

SUBJECT: CALIFORNIA COASTAL COMMISSION JULY 2020 MEETING ON SAN ONOFRE NUCLEAR GENERATING STATION INDEPENDENT SPENT FUEL STORAGE INSTALLATION INSPECTION AND MAINTENANCE PROGRAM  
 DATE: July 1, 2020

**DISTRIBUTION:**

S. Anderson, RIV  
 G. Warnick, RIV  
 J. McKirgan  
 T. McCartin  
 D. Dunn  
 L. Howell, RIV  
 L. Cuadrado  
 M. Davis  
 J. Rubenstone

C. Markley  
 A. Moreno, OCA  
 J. Weil, OCA  
 J. Caverly  
 D. Diaz-Toro  
 B. Maier, RIV  
 PUBLIC  
 RidsACRS\_MailCTR  
 RidsRgn4MailCenter

**ADAMS Accession No.: ML20149K499**

**\*via email**

OFFICE	NMSS/DUWP/PM*	NMSS/DUWP/RBD/BC*	NMSS/DUWP/D*	RIV/D*
NAME	ASnyder	BWatson	THolahan	MMuessle
DATE	5/27/2020	6/1/2020	6/02/2020	6/09/2020
OFC	NMSS/DFM/D*	OGC NLO*	NMSS/TECH ED*	NMSS/D*
NAME	AKock	ACoggins	LMoorin	JLubinski
DATE	6/09/2020	6/18/2020	6/25/2020	7/1/2020

**OFFICIAL RECORD COPY**

## **California Coastal Commission Questions on the Spent Fuel Storage and the San Onofre Nuclear Generating Station Site and U.S. Nuclear Regulatory Commission's Responses**

### **Question (Q) 1. Update on long term spent fuel storage**

#### **Q1 a.: Status and reasonably anticipated schedule of interim waste facilities proposed in New Mexico and Texas**

Response (R)1 a.: Currently, the U.S. Nuclear Regulatory Commission (NRC) staff is considering applications for two proposed consolidated interim storage facilities (CISFs). A status of both applications is provided below.

##### Holtec International Storage Module CISF, New Mexico

The NRC's safety and environmental reviews of the CISF license application submitted by Holtec International are on-going. We issued requests for additional information (RAIs), for both safety and environmental topics. We published the draft environmental impact statement (EIS) on March 10, 2020, and due to the recent events associated with the Corona Virus Disease 2019 (COVID-19) public health emergency (PHE), we extended the public comment period until July 22, 2020. On June 24, 2020, we again extended the comment period for an additional 60 days, to September 22, 2020, to accommodate holding in person public meetings in New Mexico. The NRC staff anticipates completing its safety and environmental reviews by the spring of 2021, but this may change after we evaluate the impact of the recent extended comment period and the impacts of the ongoing COVID-19 PHE.

##### Interim Storage Partners, LLC CISF, Texas

The NRC's safety and environmental reviews of the CISF license application submitted by Interim Storage Partners, LLC are on-going. We issued RAIs, for both safety and environmental topics. Additionally, we issued an environmental scoping summary report in November 2019 that addressed approximately 3200 unique comments. We published the draft EIS in May 2020 for a 120-day comment period. The NRC staff anticipates completing our safety and environmental reviews in summer 2021; however, currently we are evaluating a request for an extension of the comment period, based on events associated with the COVID-19 PHE and our ability to accommodate holding in person public meetings in Texas and New Mexico.

#### **Q1 b.: Status of long-term/permanent storage, including Yucca Mountain**

R1 b.: The NRC distinguishes between storage of spent nuclear fuel (SNF) and disposal. Commercial SNF is currently being stored safely and securely at each reactor site in the U.S., in spent fuel pools or dry casks. NRC has determined that waste can be stored safely in pools or casks for 100 years or more. Dry casks are licensed for a period of up to 40 years, which can be renewed upon application with justification and safety analyses.

The U.S. policy for nuclear waste management, as set forth in the Nuclear Waste Policy Act, is for permanent disposal of spent fuel in a geologic repository. The Department of Energy (DOE) is responsible for developing and operating a geologic repository for disposal of spent nuclear fuel and other high-level radioactive waste, to be licensed by the NRC. The NRC staff completed its safety evaluation report for the DOE's application for a geologic repository at Yucca Mountain in January 2015. Also, the NRC staff completed a supplement to the DOE EIS in May 2016.

Completion of the safety evaluation report and the EIS supplement does not represent an agency decision on whether to authorize construction. A final licensing decision could come only after completion of the Commission's adjudicatory process. The adjudicatory proceeding is currently suspended.

**Q1 c.: Status of spent fuel loading order for future interim storage facilities. How would the queue for fuel from facilities across the country be established and on what basis? More specifically, with what is known now [about] when might SONGS [San Onofre Nuclear Generating Station] spent fuel be moved once an appropriate storage facility is established?**

R1 c.: If a CISF were to be approved by the NRC, the CISF licensee would be responsible for the business and logistical decisions that would ultimately determine the rate and timing of spent nuclear fuel movement from specific sites, including the SONGS site, for acceptance of spent fuel that falls within the parameters of the CISF license. The NRC would provide oversight, consistent with our statutory authorities, to ensure the safe and secure transport of spent nuclear fuel to a licensed CISF. However, the NRC has no regulatory role beyond its safety and security functions in determining the timing of spent fuel shipments.

**Q1 d. An update on related Congressional bills establishing priorities/criteria for determining the queue would be helpful.**

R1 d.: The following bills introduced in the 116<sup>th</sup> Congress contain provisions that would address whether and how priority is given to the storage or acceptance of certain categories of spent fuel from commercial nuclear power plants.

The "Nuclear Waste Policy Amendments Act of 2019" (S. 2917), introduced on November 20, 2019, by Senator John Barrasso (R-WY), would, if passed, make a number of amendments to the Nuclear Waste Policy Act of 1982 on a range of topics. With respect to the issue of priority being given to the storage of certain categories of spent fuel, the bill would authorize DOE to enter into one monitored retrievable storage facility agreement before the NRC has issued a final repository decision and would require this agreement, to the extent allowable, to give priority to the storage of DOE-owned civilian waste from facilities that have ceased commercial operation and are located in a high seismicity area and in close proximity to a major body of water. The Senate Committee on Environment and Public Works held a hearing on May 1, 2019, on a discussion draft bill that was released as a precursor to this bill. The bill has not advanced since its introduction last year. A similar bill in the House is H.R. 2699.

The "Nuclear Waste Policy Amendments Act of 2019" (H.R. 2699), introduced on May 14, 2019, by Representative Jerry McNerney (D-CA), would, if passed, amend the Nuclear Waste Policy Act of 1982 to advance the interim storage and permanent disposal of nuclear waste. On the topic of priority given to the storage of certain categories of spent fuel, the bill would authorize DOE to enter into one monitored retrievable storage facility agreement before the NRC has issued a final repository decision and would require the agreement, to the extent allowable, to prioritize the storage of DOE-owned civilian waste from facilities that have ceased commercial operation and are in an area of high seismicity and close to a major body of water. The House Energy and Commerce Committee ordered an amended version of the bill on November 20, 2019. A similar bill (S. 2917) was introduced in the Senate.

The “Nuclear Waste Administration Act of 2019” (S. 1234), introduced on April 30, 2019, by Senator Lisa Murkowski (R-AK), would establish a new federal agency (the Nuclear Waste Administration) and require it to site, construct, and operate a pilot facility for the storage of “priority waste,” at least one additional facility for the storage of nonpriority nuclear waste, and at least one repository for the permanent disposal of nuclear waste. The bill would define “priority waste” as spent fuel removed from a commercial power reactor that has been permanently shut down and any “emergency delivery.”<sup>1</sup> The Senate Committee on Energy and Natural Resources held a hearing on this bill on June 27, 2019. There is no companion bill in the House.

The “Storage and Transportation of Residual and Excess (STORE) Nuclear Fuel Act of 2019” (H.R. 3136), introduced on June 5, 2019, by Representative Doris Matsui (D-CA), would, if passed, establish a program for the interim storage of high-level radioactive waste and spent fuel. The bill would address the issue of prioritization by requiring DOE, when entering into agreements for acceptance of title, transportation, and interim storage of high-level radioactive waste or spent fuel, to prioritize acceptance of any “emergency delivery,” as well as high-level radioactive waste or spent fuel from commercial power reactors that have been permanently shut down. This bill has not advanced since its introduction last year. Also, there is no companion bill in the Senate.

The “Spent Fuel Prioritization Act of 2019” (H.R. 2995), introduced on May 23, 2019, by Representative Mike Levin (D-CA), would, if passed, require DOE, in deciding the order in which it will accept high-level radioactive waste or spent fuel for disposal or storage, to give priority based on the operating status of the reactor at which the spent fuel or waste is located, the population of that area, and the earthquake hazard of that area. The bill would require DOE to give the highest priority to spent fuel and waste from reactors that are decommissioned or decommissioning, are located in the largest population areas, and are located in areas with the highest earthquake hazard. This bill has not advanced since its introduction last year. Also, there is no companion bill in the Senate.

Any questions or concerns related to bills should be addressed to Congress. Also, please note that these bills may change during the legislative process, and thus it is possible that the scope of a bill could change.

## **Q2. NRC inspections related to fuel loading and the transfer to Holtec system**

### **Q2 a.: Summary of inspection activities and outcomes at SONGS since fuel loading resumed in summer 2019**

R2 a.: The NRC performed 18 unannounced Independent Spent Fuel Storage Installation (ISFSI) inspections at the SONGS site between July 2019 and June 2020 to inspect key dry cask loading operations and other activities associated with the Holtec International Storage Module (HI-STORM) Underground Maximum Capacity (UMAX) storage system and the ISFSI. Last October, the NRC provided an update to the California Coastal Commission regarding the NRC’s inspections of the Holtec International Storage Module Underground Maximum Capacity (HI-STORM UMAX) system. In 2020, we inspected this SONGS ISFSI on or about the following dates: January 16-18, February 5-6, March 9-12, April 13-30 (Remote), and May 20-24, and

---

1. S. 1234 and H.R. 3136 contain similar definitions for the term “emergency delivery.” In essence, “emergency delivery” is defined in the bills as spent fuel and high-level radioactive waste accepted for storage before the date provided in the contractual delivery commitment schedule and may include spent fuel and high-level radioactive waste from certain defense activities.

