

## UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION IV 1600 EAST LAMAR BOULEVARD ARLINGTON, TEXAS 76011-4511

March 1, 2018

Mr. Eric Larson 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 05000416/2017006)

Dear Mr. Larson:

The U.S. Nuclear Regulatory Commission (NRC) has completed its end-of-cycle performance assessment of Grand Gulf Nuclear Station, reviewing performance indicators (PIs), inspection results, and enforcement actions from January 1, 2017, through December 31, 2017. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. The NRC concluded that overall performance at your facility preserved public health and safety.

The NRC determined the performance at Grand Gulf Nuclear Station during the most recent quarter was within the Regulatory Response Column, the second highest performance column of the NRC's Reactor Oversight Process (ROP) Action Matrix. This conclusion was based on a parallel PI inspection finding having low-to-moderate safety significance (i.e., White) in the Initiating Events Cornerstone, which was effective as of the first quarter of 2017. This finding was discussed in NRC Inspection Report 05000416/2017013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17342B130), dated December 6, 2017, in which the NRC concluded that the station's actions in response to a White Unplanned Scrams per 7000 Critical Hours PI, which you reported for the third and fourth quarters of 2016, did not meet the objectives of Inspection Procedure 95001, "Supplemental Inspection Response to Action Matrix Column 2 Inputs."

Therefore, in addition to ROP baseline inspections, the NRC plans to conduct an additional supplemental inspection in accordance with Inspection Procedure 95001 to review your station's actions to address the weaknesses described in the above inspection report as they relate to the inspection objectives. The objectives of this inspection are: 1) To assure that the root causes and contributing causes of significant performance issues are understood, 2) To independently assess and assure that the extent of condition and extent of cause of significant performance issues are identified, 3) To assure that corrective actions taken to address and preclude repetition of significant performance issues are prompt and effective, and 4) To assure that corrective plans direct prompt actions to effectively address and preclude repetition of significant performance issues. This inspection will be scheduled after you notify the NRC of your readiness.

Additionally, the NRC issued an assessment follow-up letter dated June 28, 2017, in which we indicated our intent to conduct a supplemental inspection in accordance with Inspection Procedure 95001 in response to a White PI for Unplanned Power Changes per 7000 Critical Hours, which you reported in May 2017. You subsequently retracted from this PI data a power change event that had been previously included in the data submitted for the third quarter of 2016. As a result, this PI remained Green; therefore, the NRC does not plan to conduct the supplemental inspection as previously indicated.

The enclosed inspection plan lists the inspections scheduled through December 31, 2019. This updated inspection plan now includes planned security inspections which were formerly transmitted under separate correspondence. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last twelve months of the inspection plan are tentative and may be revised. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes.

As reflected in the enclosed inspection plan, the Problem Identification and Resolution baseline inspection for the 2018-19 biennial inspection cycle has been scheduled for the fourth quarter of 2018. The scheduling of this inspection was informed by the results of the previous inspection documented in NRC Inspection Report 05000416/2017011 (ADAMS Accession No. ML 18043B137) dated February 12, 2018.

Additionally, from January 1 to December 31, 2016, the NRC issued three Severity Level IV traditional enforcement violations associated with impeding the regulatory process. Additionally, from January 1 to December 31, 2017, the NRC issued five Severity Level IV traditional enforcement violations associated with impeding the regulatory process. Therefore, the NRC plans to conduct Inspection Procedure 92723, "Follow Up Inspection for Three or More Severity Level IV Traditional Enforcement Violations in the Same Area in a 12-Month Period," to follow up on these violations. These inspections will be scheduled after you notify the NRC of your readiness.

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the

E. Larson 3

NRC's document system Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a> (the Public Electronic Reading Room).

