



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

October 21, 2021

Mr. James Welsch, Vice President, Nuclear  
Generation and Chief Nuclear Officer  
Pacific Gas and Electric Company  
P.O. Box 56  
Mail Code 104/6  
Avila Beach, CA 93424

SUBJECT: HUMBOLDT BAY INDEPENDENT SPENT FUEL STORAGE INSTALLATION –  
INDEPENDENT SPENT FUEL STORAGE INSTALLATION SECURITY  
INSPECTION REPORT 07200027/2021401

Dear Mr. Welsch:

On September 22, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Humboldt Bay Independent Spent Fuel Storage Installation. On September 22, 2021, the NRC inspectors discussed the results of this inspection with Mr. Robert Zimkowski, Manager DCPD Security Strategy, and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

Signed by Kellar, Ray  
on 10/21/21

Ray L. Kellar, P.E. Chief  
Plant Support Branch 1  
Division of Reactor Safety

Docket No. 07200027

Enclosure:  
As stated

HUMBOLDT BAY INDEPENDENT SPENT FUEL STORAGE INSTALLATION – INDEPENDENT SPENT FUEL STORAGE INSTALLATION SECURITY INSPECTION REPORT 07200027/2021401 – DATED OCTOBER 21, 2021

SMorris, RA  
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AVegel, DRP  
MHay, DRP  
RLantz, DRS  
JDixon, DRS  
MMuessle, DNMS  
LHowell, DNMS  
GWarnick, DNMS  
EWharton, NSIR

FBower, RI DRS  
OSmith, RII DRS  
SOrth, RIII DRS  
DCylkowski, RC  
RWilliams, RIV/OEDO  
AMoreno, RIV/CAO  
VDricks, ORA  
LWilkins, OCA  
BMaier, RSLO

WAllen, NMSS  
DJohnson, NSIR  
TKeene, NSIR  
DGarner, NSIR  
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cc w/enclosure:  
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ADAMS ACCESSION NUMBER: ML21292A046

SUNSI Review      ADAMS:       Non-Publicly Available       Non-Sensitive      Keyword:  
By: RLK       Yes    No       Publicly Available       Sensitive      NRC-002

OFFICE	PSI: PSB1	C:PSB1	C:FCDB	C:PSB1
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DATE	10/19/2021	10/19/2021	10/21/2021	10/21/2021

OFFICIAL RECORD COPY

**U.S. NUCLEAR REGULATORY COMMISSION  
Inspection Report**

Docket Number: 07200027

License Number: SNM-2514

Report Number: 07200027/2021401

Enterprise Identifier: I-2021-401-0128

Licensee: Pacific Gas and Electric Company

Facility: Humboldt Bay Independent Spent Fuel Storage Installation.

Location: Eureka, CA

Inspection Dates: September 20, 2021 to September 22, 2021

Inspectors: R. Lanfear, Physical Security Inspector

Approved By: Ray L. Kellar, P.E., Chief  
Plant Support Branch 1  
Division of Reactor Safety

## **SUMMARY**

This report covers a two-day period of an announced routine baseline inspection on security conducted by one physical security inspector from the NRC's Region IV office. There were no findings identified during this inspection.

This inspection consisted of a review and evaluation of the physical security program for the independent spent fuel storage installation at the Humboldt Bay Power Plant. The inspection consisted of observations of the independent spent fuel storage installation physical security-related activities, interviews with personnel, and an examination of procedures and security records. The inspector used Inspection Procedure (IP) 81311 "Physical Security Requirements for Independent Spent Fuel Storage Installations" to conduct the inspection.

### **List of Findings and Violations**

No findings or violations of more than minor significance were identified.

### **Additional Tracking Items**

None.

## REPORT DETAILS

### IP 81311 Physical Security Requirements for Independent Spent Fuel Storage Installations (ISFSI)

#### Inspection Scope

#### 02.02 Review of Specific License Requirements

- a. The inspector verified that spent nuclear fuel (SNF) and power reactor-related greater than class C waste is stored only within a protected area (PA) required by 10 CFR 73.51(b)(2)(i) and (10 CFR 73.51(d)(1).
- b. The inspector verified that only individuals who are authorized to enter the PA are granted access to the PA required by 10 CFR 73.51(b)(2)(ii).
- c. The inspector verified that the licensee is in compliance with site specific security orders (e.g., additional security measures) for access authorization and fingerprinting; also, that a log of authorized individuals is required pursuant to 10 CFR 73.51(d)(13)(i).
- d. The inspector verified the licensee can detect and assess penetrations through the isolation zone required by 10 CFR 73.51(d)(3).
- e. The inspector verified the licensee can provide timely communication to the designated response force whenever necessary required by 10 CFR 73.51(b)(2)(iv).
- f. The inspector verified that the physical protection system is designed to protect against loss of control of the facility that could be sufficient to cause a radiation exposure exceeding the dose as described in 10 CFR 72.106(b) and 10 CFR 73.51(b)(3).
- g. The inspector verified that the licensee has retained a copy of the physical protection plan for a period of 3 years or until termination of the license required by 10 CFR 73.51(c).
- h. The inspector verified that the licensee complies with the provisions for physical protection systems, components, and procedures that meet the performance objectives of 10 CFR 73.51(b)(1), 10 CFR 73.51(b)(2), and 10 CFR 73.51(d).
- i. The inspector verified the licensee provides illumination sufficient to permit adequate assessment of unauthorized penetrations of or activities within the PA required by 10 CFR 73.51(d)(2).
- j. The inspector verified the licensee's perimeter of the PA allows for continual surveillance and is protected by an active intrusion alarm system that is capable of detecting penetrations through the isolation zone; and that it is monitored in a continually staffed primary alarm station and in one additional continually staffed location required by 10 CFR 73.51(d)(3).
- k. The inspector verified that the primary alarm station is located within the PA; that it has bullet-resisting walls, doors, ceiling and floor; that the interior of the station is not visible from outside the PA; that a timely means for assessment of alarms is provided regarding