June 23. The inspections did not result in any findings associated with fuel transfer operations since the licensee resumed fuel loading activities in July 2019.

During these inspections, our inspectors observed key portions of fuel loading activities, including loading spent nuclear fuel into canisters, transporting loaded canisters within the site to the ISFSI, and downloading the loaded canisters into the HI-STORM UMAX storage system. Specifically, the NRC staff inspected: (1) licensee practice runs; (2) training for personnel to perform the fuel loading campaign; (3) fuel loading activities, including processing, welding, and preparing the canisters for movement; (4) transfer and downloading of canisters from the spent fuel pool into the HI-STORM UMAX facility; (5) canister cleaning activities on site; and (6) loading of a fuel canister containing damaged fuel.

**Q2 b.: Anticipated inspection schedule moving forward, recognizing that fuel transfer is anticipated to be complete summer 2020**

R2 b.: Since these inspections are unannounced (non-public), we do not provide comments or information on the timing of our spent fuel inspections outside the agency. Management in the NRC's Region IV office plans to maintain unannounced oversight activities of fuel transfer operations at the SONGS site at least once per month to inspect fuel loading activities while fuel transfer operations are still ongoing.

**Q3. NRC requirements related to dry-cask fuel storage at SONGS**

**Q3 a.: Site-specific licensing requirements related to Holtec system's Certificate of Compliance**

R3 a.: The NRC has a regulatory framework in place to ensure the safe and secure storage of spent nuclear fuel. We conduct an extensive review of each storage cask design before issuing a certificate of compliance (CoC) and provide oversight on the fabrication of storage casks. Storage cask designs are issued through changes to NRC regulations including opportunity for public comment. We conduct thorough reviews and only approve designs that meet those requirements.

The HI-STORM UMAX system is approved for use under a general license (encompassed by the SONGS site's Title 10 of the *Code of Federal Regulations* [10 CFR] Part 50, "Domestic Licensing of Production and Utilization Facilities" specific license). A general license authorizes storage of spent fuel in casks previously approved by the NRC at a site already licensed to possess fuel to operate a nuclear power plant. Storage cask designs are issued for a CoC after NRC review and approval.

Before using this NRC-approved CoC at the site, the licensee was required to demonstrate that the cask system design was appropriate for the site conditions at the SONGS site. The final safety analysis report for the HI-STORM UMAX storage system contains the necessary information to support the use of the NRC approved spent nuclear fuel dry storage system under the provisions of 10 CFR Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater Than Class C Waste." Southern California Edison (SCE) had to perform site-specific analysis of the use of this system at the SONGS site, to demonstrate that the seismic, environmental, groundwater, and other relevant factors at the site meet the regulatory requirements for the safe storage of spent nuclear fuel in a dry cask storage system. The NRC's Region IV Office and its Office of Nuclear Material Safety and Safeguards staff have confirmed that the SONGS HI-STORM



UMAX spent fuel storage system met the Part 72 criteria for use at the SONGS site via numerous technical reviews and onsite inspection activities.

The NRC remains confident that reasonable assurance of adequate protection of the public health and safety can be maintained for as long as fuel is stored in accordance with the requirements of the SONGS site license, the CoC for the HI-STORM UMAX system, and other applicable NRC requirements.

### **Q3 b.: Inspection and monitoring requirements (general overview)**

R3 b: The NRC's safety oversight program for spent fuel storage is designed to provide reasonable assurance of compliance with NRC requirements. The oversight program includes inspections and assessments of licensee and vendor activities with a focus on assuring public health and safety. For ISFSI inspections at a reactor site that is undergoing decommissioning, inspections are conducted on a periodic basis. As stated earlier (R2 b.), management in our Region IV office plans to maintain oversight activities of fuel transfer operations at the SONGS site at least once per month to inspect fuel loading activities, while fuel transfer operations are still ongoing.

Throughout site decommissioning and during the operation and eventual decommissioning of the ISFSI, the NRC requirements include that the licensee establish programs for:

- demonstration of technical and financial qualifications to operate the ISFSI facility safely;
- maintenance of an emergency plan;
- maintenance of a quality assurance program;
- maintenance of a physical protection plan;
- maintenance of a decommissioning funding plan; and
- maintenance of a training and qualifications program.

The NRC staff ensures that the licensee's programs and plans in these areas are adhered to through reviews of licensee submitted reports and inspections.

### **Q3 c.: Timing and general summary of required elements of Aging Management Plans for the two different ISFSI systems (storage systems)**

R3 c.: The NRC's regulatory framework provides reasonable assurance for the continued safe and secure storage of spent fuel throughout a renewal period. The NRC requirements for renewal of a CoC include: 1) time-limited aging analyses that demonstrate that structures, systems, and components important to safety will continue to perform their intended function for the requested period of extended operation; and 2) a description of the aging management program (AMP) for management of issues associated with aging that could adversely affect structures, systems, and components important to safety. The AMP is composed of 10 AMP elements, which will be used to describe the program to manage issues for two different storage systems at the SONGS site. These AMP elements describe preventative actions, ways to detect aging effects, and items that are monitored or inspected.

At the SONGS site, SCE uses two different storage systems, the HI-STORM UMAX storage system and the TN Standardized Advanced NUHOMS Horizontal Modular Storage System. Both these storage systems are approved for use under a general license.

Regarding the NUHOMS system, we currently are reviewing the CoC renewal application. If the NRC safety review results in CoC renewal, SCE would be required to develop procedures for implementing the approved AMPs, including the AMP elements, to the NUHOMS storage system at its site.

The HI-STORM UMAX system is in its initial CoC period of 20 years. The CoC for the HI-STORM UMAX system will expire in 2035, unless an application for renewal of the system is approved. Under the NRC Regulations in 10 CFR Part 72, a renewal application must include AMPs.

Since the publication of the NRC's 2014 final rule on the continued storage of spent nuclear fuel (79 FR 56251; September 19, 2014), we have issued guidance that defines acceptable approaches to managing aging during extended storage through inspections, monitoring activities, and preventive actions. Two of the NRC's guidance documents addressing aging management are: (1) NUREG-1927, Revision 1, "Standard Review Plan for Renewal of Specific Licenses and Certificates of Compliance for Dry Storage of Spent Nuclear Fuel"; and (2) NUREG-2214, "Managing Aging Processes in Storage Report." Also, we developed a temporary instruction (TI), NRC TI 2690/011, "Review of Aging Management Programs at Independent Spent Fuel Storage Installations." The TI served as an information-gathering activity and the results of the inspections will be used to develop guidance within the NRC inspection program to evaluate licensees' performance of these aging management activities.

July 10, 2020

**VIA E-MAIL**

California Coastal Commission  
45 Fremont Street, Suite 2000  
San Francisco, CA 94105-2219  
EORFC@coastal.ca.gov

Re: CDP 9-15-0228, Special Condition 7 Condition Compliance –  
SONGS IMP

Dear Chair Padilla and Commissioners:

Southern California Edison Company (SCE) submits this letter on behalf of itself, San Diego Gas & Electric, the City of Anaheim, and the City of Riverside (collectively, the Participants) regarding the Inspection and Maintenance Program (IMP) submitted in compliance with Special Condition 7 of CDP 9-15-0228 to construct the Holtec UMAX Independent Spent Fuel Storage Installation at San Onofre Nuclear Generating Station (SONGS) (the 2015 Holtec ISFSI CDP). Implementation of the IMP supports the Participants' and the California Coastal Commission's (Coastal Commission) shared objective that the Holtec multi-purpose canisters (MPCs) contained in the ISFSI will remain in a physical condition to ensure future onsite transfer or offsite transport.

The Participants appreciate the Coastal Commission staff's diligent and thorough review of the IMP and its compliance with Special Condition 7. We agree with the findings and the staff's recommendation for approval contained in the Staff Report, and offer the following additional information for consideration by the Coastal Commission.

I. The IMP Conservatively Provides for Early Inspection of MPCs

Through the IMP, SCE will conduct periodic inspections of the MPCs well in advance of NRC requirements. The IMP will ensure that in the unlikely event of any degradation, it would be detected early and there would be ample time for SCE to take any necessary actions to ensure that the MPCs remain transportable. During March and April of 2019, SCE utilized robotic technology to perform an initial inspection of eight MPCs soon after they were loaded in the ISFSI. Beginning in 2024, two MPCs will be inspected every five years, and the SONGS test canister will be inspected every 2.5 years. Results of the inspections will be reported to the Coastal Commission as described in the IMP.

SCE has relied on NRC-approved Aging Management Programs (AMP), expert guidance from the Electric Power Research Institute (EPRI), and recently-approved industry guidance contained in the American Society of Mechanical Engineers' (ASME) Code Case N-860 to determine the frequency and number of canisters to be inspected as part of the IMP. The NRC, EPRI and ASME recommend that inspections take place every five years starting 20 years after an ISFSI has been placed in service (i.e., in 2038 for the SONGS Holtec ISFSI). Typical NRC-required AMPs require one or two canisters to be inspected, with an inspection frequency of five years, beginning after 20 years of operation. The inspection frequency and number of canisters inspected is based on the fact that any potential canister degradation would develop slowly, and over a very long period of time (much greater than 20 years). By conservatively beginning its inspections at the time of initial operation, SCE will have conducted four MPC inspections (2019, 2024, 2029, 2034) before any inspections would otherwise have been required by the NRC.

Additionally, the SONGS ISFSI is the first in the industry to incorporate a test canister, which is a heated canister installed in the ISFSI and designed to be a representative model of a loaded MPC. The test canister will be inspected more frequently (every 2.5 years beginning in 2022) to serve as a leading indicator of any canister degradation. The test canister will also facilitate the continued enhancement of inspection and repair technologies. In addition, SCE applied two metallic overlay patches to the test canister in 2019, which will allow SCE to observe the metallic overlay mitigation over time and ensure that it continues to perform its intended design function.