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

Sincerely,

/RA/

Troy Pruett, Director Division of Reactor Projects

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

Enclosure: Inspection Plan

## IP 22 Inspection Activity Plan Report

#### **Grand Gulf**

01/01/2018 - 12/31/2019

Unit	Start	End	Activity	CAC	Title	Staff Count
EP PERFORM	MANCE INDICATO	R VERIFICATIO	N			2
1	10/27/2017	01/06/2018	IP 71151	001397	Performance Indicator Verification	
SECURITY S	OLO INSPECTION					1
1	02/05/2018	02/09/2018	IP 71130.02	000734	Access Control	
1	02/05/2018	02/09/2018	IP 71151	001338	Performance Indicator Verification	
INSERVICE I	NSPECTION R21					1
1	04/23/2018	04/27/2018	IP 71111.08G	000701	Inservice Inspection Activities - BWR	
RAD SAFETY	Y RFO 1,2					
1	04/23/2018	04/27/2018	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1	04/23/2018	04/27/2018	IP 71124.02	000726	Occupational ALARA Planning and Controls	
1	04/23/2018	04/27/2018	IP 71151	000746	Performance Indicator Verification	
FORCE-ON-	FORCE PLANNING	& EXERCISE W	ZEEK			7
1	07/23/2018	07/27/2018	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
1	08/13/2018	08/17/2018	IP 71130.03	000735	Contingency Response - Force-On-Force Testing	
SECURITY T	EAM INSPECTION					2
1	10/15/2018	10/19/2018	IP 71130.04	000736	Equipment Performance, Testing, and Maintenance	
1	10/15/2018	10/19/2018	IP 71130.07	000739	Security Training	
BIENNIAL P	I&R INSPECTION					4
1	10/22/2018	10/26/2018	IP 71152B	000747	Problem Identification and Resolution	
1	11/05/2018	11/09/2018	IP 71152B	000747	Problem Identification and Resolution	
EP PROGRA	M INSPECTION					1
1	11/05/2018	11/09/2018	IP 71114.02	000717	Alert and Notification System Testing	
						Page 1 of 3
						0/00/0040 40 44 07 484

This report does not include INPO and OUTAGE activities.

