



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

March 3, 2021

Mr. Robert Franssen, Site Vice President
Entergy Operations, Inc.
Grand Gulf Nuclear Station
P.O. Box 756
Port Gibson, MS 39150

SUBJECT: ANNUAL ASSESSMENT LETTER FOR GRAND GULF NUCLEAR STATION
(REPORT 05000416/2020006)

Dear Mr. Franssen:

The U.S. Nuclear Regulatory Commission (NRC) completed its end-of-cycle performance assessment of Grand Gulf Nuclear Station, having reviewed station performance indicators (PI), inspection results, and enforcement actions from January 1, 2020 through December 31, 2020. This letter informs you of the NRC's assessment of your facility during this period and our plans for future inspections. We concluded that overall performance at your facility preserved public health and safety.

We have determined the performance at Grand Gulf Nuclear Station during the last calendar quarter of 2020 was within the "Degraded Performance" column of the NRC's Reactor Oversight Process (ROP) Action Matrix. This conclusion was based on our assessment that the Grand Gulf Nuclear Station "Unplanned Scrams Per 7,000 Critical Hours" PI crossed the White-to-Yellow threshold. The performance issues associated with this PI contributed to five reactor scram events that occurred from May through December 2020. These events included an automatic reactor scram due to a main turbine trip, a manual reactor scram due to main turbine control valve oscillations, an automatic reactor scram due to low reactor water level following a reactor feedwater pump trip, an automatic reactor scram due to low primary water coolant flow (coolant for main generator components), and an automatic reactor scram due to low primary water tank level. Our assessment of Grand Gulf Nuclear Station performance at the end of the previous cycle (i.e., 2019) was that performance was within the "Licensee Response" column of the ROP Action Matrix. Station performance subsequently transitioned to the "Regulatory Response" column in the third quarter of 2020 due to the Grand Gulf Nuclear Station "Unplanned Scrams Per 7,000 Critical Hours" PI crossing the Green-to-White threshold. On November 3, 2020, the NRC notified you of this transition in an assessment follow-up letter, "Assessment Follow-Up Letter for Grand Gulf Nuclear Station," (ADAMS Accession No. ML20308A396).

Given the above assessment results, we plan to conduct a supplemental inspection at your facility in accordance with Inspection Procedure 95002, "Supplemental Inspection for One Degraded Cornerstone or Any Three White Inputs in a Strategic Performance Area." The objectives of this supplemental inspection are to: (1) assure that the root and contributing causes of individual risk-significant performance issues are understood, (2) independently assess and ensure that the extent of condition and extent of cause of individual risk-significant

performance issues are identified, (3) independently determine if deficient safety culture traits caused or significantly contributed to the individual risk-significant performance issues, and (4) provide assurance that Grand Gulf Nuclear Station's corrective actions for risk-significant performance issues are sufficient to address the root and contributing causes and prevent their recurrence. This inspection will be scheduled after you notify the NRC of your readiness.

The enclosed inspection plan lists the inspections scheduled through December 31, 2022. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. Routine inspections performed by our resident inspectors are not included in the inspection plan. The inspections listed during the last twelve months of the plan are tentative and may be revised. The NRC staff will contact you as soon as possible to discuss any needed changes to the inspection plan as circumstances dictate.

In response to the COVID-19 public health emergency (PHE), we have and will continue to adjust our inspection plans and schedules in order to safeguard the health and safety of both NRC and licensee staff while still effectively implementing the ROP. Each planned inspection is being carefully reviewed to determine if any portions of the inspection can be performed remotely, how best to perform on-site portions to minimize personnel health risks, and to adjust inspection schedules if needed. These reviews are performed in accordance with guidance contained in the February 1, 2021 memo, "Calendar Year 2021 Inspection Guidance During COVID-19 Telework Restrictions" (ML21027A274). In addition, NRC guidance and frequently asked questions regarding inspections associated with security and emergency preparedness programs can be found here: <https://www.nrc.gov/about-nrc/covid-19/security-ep/>. Similarly, the NRC has developed guidance if force-on-force inspections cannot be completed as scheduled due to an emergency, such as the COVID-19 PHE. All these aforementioned changes help to ensure the health and safety of both NRC and licensee staff while maintaining the NRC's important safety and security mission during the COVID-19 PHE. The attached inspection plan is accurate on the date of issuance but remains subject to change based on approval of potential exemption requests or other changes needed due to changing conditions in the COVID-19 PHE. NRC staff will contact your appropriate regulatory affairs staff in order to coordinate inspection planning and scheduling.