## II. Each MPC Inspection is Supported by a Rigorous Statistical Analysis

The decision to inspect eight MPCs in 2019 was based on a statistical analysis performed by MPR Associates, Inc. (MPR) in its May 2019 SONGS report, *Canister Installation and Removal Effects on Wall Thickness*, which is discussed in SCE's April 16, 2020 and May 29, 2020 responses to questions from the Coastal Commission's third party reviewer LPI, Inc. in connection with LPI's review of the IMP.

The results of the initial inspection of eight canisters were analyzed through MPR's statistical analysis, which looked at the population of marks on the eight MPCs to determine the maximum predicted scratch depth on the 72 MPCs that would eventually be loaded into the ISFSI. This analysis determined that the initial inspection of eight MPCs was sufficient to provide predictive results for all of the remaining MPCs that would eventually be loaded.

MPR's 2019 analysis used a "normal" probability data distribution, which was reviewed and accepted by the NRC. LPI recommended that SCE perform an analysis using an "extreme value" data distribution, which SCE did. The results of the extreme value analysis confirmed that inspecting eight MPCs was appropriate, but predicted a slightly larger maximum scratch depth. Using either technique, the analysis predicts that the deepest scratch is significantly less than the 0.0625 inch repair threshold established in the IMP.<sup>1</sup> While SCE continues to believe that the normal probability data distribution approach is appropriate, SCE will re-perform the statistical analysis utilizing both analytical approaches (i.e., normal and extreme value) after each five-year inspection, with the results reported in the inspection report provided to the Coastal Commission.

---

<sup>1</sup> The 0.0625 inch repair threshold is 10% of the canister wall thickness. Using a 0.0625 inch repair threshold is a very conservative approach.

III. The Metallic Overlay Repair Technology is Proven, Effective and Readily Deployable

In the IMP, SCE has selected a metallic overlay repair process that combines the robotic visual assessment capability previously used to inspect canisters at SONGS with metallic overlay technology, which is a high-energy solid state coating and powder consolidation process. SCE reviewed the available information from research and consulted EPRI, which has been developing remote robotic miniaturization systems since 2009, and determined that metallic overlay was the best deployable mitigation method. SCE then worked with two companies with proven experience in robotics and overlay systems, Robotic Technologies of Tennessee and VRC Metal Systems, to develop and test the miniaturized tooling metallic overlay method described in the IMP.

The metallic overlay process has been used for over seven years in several industries, including oil and gas, shipping, transportation, automotive, and military uses. Several metals have been used for the metallic overlay process. SCE selected the use of nickel (with chromium carbide added, consistent with broader experience), which is a metal that works well with stainless steel, is commonly used in the nuclear industry, is very resistant to stress corrosion cracking (SCC), and has been established as the preferred material for metallic overlay based on previous applications.

IV. SCE is Taking Action to Explore Options for Relocating SONGS Spent Fuel Offsite

Under federal law, the ultimate disposition of the spent nuclear fuel for all commercial nuclear power plants is the responsibility of the U.S. Department of Energy. However, because the federal government does not currently have a facility to receive commercial plants' spent fuel, spent fuel is expected to remain in dry storage at SONGS until the federal government identifies a facility and establishes a program for the fuel's offsite storage or disposal.

In the interim, SCE is being proactive in identifying potential alternatives for the relocation of the SONGS fuel, including at an offsite facility. Information regarding the Strategic Plan SCE is developing to assess the feasibility of relocating the SONGS spent fuel to a licensed and commercially reasonable offsite facility is attached to this letter. SCE will begin implementing actions stemming from the Strategic Plan in 2021.

Thank you for considering the above information in connection with your decision regarding the IMP. The Participants look forward to implementing the IMP and to continuing their progress in pursuing options for transferring the SONGS spent fuel to an offsite location.

Very truly yours,



Jessica Rankin

cc: David Asti  
Linda Anabtawi  
Ian Forrest

Attachment

## **Attachment – Information on Strategic Plan to Relocate SONGS Spent Fuel to an Offsite Facility**

Southern California Edison (SCE) retained North Wind, Inc. in June 2019 to develop a Strategic Plan to assess the feasibility of relocating spent nuclear fuel from the San Onofre Nuclear Generating Station (SONGS) to a licensed and commercially reasonable, offsite facility. The Strategic Plan was initiated by a settlement agreement with Citizens Oversight, Inc. that also includes the development of a Conceptual Transportation Plan.

Moving the spent fuel offsite is a priority for SCE. At present, no federally licensed facility exists to receive spent fuel from a commercial nuclear plant. SCE recognizes that efforts to relocate SONGS spent fuel offsite must proceed in a thoughtful, forward-thinking and responsible manner, ensuring that relevant concerns are heard.

### **Engaging a team of leading experts**

The North Wind consultants are working in concert with SCE and an Experts Team assembled by SCE in 2018. The Experts Team is chaired by Tom Isaacs, a former director of the Department of Energy Office of Policy and former advisor to the U.S. President's Blue Ribbon Commission on America's Nuclear Future, and includes former Nuclear Regulatory Commission Chair and former commissioner on the Blue Ribbon Commission, Dr. Allison Macfarlane. Both are nationally-recognized experts in spent fuel siting, licensing, and regulation. Others on the Experts Team lend expertise in spent fuel transportation, radiation science and nuclear engineering. The North Wind team includes former U.S. Secretary of Energy Dr. Ernest Moniz, who is lending his considerable expertise to the effort.

### **Scope of the plans**

The Strategic Plan will identify realistic, commercially reasonable paths forward for offsite interim storage or permanent disposal of commercial spent nuclear fuel. It will also explore opportunities for SCE to prepare to remove spent fuel from SONGS once an offsite solution has materialized. The Strategic Plan is not a decision-making document that will identify a single preferred solution, but rather will consider a range of alternatives for offsite storage and disposal in order to maintain optionality and durability over time. In the course of developing the plan, North Wind is engaging with a wide range of external stakeholders.

The Conceptual Transportation Plan will be to transport SONGS spent fuel to a facility assumed to be located in the Southwestern United States. It will document activities SCE may undertake over time in support of the eventual offsite transport of SONGS spent fuel.

An accompanying SCE Action Plan will outline concrete actions that SCE will take to support potential alternatives for relocating SONGS spent fuel, including everything from coalition building to advocacy for enabling federal legislation.

**Timing**

The plans—the Strategic Plan, the Conceptual Transportation Plan, and the SCE Action Plan—are on path to be released in early 2021.

The process for successfully siting, licensing, and constructing an offsite facility to accept commercial spent fuel will take many years.

**An enduring commitment to safety**

SCE is firmly committed to the safe, secure storage of SONGS spent fuel as long as it remains on-site, as well as the safe long-term disposition of the spent fuel at an offsite facility.

**Re: Southern California Edison proposed Inspection and Maintenance Program for SONGS ISFSI -- July 16, 2020 meeting Permit No. 9-15-0228 San Onofre Holtec**

Donna Gilmore <donnagilmore@gmail.com>

Fri 7/3/2020 4:50 PM

To: Weber, John@Coastal <john.weber@coastal.ca.gov>

Cc: Len R. Hering <lrhering@aol.com>; Gregory Jaczko <gregoryjaczko@gmail.com>

This December 2019 DOE Technology Gap report identifies unresolved technology issues such as inability to adequately inspect and repair thin-wall canisters and other technology gaps that will impact the ability to transport the San Onofre canisters away from coastal risks.

The DOE Technology Gap report conflicts significantly with the LPI, INC 6/12/2020 "Independent" Third Party Review report.

I recommend the Coastal Commission staff review and resolve the technology gaps identified in this DOE report that conflict with the LPI report before the Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co) moves forward. I expect you will want to rewrite your staff recommendations based on this.

I have researched these issues in depth and can confirm the information in the DOE report is more reliable than LPI report.

Separating facts from what I would call "wishful thinking" by LPI, is critical before any final recommendations are made by the Coastal Commission staff.

I may be able to help address any questions you have regarding the conflicting information and conclusions between the two reports. Feel free to contact me anytime.

**Gap Analysis to Guide DOE R&D in Supporting Extended Storage and Transportation of Spent Nuclear Fuel: An FY2019 Assessment (Final Report), December 23, 2019, SAND-2019-15479R 681990 DOI: [10.2172/1592862](https://doi.org/10.2172/1592862)**

<https://www.osti.gov/biblio/1592862/>

**LPI, Inc report, June 12, 2020**

<https://documents.coastal.ca.gov/reports/2020/7/Th3a%20July%2016/Th3a-7-2020-Appendix%20B.pdf>

**July 16, 2020 CCC meeting information**

<https://coastal.ca.gov/meetings/agenda/#/2020/7>

Thanks,



Donna Gilmore  
SanOnofreSafety.org  
949-204-7794  
donnagilmore@gmail.com

----- Original message -----

From: "Weber, John@Coastal" <john.weber@coastal.ca.gov>  
Date: 6/19/20 11:14 AM (GMT-08:00)  
To: "Weber, John@Coastal" <john.weber@coastal.ca.gov>  
Subject: Re: Southern California Edison proposed Inspection and Maintenance Program for SONGS ISFSI

All -

A quick update to let you know that this item has been scheduled for Thursday, July 16, as you can see on the Commission's July agenda available on the Commission's web site: [http://coastal.ca.gov/meengs/\\_agenda/#/2020/7](http://coastal.ca.gov/meengs/_agenda/#/2020/7).

To submit written materials for review by the Commission, either email (via [EORFC@coastal.ca.gov](mailto:EORFC@coastal.ca.gov)) or submit such materials to Commission staff by 5 pm on the Friday before the hearing. Staff will then distribute your materials to the Commission. Such materials received after this time will not be distributed to the Commission.