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

2/26/2018 10:41:37 AM

## IP 22 Inspection Activity Plan Report

#### **Grand Gulf**

01/01/2018 - 12/31/2019

Transportation   Transportation	Unit	Start	End	Activity	CAC	Title Staff Co.	ınt
1	EP PROGRAI	M INSPECTION					1
1	1	11/05/2018	11/09/2018	IP 71114.03	000718	Emergency Response Organization Staffing and Augmentation System	
Table	1	11/05/2018	11/09/2018	IP 71114.04	000719		
RAD SAFETY TEAM 5,6,7,8	1	11/05/2018	11/09/2018	IP 71114.05	000720	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	1	11/05/2018	11/09/2018	IP 71151	001397	Performance Indicator Verification	
1         11/26/2018         11/30/2018         IP 71124.06         000730         Radioactive Gaseous and Liquid Effluent Treatment           1         11/26/2018         11/30/2018         IP 71124.07         000731         Radiological Environmental Monitoring Program           1         11/26/2018         11/30/2018         IP 71124.08         000732         Radioactive Solid Waste Processing and Radioactive Material Handling, Stor Transportation           GG 50.59 CHANGES, TESTS, EXPERIMENTS           1         12/10/2018         12/14/2018         IP 71111.17T         000709         Evaluations of Changes, Tests, and Experiments           SECURITY SOLO INSPECTION           1         01/07/2019         01/11/2019         IP 71130.02         000734         Access Control           1         01/07/2019         01/11/2019         IP 71151         001338         Performance Indicator Verification           TI 2515/194           1         01/14/2019         01/18/2019         TI 2515/194         000512         Inspection of the Licensee's Implementation of Industry Initiative Associated Open Phase Condition Design Vulnerabilities In Electric Power Systems (NRC 2012-01)           RP INSPECTION           1         01/28/2019         02/01/2019         IP 71124.02         000726         Occupational ALARA Plann	RAD SAFETY	TEAM 5,6,7,8					4
1         11/26/2018         11/30/2018         IP 71124.06         000730         Radioactive Gaseous and Liquid Effluent Treatment           1         11/26/2018         11/30/2018         IP 71124.07         000731         Radiological Environmental Monitoring Program           1         11/26/2018         11/30/2018         IP 71124.08         000732         Radioactive Solid Waste Processing and Radioactive Material Handling, Stor Transportation           GG 50.59 CHANGES, TESTS, EXPERIMENTS           1         12/10/2018         12/14/2018         IP 71111.17T         000709         Evaluations of Changes, Tests, and Experiments           SECURITY SOLO INSPECTION           1         01/07/2019         01/11/2019         IP 71130.02         000734         Access Control           1         01/07/2019         01/11/2019         IP 71151         001338         Performance Indicator Verification           TI 2515/194           1         01/14/2019         01/18/2019         TI 2515/194         000512         Inspection of the Licensee's Implementation of Industry Initiative Associated Open Phase Condition Design Vulnerabilities In Electric Power Systems (NRC 2012-01)           RP INSPECTION           1         01/28/2019         02/01/2019         IP 71124.02         000726         Occupational ALARA Plann	1	11/26/2018	11/30/2018	IP 71124.05	000729	Radiation Monitoring Instrumentation	
1 11/26/2018 11/30/2018 IP 71124.08 000732 Radioactive Solid Waste Processing and Radioactive Material Handling, Stor Transportation  GG 50.59 CHANGES, TESTS, EXPERIMENTS 1 12/10/2018 12/14/2018 IP 71111.17T 000709 Evaluations of Changes, Tests, and Experiments  SECURITY SOLO INSPECTION 1 01/07/2019 01/11/2019 IP 71130.02 000734 Access Control 1 01/07/2019 01/11/2019 IP 71151 001338 Performance Indicator Verification  TI 2515/194 1 01/14/2019 01/18/2019 TI 2515/194 000512 Inspection of the Licensee's Implementation of Industry Initiative Associated Open Phase Condition Design Vulnerabilities In Electric Power Systems (NRC 2012-01)  RP INSPECTION 1 01/28/2019 02/01/2019 IP 71124.02 000726 Occupational ALARA Planning and Controls	1	11/26/2018	11/30/2018	IP 71124.06	000730		
1 11/26/2018 11/30/2018 IP 71124.08 000732 Radioactive Solid Waste Processing and Radioactive Material Handling, Stor Transportation  GG 50.59 CHANGES, TESTS, EXPERIMENTS 1 12/10/2018 12/14/2018 IP 71111.17T 000709 Evaluations of Changes, Tests, and Experiments  SECURITY SOLO INSPECTION 1 01/07/2019 01/11/2019 IP 71130.02 000734 Access Control 1 01/07/2019 01/11/2019 IP 71151 001338 Performance Indicator Verification  TI 2515/194 1 01/14/2019 01/18/2019 TI 2515/194 000512 Inspection of the Licensee's Implementation of Industry Initiative Associated Open Phase Condition Design Vulnerabilities In Electric Power Systems (NRC 2012-01)  RP INSPECTION 1 01/28/2019 02/01/2019 IP 71124.02 000726 Occupational ALARA Planning and Controls	1	11/26/2018	11/30/2018	IP 71124.07	000731	Radiological Environmental Monitoring Program	
1         12/10/2018         12/14/2018         IP 71111.17T         000709         Evaluations of Changes, Tests, and Experiments           SECURITY SOLO INSPECTION           1         01/07/2019         01/11/2019         IP 71130.02         000734         Access Control           1         01/07/2019         01/11/2019         IP 71151         001338         Performance Indicator Verification           TI 2515/194           1         01/14/2019         01/18/2019         TI 2515/194         000512         Inspection of the Licensee's Implementation of Industry Initiative Associated Open Phase Condition Design Vulnerabilities In Electric Power Systems (NRG 2012-01)           RP INSPECTION           1         01/28/2019         02/01/2019         IP 71124.02         000726         Occupational ALARA Planning and Controls	1	11/26/2018	11/30/2018	IP 71124.08	000732	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, an	d
SECURITY SOLO INSPECTION   1	GG 50.59 CH	IANGES, TESTS, E	XPERIMENTS				3
1 01/07/2019 01/11/2019 IP 71130.02 000734 Access Control 1 01/07/2019 01/11/2019 IP 71151 001338 Performance Indicator Verification  TI 2515/194 1 01/14/2019 01/18/2019 TI 2515/194 000512 Inspection of the Licensee's Implementation of Industry Initiative Associated Open Phase Condition Design Vulnerabilities In Electric Power Systems (NRC 2012-01)  RP INSPECTION 1 01/28/2019 02/01/2019 IP 71124.02 000726 Occupational ALARA Planning and Controls	1	12/10/2018	12/14/2018	IP 71111.17T	000709	Evaluations of Changes, Tests, and Experiments	
TI 2515/194  1 01/14/2019 01/18/2019 TI 2515/194 000512 Inspection of the Licensee's Implementation of Industry Initiative Associated Open Phase Condition Design Vulnerabilities In Electric Power Systems (NRC 2012-01)  RP INSPECTION  1 01/28/2019 02/01/2019 IP 71124.02 000726 Occupational ALARA Planning and Controls	SECURITY SO	OLO INSPECTION					1
TI 2515/194  1 01/14/2019 01/18/2019 TI 2515/194 000512 Inspection of the Licensee's Implementation of Industry Initiative Associated Open Phase Condition Design Vulnerabilities In Electric Power Systems (NRC 2012-01)  RP INSPECTION  1 01/28/2019 02/01/2019 IP 71124.02 000726 Occupational ALARA Planning and Controls	1	01/07/2019	01/11/2019	IP 71130.02	000734	Access Control	
1 01/14/2019 01/18/2019 TI 2515/194 000512 Inspection of the Licensee's Implementation of Industry Initiative Associated Open Phase Condition Design Vulnerabilities In Electric Power Systems (NRC 2012-01)  RP INSPECTION  1 01/28/2019 02/01/2019 IP 71124.02 000726 Occupational ALARA Planning and Controls	1	01/07/2019		IP 71151		Performance Indicator Verification	
1 01/14/2019 01/18/2019 TI 2515/194 000512 Inspection of the Licensee's Implementation of Industry Initiative Associated Open Phase Condition Design Vulnerabilities In Electric Power Systems (NRC 2012-01)  RP INSPECTION  1 01/28/2019 02/01/2019 IP 71124.02 000726 Occupational ALARA Planning and Controls	TI 2515/194						2
1 01/28/2019 02/01/2019 IP 71124.02 000726 Occupational ALARA Planning and Controls	1	01/14/2019	01/18/2019	TI 2515/194	000512	Inspection of the Licensee's Implementation of Industry Initiative Associated With to Open Phase Condition Design Vulnerabilities In Electric Power Systems (NRC Bullet 2012-01)	
	RP INSPECTI	ION					2
· ·	1	01/28/2019	02/01/2019	IP 71124.02	000726	Occupational ALARA Planning and Controls	
1 01/28/2019 02/01/2019 IP 71124.04 000729 Occupational Dose Assessment	1	01/28/2019			000729	Occupational Dose Assessment	