I have also approved the NRC staff's plan to conduct Inspection Procedure 71003, "Post-Approval Site Inspection for License Renewal," at your facility as indicated in the enclosed inspection plan.

On March 12, 2018, the NRC issued a Confirmatory Order (ADAMS Accession No. ML18072A191) (EA-17-132 and EA-17-153) to the Entergy fleet that included Grand Gulf Nuclear Station. On March 5, 2020, we completed a follow-up inspection at Entergy Corporate Headquarters in Jackson, MS, of the Confirmatory Order actions required to be completed by the end of calendar year 2019. I have approved the NRC staff's plan to conduct a subsequent follow-up inspection of the remaining Confirmatory Order actions in accordance with Inspection Procedure 92702, "Follow-up on Traditional Enforcement Actions Including Violations, Deviations, Confirmatory Action Letters, Confirmatory Orders, And Alternative Dispute Resolution Confirmatory Orders." The NRC staff will coordinate with Entergy to schedule these inspection activities at mutually convenient and appropriate date.

In accordance with Title 10 of the *Code of Federal Regulations* 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 NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact Mr. Jason Kozal at (817) 200-1144 with any questions you have regarding this letter.

Sincerely,

Scott A. Morris
Regional Administrator
Region IV

Docket No. 50-416
License No. NPF-29

Enclosure:
Inspection Plan

cc w/ encl: Distribution ® LISTSERV

ANNUAL ASSESSMENT LETTER FOR GRAND GULF NUCLEAR STATION
(REPORT 05000416/2020006) – DATED MARCH 3, 2021

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ADAMS ACCESSION NUMBER: ML21055A008

☒ SUNSI Review

ADAMS:

☐ Non-Publicly Available☒ Non-Sensitive

Keyword:

By: **AAS**☒ Yes ☐ No☒ Publicly Available☐ Sensitive

NRC-002

OFFICE	ASPE:DRP/PBC	BC:DRP/PBC	D:DRP	RA:DRP		
NAME	ASanchez	JKozal	RLantz	SMorris		
SIGNATURE	/RA/	/RA/	/RA/	/RA/		
DATE	02/23/21	02/23/21	02/25/21	03/03/21		

OFFICIAL RECORD COPY

IP 22 Inspection Activity Plan Report

07200050 - Grand Gulf (ISFSI)

01/01/2021 - 12/31/2022

Unit	Start	End	Activity	CAC	Title	Staff Count
Grand Gulf ISFSI Loading Inspection (1 week in October)						2
1	10/01/2021	10/31/2021	IP 60855	001001	Operation Of An ISFSI	
1	10/01/2021	10/31/2021	IP 60857	001004	Review of 10 CFR 72.48 Evaluations	

IP 22 Inspection Activity Plan Report

Grand Gulf

01/01/2021 - 12/31/2022

Unit	Start	End	Activity	CAC	Title	Staff Count
In-Office EP Exercise Scenario Review - GG						4
1	01/03/2021	02/14/2021	IP 71114.08	000723	Exercise Evaluation □ Scenario Review	
RP 2,4						2
1	02/01/2021	02/05/2021	IP 71124.02	000726	Occupational ALARA Planning and Controls	
1	02/01/2021	02/05/2021	IP 71124.04	000728	Occupational Dose Assessment	
Security VA Door Focused (2017), IP 71130.02						1
1	02/01/2021	02/04/2021	IP 71130.02	000734	Access Control	
EP Exercise and PI Inspection - GG						4
1	03/15/2021	03/19/2021	IP 71114.01	000716	Exercise Evaluation	
1	03/15/2021	03/19/2021	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
1	03/15/2021	03/19/2021	IP 71151	001397	Performance Indicator Verification	
FORCE-ON-FORCE PLANNING AND EXERCISE WEEKS - GG						6
1	04/12/2021	04/16/2021	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
1	05/03/2021	05/07/2021	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
Security FFD .08						1
1	05/10/2021	05/14/2021	IP 71130.08	000740	Fitness For Duty Program	
50.59 Inspection 17T - Grand Gulf						3
1	05/17/2021	05/21/2021	IP 71111.17T	000709	Evaluations of Changes, Tests, and Experiments	
Security Access Authorization .01 and Access Control .02 w/PIV						2
1	05/17/2021	05/21/2021	IP 71130.01	000733	Access Authorization	
1	05/17/2021	05/21/2021	IP 71130.02	000734	Access Control	
1	05/17/2021	05/21/2021	IP 71130.09	001656	Security Plan Changes	