Thanks very much -

John

---

**From:** Weber, John@Coastal  
**Sent:** Friday, June 12, 2020 3:13 PM  
**To:** Weber, John@Coastal <john.weber@coastal.ca.gov>  
**Subject:** Southern California Edison proposed Inspection and Maintenance Program for SONGS ISFSI

Dear Interested Parties,

Southern California Edison's proposed Inspection & Maintenance Program (IMP) for the San Onofre Generating Station's Independent Spent Fuel Storage Installation (SONGS ISFSI) is scheduled for the Coastal Commission's July 2020 meeting. Staff decided to post the staff report early to give the interested public extra time to review the staff recommendation and technical reports associated with the proposed IMP. You can find the staff report and its associated exhibits and appendices posted on the Coastal Commission's webpage at <http://www.coastal.ca.gov/>.

The agenda for the July meeting will be posted online Friday, June 19. At that time, you will be able to see which day this matter will be scheduled for a public hearing and its agenda item number. We also encourage you to review the Coastal Commission's Virtual Hearing Procedures also posted on the Commission's webpage (click on "Meetings") if you wish to provide public testimony for this item or any other item at the July meeting.

If you have questions, please email me at [john.weber@coastal.ca.gov](mailto:john.weber@coastal.ca.gov).


Thank you,

John

---

John Weber  
California Coastal Commission  
45 Fremont Street #2000  
San Francisco, CA 94105  
415-904-5245

<http://www.coastal.ca.gov/>

cid:image002.jpg@01D0B33B.CB672000

Every Californian should conserve water. Find out how at:

 [SaveOurWater\\_Logo](#)

[SaveOurWater.com](#) · [Drought.CA.gov](#)

**Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).**

Jaci Baranger <jaci.baranger@gmail.com>

Sun 7/5/2020 5:09 PM

To: Energy@Coastal <EORFC@coastal.ca.gov>

Chair Padilla and Commissioners,

Thank you for prioritizing the safety of our community. I write to urge your approval of the SONGS inspection and maintenance program on your July 16th agenda. As the wife of an Orange County firefighter and mother to three young children, I share your interest in ensuring the spent fuel at SONGS is maintained by Southern California Edison in a safe manner that ultimately ensures the spent fuel can be moved offsite. I would like to see the spent fuel removed from our community and our coastline restored as soon as possible. As your staff has recommended, I also urge your approval.

Sincerely,

Jaclyn Baranger

**Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).**

Ryan Fleming <rsfleming25@gmail.com>

Mon 7/6/2020 9:32 AM

To: Energy@Coastal <EORFC@coastal.ca.gov>

Dear Commissioners,

As a life-long Orange County resident and avid surfer, my family spends a lot of weekends at San Onofre State Beach and I look forward to the day the nuclear plant is fully dismantled and the spent fuel is moved out of our community permanently. Thank you for the oversight and effort you have taken to ensure the spent fuel canisters at SONGS are safe for our coastline. I share your priority of making sure these canisters are maintained well and in a manner that will ultimately allow for moving the canisters out of our region.

I urge your approval of the inspection and maintenance program at your July 16 meeting, as recommended by your staff.

Thank you,

Ryan Fleming  
Mission Viejo, CA

## Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).

lrannals@pacbell.net <lrannals@pacbell.net>

Tue 7/7/2020 8:44 AM

To: Energy@Coastal <EORFC@coastal.ca.gov>

Chairman Padilla & other Members of the California Coastal Commission,

This comment is submitted in reference to the Commission's July 16<sup>th</sup> Agenda Item **Th3a** regarding Condition Compliance and the proposed Inspection and Maintenance Program (IMP) for the HOLTEC dry storage system at the San Onofre Nuclear Generating Station (SONGS) facility.

I strongly support your staff's recommendation on this agenda item, and urge the Commission to approve the proposed IMP at SONGS for the following reasons: Southern California Edison (SCE) has developed a comprehensive IMP for the HOLTEC dry storage site that contains several key elements which facilitate the desired safety requirements not only expected, but demanded of such a system. Moreover, the IMP developed for SONGS goes above and beyond current NRC requirements for Aging Management systems now in use at nuclear spent fuel dry storage sites. It additionally conforms with guidance from the American Society of Mechanical Engineers (ASME), as well as research by the Electric Power Research Institute (EPRI) and the nuclear industry on MPC performance and potential degradation. And finally, the proposed SONGS IMP has been peer-reviewed by industry experts in the nuclear safety field, to include an independent evaluation performed by the Commission's own consultant, Lucius Pitkin, Inc. (LPI). As you know, the LPI evaluation has concluded that the SONGS IMP has been appropriately designed to ensure that the spent fuel storage containers will remain in sufficient physical condition to allow for future off-site transfer to either an "interim" storage or "permanent" fuel disposal facility at the soonest opportunity that such a facility becomes available.

As has been the case since the SONGS facility ceased power production in 2012, some will argue against the Commission's approval of the IMP by citing "safety" concerns or the lax safety practices by SCE management at the SONGS facility. Nothing could be further from the truth. As a 22-year employee at Camp Pendleton during the period 1993-2015, I was a longtime observer of SONGS operations and had direct interface with SCE managers at the SONGS facility. One of my primary responsibilities during this period was to serve as the Base Commanding General's liaison and direct representative with all non-DOD tenants on the Base, of which SONGS was one of the largest. Of all the many tenants aboard Camp Pendleton, SONGS was hands-down the absolute BEST for numerous reasons. SONGS focus on safety and strict compliance with NRC regulations, in particular, was one of this facility's strongest attributes.

Based on this experience, my views on SONGS safety programs completely differ with those who continue to oppose all aspects of the SONGS Decommissioning Plan by raising unsubstantiated safety concerns at every regulatory hearing along the way. Therefore, I respectfully ask that the Commission grant approval for the SONGS IMP to proceed as planned.

Respectfully,

Larry Rannals

LtCol, USMC (Ret)

35-Year San Clemente Resident

Larry Rannals

lrannals@pacbell.net

## Agenda item Th3a

Jona Adams <jona.adams@poseidonatomic.com>

Tue 7/7/2020 11:34 AM

To: Energy@Coastal <EORFC@coastal.ca.gov>

SCE has by far, exceeded the NRC requirements in durability. The IMP is far beyond the NRC requirements for inspection and maintenance of MPCs during their first 20 years of service.

The commission should approve the IMP pursuant to Special Condition 7 of CDP 9-15-0228.

***Jona Tera Adams***

***CEO, Founder***

***Poseidon Atomic***

## Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).

richard warnock <[rwarnock@warnocksolutions.com](mailto:rwarnock@warnocksolutions.com)>

Tue 7/7/2020 1:56 PM

To: Energy@Coastal <[EORFC@coastal.ca.gov](mailto:EORFC@coastal.ca.gov)>

Cc: richard warnock <[rwarnock@warnocksolutions.com](mailto:rwarnock@warnocksolutions.com)>

Sent from [Mail](#) for Windows 10

Dear Commissioners,

Thank you for the opportunity to comment on the proposed SCE Inspection and Maintenance Program for Units 2 & 3 spent fuel containers.

I am a retired SONGS employee with experience in chemistry, corrosion sciences and health physics. I am pleased to read and to agree that the alloy selected for the spent fuel containers is appropriately stress corrosion cracking resistant and is also judged by an independent technical reviewer to be correct for the application. In a previous Commission meeting we saw the SCE capability to inspect and repair a spent fuel cask without removing it from the concrete shielding. Impressive! The alloy selection, the ability to inspect and repair in situ, and a regularly scheduled and reviewed inspection cycle is what it takes to give me confidence in the long-term safety of the spent fuel. After all, my family and I still live in the area near San Onofre and we certainly don't want to feel concerned about the spent fuel integrity.

I urge the Commission to approve the proposed SONGS Inspection and Maintenance Program.

I also urge the Commission to make all possible efforts to encourage the federal government to move forward with the long promised national high level waste storage facility. Our country started on this project during President Reagan's administration and we still have nothing. We were able to decide to go to the moon and accomplish that in a few years.

Respectfully,

Richard Warnock  
Board Certified Health Physicist  
Dana Point, CA  
[rwarnock@warnocksolutions.com](mailto:rwarnock@warnocksolutions.com)

**Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).**

Scott Genschaw <sjgenschaw@gmail.com>

Tue 7/7/2020 3:03 PM

To: Energy@Coastal <EORFC@coastal.ca.gov>

This comment relates to agenda item Th3a:

My wife and I are residents of Dana Point. In addition my wife is a teacher at Shore Cliffs Middle School which is located in the city of San Clemente very near the San Onofre facility. We share the California Coastal

Commission's interest in ensuring the spent fuel at the facility is maintained by SCE in a safe manner that facilitates transporting the spent fuel offsite once an off-site facility is available.

To this end, rigorous inspection and maintenance of the storage system is vital.

Your staff has performed a detailed and professional review of the proposed inspection and maintenance plan.

Therefore, we urge the Commission to approve the inspection and maintenance program today.

Scott Genschaw

Katie Genschaw



**Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).**

scott schofield <schofieldrs@gmail.com>

Tue 7/7/2020 4:14 PM

To: Energy@Coastal <EORFC@coastal.ca.gov>

Cc: scott schofield <schofieldrs@gmail.com>

California Coastal Commission (CCC)

July 7, 2020

I am writing the CCC to encourage the Commission to approve the San Onofre Nuclear Generating Station (SONGS) spent fuel dry storage Inspection and Maintenance Program (IMP).

My name is Scott Schofield. I live in Carlsbad Ca just south of SONGS. I am a retired Certified Health Physicist with over thirty five years of working experience in nuclear research, nuclear medicine and nuclear power plants. As a Health Physicist it was my responsibility to ensure the radiological safety of employees, the public and the environment. I worked at SONGS for thirty years and therefore very knowledgeable of their work culture and their attention to industrial and radiological safety.

I share the CCC's interest in ensuring the spent fuel at SONGS is maintained by SCE in a safe manner that facilitates transporting the fuel offsite once an off-site facility is available. The CCC staff has reviewed the IMP and is recommending approval.

