



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

November 03, 2021

Mr. G. T. Powell, President and CEO
STP Nuclear Operating Company
P.O. Box 289
Wadsworth, TX 77483

**SUBJECT: SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION, UNITS 1 AND
2 – INTEGRATED INSPECTION REPORT 05000498/2021003 AND
05000499/2021003**

Dear Mr. Powell:

On September 30, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at South Texas Project Electric Generating Station, Units 1 and 2. On October 7, 2021, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

Two findings of very low safety significance (Green) are documented in this report. Two of these findings involved violations of NRC requirements. One Severity Level IV violation without an associated finding is documented in this report. We are treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2 of the Enforcement Policy.

Additionally, in the preceding 12 months the NRC issued four Severity Level IV traditional enforcement violations associated with impeding the regulatory process, as described in NRC Inspection Reports 05000498,05000499/2020004, dated January 26, 2021, 05000498,05000499/2021001, dated May 7, 2021, and in this report. While the NRC did note that the identified issues appear to show a gap in the stations process for determining whether prior NRC approval was required for changes being made, the NRC determined that two of the examples were dated and not representative of current plant performance. Based on this, the NRC is not currently planning to perform 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."

If you contest the violations or the significance or severity of the violations documented in this inspection report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; the Director, Office of Enforcement; and the NRC Resident Inspector at South Texas Project Electric Generating Station, Units 1 and 2.

If you disagree with a cross-cutting aspect assignment in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; and the NRC Resident Inspector at South Texas Project Electric Generating Station, Units 1 and 2.

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,

Jeffrey E. Josey, Chief
Reactor Projects Branch A
Division of Reactor Projects

Docket Nos. 05000498 and 05000499
License Nos. NPF-76 and NPF-80

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV®

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION, UNITS 1 AND 2 –
 INTEGRATED INSPECTION REPORT 05000498/2021003 AND 05000499/2021003 – DATED
 NOVEMBER 03, 2021

DISTRIBUTION:

SMorris, RA
 JMonninger, DRA
 AVegel, DRP
 MHay, DRP
 RLantz, DRS
 JDixon, DRS
 DCylkowski, RC
 RWilliams, RIV/OEDO
 VDricks, ORA
 LWilkins, OCA
 DGalvin, NRR
 AMoreno, RIV/OCA
 BMaier, RSLO
 FRamirez, IPAT
 JJosey, DRP
 DBryen, DRP
 HFreeman, DRP
 GKolcum, DRP
 CStott, DRP
 LReyna, DRP
 LFlores, IPAT
 BCorrell, IPAT
 R4Enforcement

ADAMS ACCESSION NUMBER: ML21299A204

KEYWORD: NRC-002

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	SRI:DRP/A	RI:DRP/A	ABC:DRS/IPAT	BC:DRS/EB1	BC:DRS/EB2
NAME	GKolcum <i>GJK</i>	CStott <i>CAS</i>	FRamirez <i>FCR</i>	VGaddy <i>VGG</i>	NTaylor <i>NHT</i>
DATE	11/1/2021	11/1/2021	11/1/2021	11/1/2021	11/1/2021
OFFICE	BC:DRS/RCB	BC:DRS/OB	BC:DNMS/RxIB	SPE:DRP/A	BC:DRP/A
NAME	MHaire <i>MSH</i>	HGepford <i>HJG</i>	GWarnick <i>GGW</i>	HFreeman <i>/RA/</i>	JJosey <i>JEJ</i>
DATE	11/1/2021	11/1/2021	11/2/2021	10/20/2021	11/2/2021

OFFICIAL RECORD COPY

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

Docket Numbers: 05000498 and 05000499

License Numbers: NPF-76 and NPF-80

Report Numbers: 05000498/2021003 and 05000499/2021003

Enterprise Identifier: I-2021-003-0104

Licensee: STP Nuclear Operating Company

Facility: South Texas Project Electric Generating Station, Units 1 and 2

Location: Wadsworth, Texas

Inspection Dates: July 1, 2021 to September 30, 2021

Inspectors: R. Alexander, Senior Emergency Preparedness Inspect
B. Baca, Health Physicist
J. Drake, Senior Reactor Inspector
S. Hedger, Emergency Preparedness Inspector
G. Kolcum, Senior Resident Inspector
D. Livermore, Nuclear Systems Engineer
E. Simpson, Health Physicist
C. Stott, Resident Inspector

Approved By: Jeffrey E. Josey, Chief
Reactor Projects Branch A
Division of Reactor Projects

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee’s performance by conducting an integrated inspection at South Texas Project Electric Generating Station, Units 1 and 2, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC’s program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