This report does not include INPO and OUTAGE activities.

This report shows only on-site and announced inspection procedures.

IP 22 Inspection Activity Plan Report

Grand Gulf

01/01/2021 - 12/31/2022

Unit	Start	End	Activity	CAC	Title	Staff Count
Security Access Authorization .01 and Access Control .02 w/PIV						2
1	05/17/2021	05/21/2021	IP 71151	001338	Performance Indicator Verification	
RP 1,3,PI						2
1	06/14/2021	06/18/2021	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1	06/14/2021	06/18/2021	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
GG 2021 BRQ						3
1	08/15/2021	08/21/2021	IP 71111.11B	000704	Licensed Operator Requalification Program and Licensed Operator Performance	
GG 2021 INITIAL EXAM						5
1	09/13/2021	09/16/2021	OV	000956	VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1	10/18/2021	10/22/2021	EXAD	000500	LICENSE EXAM ADMINISTRATION (EXAD)	
Heat Sink Performance 07T - Grand Gulf						2
1	12/06/2021	12/10/2021	IP 71111.07T	000700	Heat Sink Performance	
Inservice Inspection RF23 - GG						1
1	02/28/2022	03/04/2022	IP 71111.08G	000701	Inservice Inspection Activities (BWR)	
License Renewal Inspection 71003 (Phase 1) - GG						2
1	03/07/2022	03/11/2022	IP 71003	000687	Post-Approval Site Inspection for License Renewal	
RP 1,2,PI						2
1	03/07/2022	03/11/2022	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1	03/07/2022	03/11/2022	IP 71124.02	000726	Occupational ALARA Planning and Controls	

IP 22 Inspection Activity Plan Report

Grand Gulf

01/01/2021 - 12/31/2022

Unit	Start	End	Activity	CAC	Title	Staff Count
Security Access Control .02						1
1	04/04/2022	04/08/2022	IP 71130.02	000734	Access Control	
1	04/04/2022	04/08/2022	IP 71151	001338	Performance Indicator Verification	
Security Training/Equip Maint .07 and .04						2
1	07/25/2022	07/29/2022	IP 71130.04	000736	Equipment Performance, Testing, and Maintenance	
1	07/25/2022	07/29/2022	IP 71130.07	000739	Security Training	
GG 2022 INITIAL EXAM						5
1	09/11/2022	09/17/2022	OV	000956	VALIDATION OF INITIAL LICENSE EXAMINATION (OV)	
1	10/09/2022	10/15/2022	EXAD	000500	LICENSE EXAM ADMINISTRATION (EXAD)	
EP Program & PI Inspection - GG						1
1	10/03/2022	10/07/2022	IP 71114.02	000717	Alert and Notification System Testing	
1	10/03/2022	10/07/2022	IP 71114.03	000718	Emergency Response Organization Staffing and Augmentation System	
1	10/03/2022	10/07/2022	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
1	10/03/2022	10/07/2022	IP 71114.05	000720	Maintenance of Emergency Preparedness	
1	10/03/2022	10/07/2022	IP 71151	001397	Performance Indicator Verification	
RP 5,8						2
1	11/14/2022	11/18/2022	IP 71124.05	000729	Radiation Monitoring Instrumentation	
1	11/14/2022	11/18/2022	IP 71124.08	000732	Radioactive Solid Waste Processing & Radioactive Material Handling, Storage, & Transportation	