I urge the Commission to approve the SONGS spent fuel dry storage inspection and maintenance program today. Thank you for reading my letter.

Robert Scott Schofield  
Certified Health Physicist  
6912 Waters End Dr  
Carlsbad, Ca, 92011

Sent from my iPad

**Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).**

Todd Priest <todd@toddpriest.com>

Tue 7/7/2020 7:45 PM

To: Energy@Coastal <EORFC@coastal.ca.gov>

 1 attachments (90 KB)

Diane Dixon Letter.docxSCE 7 2020.pdf;

*On behalf of Newport Beach City Councilmember Diane Dixon, please find the attached comments related to Item Th3a.*

*I've attached a copy of her letter as well. Thank you.*

***Regarding : ItemTh3a***

***Dear Commissioners,***

***I am writing to express support for Southern California Edison's (SCE) Inspection and Maintenance Program, as recommended by your staff. Since beginning the decommissioning process in 2013, SCE continues to safely plan for the removal of its facility at San Onofre. The Commission staff and consultants have concluded the program has been appropriately designed and warrants your support.***

***Thank you for your consideration.***

***Sincerely,***

***Diane B. Dixon  
Council Member, District 1  
City of Newport Beach***

**Todd Priest**

Todd Priest and Associates

President

949.287.2297

[www.ToddPriest.com](http://www.ToddPriest.com)

Corona del Mar, CA



The contents of this email message and any attachments are intended solely for the addressee(s) and may contain confidential and/ or privileged information and may be legally protected from disclosure. If you are not the intended recipient of this message or their agent, or if this message has been addressed to you in error, please immediately alert the sender by reply email and then delete this message and any attachments. If you are not the intended recipient, you are hereby notified that any use, dissemination, copying, or storage of this message or its attachments is strictly prohibited.

Diane B. Dixon  
3419 Via Lido, # 197  
Newport Beach, CA 92663  
dianebdixon@gmail.com

July 10, 2020

California Coastal Commission  
45 Fremont, Suite 2000  
San Francisco, CA 94105-2219


Re: Item Th3a

Dear Commissioners,

I am writing to express support for Southern California Edison's (SCE) Inspection and Maintenance Program, as recommend by your staff. Since beginning the decommissioning process in 2013, SCE continues to safely plan for the removal of its facility at San Onofre. The Commission staff and consultants have concluded the program has been appropriately designed and warrants your support.

Thank you for your consideration.

Sincerely,

A handwritten signature in cursive script that reads "Diane B. Dixon".

Diane B. Dixon  
Council Member, District 1  
City of Newport Beach

**Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).**

Meredith Angwin <mjangwin@earthlink.net>

Wed 7/8/2020 9:21 AM

To: Energy@Coastal <EORFC@coastal.ca.gov>

Cc: Meredith Angwin <mjangwin@earthlink.net>

Dear Commissioners,

I am writing concerning agenda it Th3a, about the storage and maintenance program for spent nuclear fuel at SONGS.

I am retired now, but lived in California for most of my working life. I was one of the first women to be a project manager at EPRI (Electric Power Research Institute) and I was in the Steam Generator group. As a chemist, I worked on corrosion issues for steam generator tubes. Later, after I left EPRI, I also worked on corrosion mitigation for other types of power plants, including coal and hydro.

Even under the high temperature conditions in a working steam generator, stress corrosion cracking was slow-moving and easy to detect before any major harm was done. The fuel storage monitoring program proposed by SCE looks robust and capable of detecting any problems long before the public would be affected.

I urge you to approve their program.

Meredith Angwin

*Not all those who wander are lost*

Meredith Angwin

Currently living at 68 Passumpsic Avenue, Wilder VT 05088

Formerly of Palo Alto, CA

## Comment to CDP No. 9-15-0228 - SONGS San Onofre IMP

Kale Walker <ggchappykale@yahoo.com>

Wed 7/8/2020 3:33 PM

To: Weber, John@Coastal <john.weber@coastal.ca.gov>

Cc: Donna Gilmore <donnagilmore@gmail.com>; Gregory Jaczko <gregoryjaczko@gmail.com>; LRHering <lrhering@aol.com>; Paul <pmblanch@comcast.net>; Marv Lewis <marvlewis@juno.com>; Torgen Johnson <torgenjohnson@hotmail.com>

Hello Mr. Weber,

I've been reading the documents regarding Edison's proposed Inspection Maintenance Program for the SONGS Holtec ISFSI.

<https://www.coastal.ca.gov/meetings/agenda/#/2020/7> (Agenda item 3. Conditions of Compliance - July 17, 2020 meeting)

With only a partial review, I've found serious errors and misrepresentations in the reports. The following problems undermine the credibility and validity of the LPI and Edison Reports (Appendix B and Appendix C)

### **Problem #1 – Draft ASME Code Case N-860**

Both the Edison and LPI Reports reference Draft Code Case N-860 to validate the proposed inspection and repair plans.

Edison states, "SCE's inspections will be modeled after the American Society of Mechanical Engineers' (ASME) Draft Code Case N-860, which provides guidance for the inspection and maintenance of spent fuel canisters to manage potential degradation from SCC." (Appendix C pg 4)

The LPI report refers to the Draft Code numerous times with footnote [6], particularly in their recommendation for a '10% flaw allowance'. (Appendix B pg 4)

[6] ASME Code Section XI, Division 1 and 2, **Draft Code Case N-860**, "Inspection Requirements and Evaluation Standards for Spent Nuclear Fuel Storage and Transportation Containment Systems," Rev. 04, February 26, 2020.

### **But Code Case N-860 is NOT an approved code. It is a draft.**

A draft document must not be considered a valid technical reference for assessing inspection or repair capabilities - or for basing recommendations.

Contrary to Edison's claim that the draft is "currently being finalized and is expected to be approved by the end of 2020" (Appendix C pg 20), this February 1, 2019 report on the draft code states, "The new code case being developed for ASME Section III is currently at stage 2" of a 7 stage process. (see Table 5 on page 10)

[https://www.researchgate.net/publication/339014285\\_Application\\_of\\_the\\_Advanced\\_Surface\\_Modification\\_Process\\_to\\_the\\_ASME\\_Code\\_Case\\_for\\_Sections\\_III\\_and\\_XI\\_of\\_Nuclear\\_Power\\_Plants/fulltext/5e38ca95299bf1cdb90aef18/339014285\\_Application\\_of\\_the\\_Advanced\\_Surface\\_Modification\\_Process\\_to\\_the\\_ASME\\_Code\\_Case\\_for\\_Sections\\_III\\_and\\_XI\\_of\\_Nuclear\\_Power\\_Plants.pdf?origin=publication\\_detail](https://www.researchgate.net/publication/339014285_Application_of_the_Advanced_Surface_Modification_Process_to_the_ASME_Code_Case_for_Sections_III_and_XI_of_Nuclear_Power_Plants/fulltext/5e38ca95299bf1cdb90aef18/339014285_Application_of_the_Advanced_Surface_Modification_Process_to_the_ASME_Code_Case_for_Sections_III_and_XI_of_Nuclear_Power_Plants.pdf?origin=publication_detail)

There is no guarantee this draft will become Code - the industry has been trying to solve the problem of the inability to adequately inspect or repair stress corrosion cracks in these in-service pressure vessels for decades - with no adequate solution to date.

That LPI would recommend a Draft Code indicates they were not able to find an approved ASME Code, and represents a desperate attempt to find a way to validate Edison's unapproved inspection and repair plans. This is unacceptable by any professional standards.

### **Problem #2 - Inspection and Repair**

Edison continues to mislead the Commission and the public by claiming they can “inspect” canisters for cracks - and characterize cracks. Documents obtained through FOIA (Freedom of Information Act) contain Edison’s Visual Assessment Report which explicitly states, “This is NOT a formal ‘inspection’ or an activity qualified to ASME Sections III, V, XI or otherwise.”

<http://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML19261A089> (attached image pg 124 )



NRC senior inspector, Lee Brookhart stated that it’s impossible to inspect or repair canisters. <https://sanonofresafety.files.wordpress.com/2019/10/ccc-comments.pdf>

And Edison’s proposed nickel spray “repair” process has not been approved by the NRC or ASME, nor has it been demonstrated in an actual canister or tested to withstand pressure limits.

### **Problem #3 - Carbonic Corrosion**

The LPI report clearly makes an incorrect statement regarding Carbonic Corrosion. The report states, “This degradation mechanism is seen as extremely unlikely (there are no dissimilar metals in contact for the UMAX canister system).“ (Appendix B page 50)

In fact, a basic problem with the Holtec system is that stainless steel canister walls scrape and gouge against carbon steel guide rings and seismic restraints during canister downloading.

A valid and professional report on the SONGS proposed IMP would include a technical assessment by professional structural and material engineers of the potential introduction of new corrosion mechanisms and new corrosion sites caused by the carbon steel contamination.

Edison references carbon steel contamination numerous times in their Visual Assessment Report.

<http://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML19261A089> (pgs 121 - 138) (attached image is from pg 136)

MPC SIN 072



Carbon Steel Contamination within the HAZ of the MPC circumferential weld

The figure above corresponds to the shield ring induced carbon steel contamination identified between MPC Inner Seismic Restraints 1 and 2 as documented in Table 1 in the body of the report. There was no measurable depth for this location.

Not only did LPI not address the 'dissimilar metal' and carbon steel contamination issues, but they presented incorrect information as fact.

This calls into question the validity of the entire LPI report.

The Commission must not accept a report with faulty information as a credible expert assessment.

**A flawed LPI report does not satisfy Special Condition 19 of the Decommissioning Permit.**

**Please revise your staff report and do not recommend approval.**

Thank you for reviewing these serious issues.

I would appreciate your feedback BEFORE the July 16, 2020 meeting.