## IP 22 Inspection Activity Plan Report

#### **Grand Gulf**

01/01/2018 - 12/31/2019

Unit	Start	End	Activity	CAC	Title	taff Count
EP EXERCISE	INSPECTION					4
1	03/11/2019	03/15/2019	IP 71114.01	000716	Exercise Evaluation	
1	03/11/2019	03/15/2019	IP 71114.04	000719	Emergency Action Level and Emergency Plan Changes	
1	03/11/2019	03/15/2019	IP 71151	001397	Performance Indicator Verification	
CYBER SECU	RITY INSPECTION	I				4
1	04/29/2019	05/03/2019	IP 71130.10P	000741	Cyber Security	
1	05/13/2019	05/17/2019	IP 71130.10P	000741	Cyber Security	
GRAND GUL	F HEAT SINK INS	PECTION				2
1	06/17/2019	06/21/2019	IP 71111.07T	000700	Heat Sink Performance -Triennial	
BRQ						2
1	08/11/2019	08/17/2019	IP 71111.11B	000704	Licensed Operator Requalification Program and Licensed Operator Perform Biennial	nance -
GRAND GUL	F DBA PROGRAM	I EQ INSPECTIO	N			3
1	09/09/2019	09/27/2019	IP 71111.21N	000714	Design Bases Assurance Inspection (Programs)	
SECURITY TE	AM INSPECTION					2
1	09/30/2019	10/04/2019	IP 71130.05	000737	Protective Strategy Evaluation	
RP INSPECTI	ON					3
1	09/30/2019	10/04/2019	IP 71124.01	000725	Radiological Hazard Assessment and Exposure Controls	
1	09/30/2019	10/04/2019	IP 71124.03	000727	In-Plant Airborne Radioactivity Control and Mitigation	
1	09/30/2019	10/04/2019	IP 71151	000746	Performance Indicator Verification	

2/26/2018 10:41:37 AM

E. Larson 4

# ANNUAL ASSESSMENT LETTER FOR GRAND GULF NUCLEAR STATION (REPORT 05000416/2017006) DATED MARCH 1, 2018

#### **DISTRIBUTION:**

KKennedy, RA

SMorris, DRA

TPruett, DRP

AVegel, DRS

RLantz, DRP

JClark, DRS

SKirkwood, RC

JKozal, DRP

CYoung, DRP

TSteadham, DRP

NDay, DRP

AAthar, DRP

AElam, DRP

JBowen, RIV/OEDO

VDricks, ORA

JWeil, OCA

TWengert, NRR

AMoreno, RIV/CAO

BMaier, RSLO

EUribe, IPAT

TDeBey, DRP

MHerrera, DRMA

R4Enforcement

CMiller, NRR

MKing, NRR

JGiitter, NRR

KBrock, NRR

BMcDermott, NSIR

MBailey, NSIR

**DRP Branch Chiefs** 

**DRS Branch Chiefs** 

**ROP Reports Resource** 

**ROP Assessment Resource** 

#### ADAMS ACCESSION NUMBER: ML18057B123

× SUNSI Review	ADAM			Non-Publicly Ava		Keyword:
By: CYoung/dll/	iui × yes	□ No	×Р	ublicly Available	ensitive	NRC-002

OFFICE	RIV/DRP/SPE	RIV/DRP/C	RIV/DRS/C	RIV/DRS/TL	RIV/DRS/D	RIV/DRP/D
NAME	CYoung	JKozal	JGroom	ERuesch	AVegel	TPruett
SIGNATURE	/RA/	/RA/	/RA/	/RA/	/RA/	/RA/