alarm monitoring; and that the redundant location provided a summary indication that an alarm has been generated required by 10 CFR 73.51(d)(3).

- l. The inspector verified the licensee's PA is monitored by daily random patrols pursuant to 10 CFR 73.51(d)(4); and a log of all patrols is required in accordance with 10 CFR 73.51(d)(13)(iii).
- m. The inspector verified the licensee's security organization has written procedures that provides for sufficient personnel per shift to ensure the monitoring of detection systems and the conduct of surveillance, assessment, access control, and communications to assure adequate response; that members of the security organization are trained, equipped, qualified, and requalified to perform assigned job duties in accordance with Appendix B to Part 73, sections I.A, (1)(a) and (b), B(1)(a), and the applicable portions of section II pursuant to 10 CFR 73.51(d)(5).
- n. The inspector verified the licensee has a documented liaison with a designated response force or local law enforcement agency (LLEA) to permit a timely response to unauthorized penetration or activities required by 10 CFR 73.51(d)(6).
- o. The inspector verified the licensee has a personnel identification system and a controlled lock system that limits access to only authorized individuals required by 10 CFR 73.51(d)(7).
- p. The inspector verified the licensee has redundant communications capability between onsite security force members and designated response force or LLEA required by 10 CFR 73.51(d)(8).
- q. The inspector verified that all individuals, vehicles, and hand-carried packages entering the PA are checked for proper authorization and visually searched for explosives before entry in accordance with 10 CFR 73.51(d)(9).
- r. The inspector verified the licensee's written response procedures have been established and maintained for addressing unauthorized penetration of, or activities within, the PA required by 10 CFR 73.51(d)(10).
- s. The inspector verified that all the licensee's detection systems and supporting subsystems include a tamper indicating system with line supervision; that the system, as well as surveillance/assessment and illumination systems, is maintained in an operable condition required by 10 CFR 73.51(d)(11).
- t. The inspector verified the licensee protects safeguards information against unauthorized disclosure required by (10 CFR 73.21 and 10 CFR 73.22).
- u. The inspector verified the licensee's physical protection program is reviewed once every 24 months by individuals independent of both physical protection program management and personnel who have direct responsibility for implementation of the physical protection program; that the physical protection program review includes an evaluation of the effectiveness of the physical protection system and a verification of the liaison established with the designated response force or LLEA pursuant to 10 CFR 73.51(d)(12).

- v. The inspector verified the licensee has retained the following documentation as a record for 3 years after the record is made or until termination of the license: a log of individuals granted access to the PA; screening records of members of the security organization; a log of all patrols; a record of each alarm received, identifying the type of alarm, location, date, and time when received, and disposition of the alarm; and the physical protection program review reports pursuant to 10 CFR 73.51(d)(13)(i)(ii)(iii)(iv) and (v).
- w. The inspector verified in accordance with any applicable security requirements and/or security orders that the licensee has implemented measures and processes for vehicle control measures into protected areas.
- x. The inspector verified in accordance with any applicable security requirements and/or security orders, that the licensee has implemented an insider mitigation program.
- y. The inspector verified that the licensee has developed offsite response coordination with LLEA as applicable to physical security requirements and/or security orders.

## **INSPECTION RESULTS**

No findings were identified.

## **EXIT MEETINGS AND DEBRIEFS**

The inspectors verified no proprietary information was retained or documented in this report.

- On September 22, 2021, the inspectors presented the independent spent fuel storage installation security inspection results to Robert Zimkowski, Manager DCP Security Strategy, and other members of the licensee staff.

**DOCUMENTS REVIEWED**

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
81311	Corrective Action Documents	121590987, 120690685, 120234600;		
	Drawings	HB3-EC-641	Modular Building Plans	0
	Miscellaneous	190630032	2019 Humboldt Bay Independent Spent Fuel Storage Installation Audit Report	06/11/2019
		HB9-EE-693	Design Change Notice Security Electronic System	1
	Procedures	HB-137	ISFSI Searching Personnel, Vehicles, Cargo and Packages	4
		HBI 342	HB ISFSI Compensatory Measures for Degraded Security Barriers or Equipment	10
		HBI-130	ISFSI Access Authorization	5
		HBI-262	ISFSI Response and Actions	7
		HBI-301	ISFSI Physical Security Plan	9
		HBI-402	ISFSI Lock and Key Control	15
		HBI-452	Protected Area Lighting Inspection	4.1
		HBI-L5	HB ISFSI Training and Qualification Plan	2
	Self-Assessments		2021 HB ISFSI Self-Assessment - Physical Protection Program Review	05/11/2021