Sincerely,

Kalene Walker

760-712-2799



**Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).**

Arlen Flores <arlen@scchamber.com>

Wed 7/8/2020 2:39 PM

To: Energy@Coastal <EORFC@coastal.ca.gov>

*The San Clemente Chamber of Commerce serves the community nearest San Onofre for the purpose of promoting the general welfare and prosperity of the area. The Chamber supports the safe and secure management of spent fuel at SONGS, for as long as the fuel remains on site. We share the California Coastal Commission's interest in ensuring the spent fuel is maintained by SCE in a manner that facilitates transporting the spent fuel offsite, once a facility is available to accept that fuel; our position supports the CA Coastal Commission's staff recommendation for a chosen program for inspecting and maintaining the spent fuel. The San Clemente Chamber of Commerce urges the Commission to approve the SONGS inspection and maintenance program.*

In health and community,

Arlen Flores  
Director of Operations  
San Clemente Chamber of Commerce  
1231 Puerta Del Sol, 200  
San Clemente, CA 92673  
Tel. (949) 492-1131 Fax (949) 492-3764  
[www.scchamber.com]scchamber.com  
[#SCSTAYSTRONG](#)

**Mission Statement**

*To protect the Free Enterprise System, Champion Business and Strive for a Healthy Economy and a Better Quality of Life in Our Community.*

**CONFIDENTIALITY NOTICE:**

This electronic mail message and any attached files contain information intended for the exclusive use of the individual or entity to whom it is addressed and may contain information that is proprietary, privileged, confidential and/or exempt from disclosure under applicable law. If you are not the intended recipient, you are hereby notified that any viewing, copying, disclosure or distribution of this information may be subject to legal restriction or sanction. Please notify the sender, by electronic mail or telephone, of any unintended recipients and delete the original message without making any copies.

July 10, 2020

California Coastal Commission  
45 Fremont, Suite 2000  
San Francisco, CA 94105-2219

Re: Item Th3a

Dear Commissioners:

As a Councilmember of an Orange County coastal city I am asking you to vote in favor of item Th3a, the approval for the Inspection and Maintenance Program for the spent nuclear fuel at San Onofre Nuclear Generating Station (SONGS).

As staff and the outside consultant concluded, the SONGS inspection and maintenance program is appropriately designed to ensure that the fuel storage containers will remain in a very safe physical condition and are beyond sufficient to allow safe off-site transport someday in the future. SONGS and SCE's top priority is finding a long-term solution for the spent fuel as well as ensure that is moved safely and properly. That is a priority shared by us all in Orange County. This program of inspection, care and maintenance is one step forward to advance toward that goal and to safely guarantee that it can happen.

I ask for your yes vote for this approval and together we can take these necessary next steps.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Posey", with a large, sweeping underline that extends to the right.

Councilmember Mike Posey  
The City of Huntington Beach

## Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).

Daniel Stetson <danstetson@me.com>

Wed 7/8/2020 8:21 PM

To: Energy@Coastal <EORFC@coastal.ca.gov>

Good Morning, my name is Dan Stetson and I am also speaking on behalf of David Victor. We have volunteered as members of the SONGS Community Engagement Panel since its formation in 2014 and, at present, David Victor serves as Chair and I serve as Vice Chair. Our comments today reflect our own thoughts, and not necessarily the rest of the CEP.

Over the years, we have learned that there are just a few issues that matter most to the communities surrounding San Onofre; these include (1) safe management of spent nuclear fuel as long as it remains on site, and (2) safely relocating that spent fuel offsite as soon as an offsite facility is available.

As such, we share the California Coastal Commission's concerns in ensuring the spent fuel at SONGS is properly maintained by SCE in a manner that facilitates safely transporting the spent fuel offsite once a facility is available to accept it.

At our CEP meetings, we have focused extensive attention on SCE's inspection and maintenance, "defense in depth," plans for the ISFSI. We understand that SCE's program goes further than any similar program in the U.S. commercial nuclear power industry. These plans are based on a wide array of monitoring strategies that include a test canister that will be inspected every two and one-half years, as well as a demonstrated repair method.

Further, we are aware that the CCC staff retained Lucius Pitkin Inc. to independently review SCE's plans. They found the program appropriate to support the CCC's objective of ensuring the canisters will remain ready for off-site transportation.

We support the staff recommendation and urge the Commission to approve the SONGS inspection and maintenance program.

We must continue, all of us, to keep our eyes on what matters for the long term - making sure the SONGS fuel is ready to ship; and raising the odds that through changes in federal law and other actions that fuel can be safely sent to an interim storage facility.

David Victor, Chair

Dan Stetson, Vice Chair

SONGS Community Engagement Panel

July 10, 2020

California Coastal Commission  
45 Fremont, Suite 2000  
San Francisco, CA 94105-2219

Re: Item Th3a

Dear Commissioners of the California Coastal Commission:

I am writing to ask you to vote in favor of Item Th3a, the approval for the Inspection and Maintenance Program (IMP) for one of the dry storage systems for spent nuclear fuel at San Onofre Nuclear Generating Station (SONGS).

As a former member of the Concerned Coastal Communities Commission and a Councilwoman for a coastal city, I share the Coastal Commission's concerns and want to ensure the safety of our community as we are dealing with spent nuclear fuel. I believe that staff has done an excellent job in reviewing this matter and the work of independent experts evaluating the IMP. Your vote to approve would continue the great strides already undertaken to ensure that SONGS continues to operate safely.

We all share the same goal. As a community, we are looking for a permanent offsite storage facility for this spent fuel. In the interim, the IMP helps safely managing this fuel as we seek this long-term goal.

Our coastal cities, indeed all of our cities, should be protected and I believe the IMP helps do just that. Please vote in favor of approving the Inspection and Maintenance Program at San Onofre Nuclear Generating Station.

Sincerely,



Councilmember Barbara Delgleize  
The City of Huntington Beach

## Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).

John <ramjet949@yahoo.com>

Thu 7/9/2020 9:34 AM

To: Energy@Coastal <EORFC@coastal.ca.gov>

California Coastal Commission  
45 Fremont Street, Suite 2000  
San Francisco, CA 94105-2219

Re: SONGS Decommissioning Project Permit (# 9-19-0194)

To the Commissioners:

I am a lifelong resident of California, and worked at the San Onofre Nuclear Power Plant (SONGS) as an employee of Southern California Edison (SCE) for 37 years. I started my career there as a Control Room Operator after successfully getting a Reactor Operator License from the Nuclear Regulatory Commission (NRC). In later years I worked in the Engineering group and was the Supervisor of Reliability Engineering and Predictive Maintenance. My final 5 years at SONGS I was a member of the Decommissioning Team. I was also the Chairman of the industry's Maintenance Rule Users Group for 5 years. The Maintenance Rule (10 CFR 50.65) ensures that Nuclear risk is minimized and maintenance activities are appropriate to ensure equipment reliability.

The proposed SONGS Inspection and Maintenance Plan (IMP) was developed to ensure that the spent fuel canisters at SONGS are maintained safely and in a condition that when an off-site storage facility is approved by the NRC, the canisters will be ready for removal and transport.

The proposed IMP:

- Was developed with input from many Nuclear Decommissioning professionals throughout the industry.
- Meets all NRC requirements and regulations.
- Has been reviewed by the CCC staff which is recommending an approval.
- Was reviewed at the request of CCC staff by Lucius Pitkin Inc. (LPI), an Engineering firm with expertise in Fitness for Service and Metallurgy, who concluded that the SONGS IMP was appropriately designed to ensure that the fuel storage containers will remain in a physical condition sufficient to allow off-site transport.

There is no need or NRC requirement to maintain a Spent Fuel Pool (SFP) during the time period between entering Long Term On-site Dry Storage and the eventual transference to an off-site facility. There is no credible design basis event, to include a credible earthquake, in which the SFP would be utilized. Once all the fuel is safely stored in dry storage, the SFP has served its total and complete purpose and is no longer needed.

Based on these facts, I would like to encourage the Commission to approve the San Onofre Inspection and Maintenance Plan when it comes up for your approval.

Sincerely,  
John E. Ramsdell III  
ASQ Certified Reliability Engineer  
Former NRC Licensed Reactor Operator  
SONGS Employee for 37 Years

**Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).**

Jenn Lowe <jlowe@accoc.org>

Thu 7/9/2020 11:50 AM

To: Energy@Coastal <EORFC@coastal.ca.gov>

Cc: Board of Directors <BoardofDirectors@accoc.org>

 1 attachments (193 KB)

ACC-OC Support - SCE\_IMP.pdf;

To whom it may concern,

On behalf of the Association of California Cities – Orange County Board of Directors, I am submitting a letter in support of the July 16, 2020 agenda item Th3a. This letter expresses ACC-OC's support for Southern California Edison's proposed Inspection and Maintenance Program.

We appreciate your consideration. I am available to answer any questions you might have about ACC-OC's position.

Respectfully,

Jenn Lowe

Director of Legislative & External Affairs



July 8, 2020

The Honorable Steve Padilla  
Chair, California Coastal Commission  
7575 Metropolitan Dr., #103  
San Diego, CA 92108

***Re: Support for SCE's Proposed Inspection and Maintenance Program***

Dear Chair Padilla:

On behalf of the Association of California Cities – Orange County (ACC-OC) Board of Directors, I am writing to request that the California Coastal Commission (CCC) approve the Inspection and Maintenance Plan (IMP) as submitted by Southern California Edison and presented as item Th3a on the July 16, 2020 agenda.

ACC-OC represents the interests of Orange County cities on regional public policy issues. The San Onofre Nuclear Generating Station (SONGS) safely provided a clean, reliable energy source to thousands of Orange County residents for decades. It also created hundreds of jobs for Orange County residents and generated billions of dollars in revenue for the region.

Since 2013, SCE has worked diligently with federal, state and local officials to ensure the safe decommissioning of the SONGS facility. SCE has consistently shown a willingness to work with government agencies to protect the coastline and surrounding communities until the spent fuel can be safely transported.

ACC-OC supports CCC staff's recommendation to approve SCE's IMP. In particular, we appreciate that staff recommendations are premised on an analysis prepared by an independent contractor with expertise on these matters; and that SCE has agreed to all staff recommendations to improve upon the IMP. Once again, SCE has demonstrated its commitment to doing whatever it takes to maximize safety.

We at ACC-OC appreciate all the hard work that the CCC does to protect our state's iconic coastline.

Thank you for your consideration.



Association of California Cities  
Orange County



- Education
- Policy
- Advocacy

Sincerely,

A handwritten signature in black ink, appearing to read "Diane Dixon".

Diane Dixon  
President, ACC-OC Board of Directors  
Council Member, City of Newport Beach

cc:

California Coastal Commission Members  
ACC-OC Board of Directors

**Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).**

Mail Tod Burnett <mail@todburnett.com>

Thu 7/9/2020 4:58 PM

To: Energy@Coastal <EORFC@coastal.ca.gov>

Cc: Mail Tod Burnett <mail@todburnett.com>

Dear California Coastal Commissioners,

I am writing to express support for Southern California Edison's (SCE) Inspection and Maintenance Program, as recommend by your staff. As an Orange County resident, former President of Saddleback College, and member of the Orange County Workforce Development Board, I appreciate the thoughtfulness of the program.

Since beginning the decommissioning process in 2013, SCE continues to safely plan for the removal of their facility at San Onofre. The Commission staff and consultants have concluded the program has been appropriately designed and warrants your support.

Thank you for your consideration of my viewpoint.

Sincerely,

Dr. Tod A. Burnett  
Irvine, CA

## Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).

home home <msarram@gmail.com>

Thu 7/9/2020 6:08 PM

To: Energy@Coastal <EORFC@coastal.ca.gov>

Cc: Mehdi Sarram <msarram@energyscg.com>

Dear CCC Commissioners,

My name is Dr. Mehdi Sarram, a nuclear engineer, graduate of the University of Michigan 1967. I also possessed a USAEC senior reactor operator license in 1965. I have 50 years nuclear experience. I have extensive experience with High Level Nuclear waste management and have worked with US NRC on nuclear licensing for over 30 years. I was a member of Nuclear Energy Institute Audit team in 1996 to audit SONGS.

I have attended several CCC meetings related to SONGS and I have lived in Carlsbad CA for 12 years, some 30 miles from the San Onofre nuclear site. I have supported the decommissioning of the SONGS in the past and will continue to do so as it is the RIGHT thing to do.

I support the CCC staff recommendation to approve the Inspection and Maintenance Program (IMP) at the meeting on July 16, 2020.

The purpose of the IMP is to ensure that the Spent Fuel Canisters at SONGS are maintained in a manner such that they will be ready for pickup and transport once a licensed off site facility is available.

To me, approval of the CCC staff recommendation is the right thing to do. The ultimate goal is to decommission the SONGS plants in a safe manner. To me, the public health and safety will be ensured once SONGS is decommissioned.

Best regards

Dr. Mehdi Sarram

Carlsbad CA

760-448-6775

Sent from [Mail](#) for Windows 10

**Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).**

Mark Lewis <marklewistrombone@gmail.com>

Thu 7/9/2020 8:51 PM

To: Energy@Coastal <EORFC@coastal.ca.gov>

Sir/Madam,

I am a lifelong Californian and Carlsbad resident.

I believe ensuring the safe storage of spent nuclear fuel at SONGS is important until some off site option becomes available. That will be in a distant future. Thus the work done to maintain the stored fuel to facilitate eventual transportation off site is important.

I am relieved that the CCC staff has reviewed the SONGS program for inspection and maintaining the spent fuel storage system and is recommending approval.

The CCC should therefore approve the SONGS program today.

Mark Lewis  
Carlsbad, CA.



OCEANSIDE  
CHAMBER OF  
COMMERCE

July 10, 2020

Chairman Steve Padilla  
California Coastal Commission  
45 Fremont, Suite 2000  
San Francisco, CA 94105-2219

RE: Support for Item #Th3a

Dear Chairman Padilla and Commissioners,

On behalf of the Oceanside Chamber of Commerce, I am writing to respectfully request your support of Southern California Edison's *Inspection and Maintenance Program* (IMP) on the Commission's July 17, 2020 Agenda. The Oceanside Chamber represents, serves, supports, and promotes the interests of all businesses within the City of Oceanside, and nearby Camp Pendleton.

The approval of Southern California Edison's (SCE) IMP is an important step in returning the site to the United States Marines. SCE worked closely with Commission staff in developing the plan, incorporating each of the recommendations provided by the Commission's independent third-party consultant. The technology, maintenance protocols, and inspection timeframes and methodology demonstrate SCE's continued commitment to safety decommissioning SONGS.

Thank you for your consideration of our views, and again we respectfully urge your approval of Item #Th3a.

Sincerely,

Scott Ashton  
Chief Executive Officer

## Re: Comment to CDP No. 9-15-0228 - SONGS San Onofre IMP

Kale Walker <ggchappykale@yahoo.com>

Fri 7/10/2020 12:45 PM

To: Weber, John@Coastal <john.weber@coastal.ca.gov>

Cc: Donna Gilmore <donnagilmore@gmail.com>; Gregory Jaczko <gregoryjaczko@gmail.com>; LRHering <lrhering@aol.com>; Paul <pdblanch@comcast.net>; Marv Lewis <marvlewis@juno.com>; Torgen Johnson <torgenjohnson@hotmail.com>

Hi,

I'm wondering if you received and reviewed my comment.

Do you have any disagreements or questions? Please let me know before the meeting, so I have an opportunity to respond to questions Or disagreements.

I'd appreciate a response before the meeting.

To clarify and reiterate on the Corrosion Problem:

I find it interesting that the LPI report mentions the shield ring, but never that it is made of carbon steel. I did a word-search of the LPI document, and it does not even mention the word 'carbon', yet it claims no disparate metals in the system.

Carbon introduces a whole new mode of corrosion mechanisms to the canisters.

'Carbon steel stains' and 'iron oxides' are not minor problems. They indicate the presence of carbon particles on the stainless steel canisters - - a SIGNIFICANT trigger for stress corrosion cracking.

Edison's report even references the problem with carbon in their Design Improvements section (pg 9).

It states "Typically, canisters fabricated for spent fuel storage are constructed with stainless steel 304. **SCE's use of stainless steel 316L minimizes carbon content within the shell and weld material, which SIGNIFICANTLY minimizes the potential for SCC.**"

Using statistics and probability are not adequate methods to analyze this corrosion mechanism that has now been introduced to virtually every Holtec canister.

A Visual Assessment CANNOT find cracks (according to ASME) characterize flaws (length, width, depth, direction of cracks) or the propagation **crack growth rate**.

SCE's professional engineers who signed the Visual Assessment report made this clear that the visual assessment is NOT an inspection by ASME or any other code. LPI and SCE have NOT provided adequate evidence that the ISFSI containers can be inspected or maintained according to Condition 7 of their Coastal permit.

I look forward to hearing your feedback.

Kalene

On Jul 8, 2020, at 3:33 PM, Kale Walker <ggchappykale@yahoo.com> wrote:

Hello Mr. Weber,

I've been reading the documents regarding Edison's proposed Inspection Maintenance Program for the SONGS Holtec ISFSI.

<https://www.coastal.ca.gov/meetings/agenda/#/2020/7> (Agenda item 3. Conditions of Compliance - July 17, 2020 meeting)

With only a partial review, I've found serious errors and misrepresentations in the reports. The following problems undermine the credibility and validity of the LPI and Edison Reports (Appendix B and Appendix C)

### **Problem #1 – Draft ASME Code Case N-860**

Both the Edison and LPI Reports reference Draft Code Case N-860 to validate the proposed inspection and repair plans.

Edison states, "SCE's inspections will be modeled after the American Society of Mechanical Engineers' (ASME) Draft Code Case N-860, which provides guidance for the inspection and maintenance of spent fuel canisters to manage potential degradation from SCC." (Appendix C pg 4)

The LPI report refers to the Draft Code numerous times with footnote [6], particularly in their recommendation for a '10% flaw allowance'. (Appendix B pg 4)

[6] ASME Code Section XI, Division 1 and 2, **Draft Code Case N-860**, "Inspection Requirements and Evaluation Standards for Spent Nuclear Fuel Storage and Transportation Containment Systems," Rev. 04h, February 26, 2020.

### **But Code Case N-860 is NOT an approved code. It is a draft.**

A draft document must not be considered a valid technical reference for assessing inspection or repair capabilities - or for basing recommendations.

Contrary to Edison's claim that the draft is "currently being finalized and is expected to be approved by the end of 2020" (Appendix C pg 20), this February 1, 2019 report on the draft code states, "The new code case being developed for ASME Section III is currently at stage 2" of a 7 stage process. (see Table 5 on page 10)

[https://www.researchgate.net/publication/339014285\\_Application\\_of\\_the\\_Advanced\\_Surface\\_Modification\\_Process\\_to\\_the\\_ASME\\_Code\\_Case\\_for\\_Sections\\_III\\_and\\_XI\\_of\\_Nuclear\\_Power\\_Plants/fulltext/5e38ca95299b1c90aef18/339014285\\_Application\\_of\\_the\\_Advanced\\_Surface\\_Modification\\_Process\\_to\\_the\\_ASME\\_Code\\_Case\\_for\\_Sections\\_III\\_and\\_XI\\_of\\_Nuclear\\_Power\\_Plants.pdf?origin=publication\\_detail](https://www.researchgate.net/publication/339014285_Application_of_the_Advanced_Surface_Modification_Process_to_the_ASME_Code_Case_for_Sections_III_and_XI_of_Nuclear_Power_Plants/fulltext/5e38ca95299b1c90aef18/339014285_Application_of_the_Advanced_Surface_Modification_Process_to_the_ASME_Code_Case_for_Sections_III_and_XI_of_Nuclear_Power_Plants.pdf?origin=publication_detail)

There is no guarantee this draft will become Code - the industry has been trying to solve the problem of the inability to adequately inspect or repair stress corrosion cracks in these in-service pressure vessels for decades - with no adequate solution to date.

That LPI would recommend a Draft Code indicates they were not able to find an approved ASME Code, and represents a desperate attempt to find a way to validate Edison's unapproved inspection and repair plans. This is unacceptable by any professional standards.

### **Problem #2 - Inspection and Repair**

Edison continues to mislead the Commission and the public by claiming they can "inspect" canisters for cracks - and characterize cracks. Documents obtained through FOIA (Freedom of Information Act) contain Edison's Visual Assessment Report which explicitly states, "This is NOT a formal 'inspection' or an activity qualified to ASME Sections III, V, XI or otherwise." <http://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML19261A089> (attached image pg 124 )

[AccessionNumber=ML19261A089](#) (attached image pg 124 )  
<image0.jpeg>

NRC senior inspector, Lee Brookhart stated that it's impossible to inspect or repair canisters. <https://sanonofresafety.files.wordpress.com/2019/10/ccc-comments.pdf>

And Edison's proposed nickel spray "repair" process has not been approved by the NRC or ASME, nor has it been demonstrated in an actual canister or tested to withstand pressure limits.

### **Problem #3 - Carbonic Corrosion**

The LPI report clearly makes an incorrect statement regarding Carbonic Corrosion. The report states, "This degradation mechanism is seen as extremely unlikely (there are no dissimilar metals in contact for the UMAX canister system)." (Appendix B page 50)

In fact, a basic problem with the Holtec system is that stainless steel canister walls scrape and gouge against carbon steel guide rings and seismic restraints during canister downloading.

A valid and professional report on the SONGS proposed IMP would include a technical assessment by professional structural and material engineers of the potential introduction of new corrosion mechanisms and new corrosion sites caused by the carbon steel contamination.

Edison references carbon steel contamination numerous times in their Visual Assessment Report.

<http://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML19261A089> (pgs 121 - 138)

(attached image is from pg 136)

<image1.jpeg>

Not only did LPI not address the 'dissimilar metal' and carbon steel contamination issues, but they presented incorrect information as fact.

This calls into question the validity of the entire LPI report.

The Commission must not accept a report with faulty information as a credible expert assessment.

**A flawed LPI report does not satisfy Special Condition 19 of the Decommissioning Permit.**

**Please revise your staff report and do not recommend approval.**

Thank you for reviewing these serious issues.

I would appreciate your feedback BEFORE the July 16, 2020 meeting.

Sincerely,

Kalene Walker

760-712-2799



**Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).**

Phil Ord <ord.phil@americansfornuclearenergy.org>

Fri 7/10/2020 1:26 PM

To: Energy@Coastal <EORFC@coastal.ca.gov>

To whom it may concern:

As a nuclear power science advocate who has great confidence in the technology, I would like to share my thoughts on the approval of the inspection of the spent fuel canisters at the decommissioned San Onofre Nuclear Generating Station.

I believe that the California Coastal Commission (CCC) is right in ensuring the proper management by Southern California Edison (SCL) of the spent fuel containers on site at the closed plant. This oversight of the spent fuel must happen with the upmost safety requirements and regulations, until the canisters are transferred to a central repository facility off the site.

The program designed to address the safe and secure management of this fuel, has been reviewed and recommended by the CCC, and is seeking approval of said program. If the Commission has the power, I would strongly recommend that they approve this program today. The professionals working on this are very dedicated to the safety of humanity and the health of the natural world.

Thank you!

Phil Ord

ord.phil@americansfornuclearenergy.org

303.579.3599



July 10, 2020

California Coastal Commission  
45 Fremont, Suite 2000  
San Francisco, CA 94105-2219

Submitted via email to: [FORFC@coastal.ca.gov](mailto:FORFC@coastal.ca.gov)

Re: Agenda Item Th3a

Dear Members of the California Coastal Commission,

Since 1969, the South Orange County Economic Coalition (SOCEC) has been the leading voice of the business community in South Orange County. We advocate for a strong and vibrant economic climate locally and regionally and strive to keep our members and supporters well informed about public policy issues affecting them and their communities. We also speak on behalf of our communities when our voice as a stakeholder can contribute to improving South Orange County as a better place to live and work.

This is why, on behalf of SOCEC's board of directors and members, I am writing to you to express our support for the Commission's approval of agenda item Th3a, the Coastal Development Permit for the Inspection and Maintenance Program for dry fuel storage at the San Onofre Nuclear Generating Station (SONGS).

A member of our Board of Directors, Jim Leach, has been on the Community Engagement Panel ("CEP") since its inception in 2013. His participation has ensured SOCEC's involvement and understanding of the activities and processes at San Onofre over the years. As detailed in the staff report, the Inspection and Maintenance Program (IMP) as submitted by Southern California Edison was independently reviewed by engineering firm Lucius Pitkin Inc. (LPI), which undertook a thorough vetting of the IMP before issuing findings in support of the plan and offering additional recommendations. Edison agreed to those recommendations and has incorporated those into the final IMP before you.

Further, Coastal Commission staff has reviewed the IMP, LPI's review and findings, as well as all the relevant documentation, reports, and exhibits, and has recommended approval. We wholeheartedly agree with staff's findings and conclude that the plan proposed by Edison will result in safe storage and the ability for SONGS to operate and proceed with deconstruction as planned.

Again, the SOCEC stands in support of the SONGS IMP as proposed by Edison and recommended by staff, and we urge you to vote in favor of approval.

Sincerely,

A handwritten signature in black ink that reads "Barbara J. Thomas". The signature is written in a cursive, flowing style.

Barbara J. Thomas  
Executive Director

## Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).

Jim Conca <jim@ufaventures.com>

Fri 7/10/2020 3:24 PM

To: Energy@Coastal <EORFC@coastal.ca.gov>

Dear Commission,

As a 35-year veteran of nuclear waste disposal, I am writing regarding agenda item Th3a for July 16th, to recommend approval of the proposed inspection and maintenance program for the Holtec multi-purpose canister dry storage systems for spent nuclear fuel at the San Onofre Nuclear Generating Station. This maintenance program is essential to keep the storage canisters and other components in good condition in order to eventually move the waste to a centralized interim storage site or to a permanent disposal facility, both outside of California.

These eventual storage or disposal sites will require that the waste have been sufficiently maintained by NRC-approved programs such as that which is proposed. Since this program is modeled on, and actually exceeds, NRC requirements for Aging Management Programs, guidance from the American Society of Mechanical Engineers, and research by the Electric Power Research Institute, approval of this program should ensure that this waste will meet any future requirements and will be able to be transported when that time comes.

I would like to mention the possible chloride-induced stress corrosion cracking of stainless steel components in the spent fuel canisters which is always brought up as an issue for SONGS. SCC has only been observed, and is only predicted for, humid environments and is not likely in the extreme for the conditions of San Onofre.

Thank you for all of your efforts in addressing this important issue. Please feel free to contact me if there is anything I can do or provide.

Sincerely,

Jim Conca

Dr. James Conca, Senior Scientist  
UFA Ventures, Inc.  
2801 Appaloosa Way  
Richland, WA 99352  
509-205-7541  
[jim@ufaventures.com](mailto:jim@ufaventures.com)  
[Forbes.com](http://www.forbes.com) Science Contributor  
<http://www.forbes.com/sites/jamesconca/>

**Public Comment on July 2020 Agenda Item undefined 3a - Condition Compliance for Permit No. 9-15-0228 (Southern California Edison, San Diego Co).**

Heather Hoff <heather@mothersfornuclear.org>

Fri 7/10/2020 3:53 PM

To: Energy@Coastal <EORFC@coastal.ca.gov>

I am a concerned citizen writing to express support for the San Onofre inspection and maintenance program for used fuel. I share the California Coastal Commission's interest in ensuring the spent fuel at SONGS is maintained by SCE in a safe manner that facilitates transporting the spent fuel offsite once an off-site facility is available. The CCC staff has reviewed the program and is recommending approval. Therefore, I urge the Commission to approve the SONGS inspection and maintenance program today.

Thank you,

Heather Hoff

Co-founder, Mothers for Nuclear.



**Public Watchdogs**

7867 Convoy Court, Suite 302, San Diego CA 92111  
(858) 384-2139 [www.publicwatchdogs.org](http://www.publicwatchdogs.org)

**CDP No. 9-15-0228**

California Coastal Commission  
Energy, Ocean Resources & Federal Consistency Division  
45 Fremont, Suite 2000  
San Francisco CA 94105-2219

July 10, 2010

RE: Request a **NO** vote on Resolution to approve Inspection and Maintenance Program (IMP)

Dear Coastal Commissioner:

Public Watchdogs respectfully requests that you cast a NO vote on the Resolution that will result in the approval of SCE's Inspection and Maintenance Program based on the following:

- **Errors in supporting documents.** The '*independent*', third-party consulting firm, LPI, stated there were miscalculations and typographical errors in the supporting documents specific to the depth of the gouging of the Holtec MPC-37 canisters. Therefore, LPI's conclusions which served as the basis for their four recommendations to enhance SCE's IMP, are invalid and inaccurate because they are based on false foundational documentation. Further, Every single canister at SONGS has been damaged during downloading in violation of Holtec's Certificate of Compliance (CoC), to the Nuclear Regulatory Commission (NRC).
- **SCE has disingenuously claimed that their IMP is modeled after the Draft ASME Code Case N-860** that is "*currently being finalized and is expected to be approved by the end of 2020.*" SCE exaggerates. It knows that the current status of their ASME process is only at Stage 2 of a 7-step process.
- **The SONGS ISFSI is operating in an unanalyzed condition** in violation of NRC rules. In the event of flooding, SCE has argued that a flooded canister cavity will actually improve convection cooling. However, if the canister enclosure cavities are not *fully submerged*, convection cooling will not occur. The failure of convection cooling under these conditions has not been analyzed by the NRC and is therefore violates NRC rules.
- **The LPI report to the Commission contains false information** based on factually incorrect data provided by SCE. Specifically, SCE claimed that the exterior temperature of a Holtec MPC-37 canister is 225F. The actual temperature, according to the Holtec's Final Safety Analysis Report (FSAR), filed with NRC, shows that the exterior temperature ranges between 450 and 460 degrees.

Cordially,

Charles Langley  
Executive Director  
Public Watchdogs