List of Findings and Violations

Inadequate Maintenance and Post-Maintenance Test Procedures			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000499/2021003-01 Open/Closed	[H.11] - Challenge the Unknown	71111.19
A self-revealed green finding and associated non-cited violation (NCV) of Technical Specification (TS) 6.8.1.a, for the licensee’s failure to properly preplan, and implement adequate written procedures as required by Regulatory Guide 1.33, “Quality Assurance Program Requirements (Operation),” revision 2, Appendix A, Section 9, “Procedures for Performing Maintenance,” was identified. Specifically, steps in the work instructions provided for disassembling and reassembling the actuator for Unit 2 steam generator D blowdown containment isolation valve could not be accomplished as written and the post-maintenance test was not adequate to verify that valve FV-4150 was physically able to shut which resulted in the valve failing its subsequent surveillance test.			
Failure to Perform Analyses of Changes Made to the Emergency Plan			
Cornerstone	Severity	Cross-Cutting Aspect	Report Section
Not Applicable	Severity Level IV NCV 05000498,05000499/2021003-02 Open/Closed	Not Applicable	71114.04
The inspectors identified a Severity Level IV non-cited violation of 10 CFR 50.54(q)(3), for a change to the licensee’s emergency plan associated with the emergency classification process for failure to demonstrate that the changes would not reduce the effectiveness of the plan. Specifically, the licensee did not perform an analysis demonstrating that changes made to the emergency action level (EAL) downgrade process described in the EAL technical basis document was not a reduction in effectiveness of the plan.			
Failure to Correct Weaknesses During Drills			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Emergency Preparedness	Green NCV 05000498,05000499/2021003-03 Open/Closed	[H.8] - Procedure Adherence	71151
The inspectors identified a Green, non-cited violation of 10 CFR 50.47(b)(14) for the licensee’s failure to identify and correct weaknesses in emergency response organization performance during control room simulator drills conducted on November 24, 2020, December 8, 2020, and December 15, 2020. Specifically, the licensee did not identify			

performance that would have precluded effective implementation of the emergency plan if it occurred during an actual radiological emergency.

Additional Tracking Items

Type	Issue Number	Title	Report Section	Status
LER	05000499/2021-001-00	LER 2021-001-00 for South Texas Project, Unit 2, Condition Prohibited by Technical Specifications Due to Inoperable Containment Isolation Valve	71111.19	Closed

PLANT STATUS

Unit 1 began the inspection period at rated thermal power. On July 2, 2021, the unit reduced power to approximately 94 percent following the trip of heater drip pump 11. Unit 1 returned to 100 percent power on July 3, 2021.

Unit 2 operated at or near rated thermal power for the entire inspection period.

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance, and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), resident, and regional inspectors were directed to begin telework and to remotely access licensee information using available technology. During this time, the resident inspectors performed periodic site visits each week, increasing the amount of time on site as local COVID-19 conditions permitted. As part of their onsite activities, resident inspectors conducted plant status activities as described in IMC 2515, Appendix D; observed risk significant activities; and completed on site portions of IPs. In addition, resident and regional baseline inspections were evaluated to determine if all or a portion of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely, and on site. The inspections documented below met the objectives and requirements for completion of the IP.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

Impending Severe Weather Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated readiness for potential impending adverse weather conditions for Hurricane Nicholas on September 12, 2021.

71111.04 - Equipment Alignment

Partial Walkdown Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

- (1) Unit 1, train A emergency core cooling system after maintenance during the week of September 6, 2021

- (2) Unit 1, train A solid state protection system after maintenance during the week of September 6, 2021
- (3) Unit 2, train A emergency diesel generator system after maintenance during the week of September 6, 2021
- (4) Unit 2, train B emergency diesel generator system during the week of September 13, 2021

Complete Walkdown Sample (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated system configurations during a complete walkdown of the Unit 1, emergency core cooling system pumps train A on the week of September 27, 2021.

71111.05 - Fire Protection

Fire Area Walkdown and Inspection Sample (IP Section 03.01) (4 Samples)

The inspectors evaluated the implementation of the fire protection program by conducting a walkdown and performing a review to verify program compliance, equipment functionality, material condition, and operational readiness of the following fire areas:

- (1) Fire pump house on September 6, 2021
- (2) Unit 2, train D auxiliary feedwater pump room in the isolation valve cubicle on September 23, 2021
- (3) Unit 2, train C cable spreading room in the electrical auxiliary building on September 23, 2021
- (4) Unit 2, component cooling water heat exchanger and header piping rooms on September 27, 2021

71111.06 - Flood Protection Measures

Inspection Activities - Internal Flooding (IP Section 03.01) (1 Sample)

The inspectors evaluated internal flooding mitigation protections in the:

- (1) Units 1 and 2, auxiliary feedwater pump cubicles the week of September 27, 2021

71111.11Q - Licensed Operator Regualification Program and Licensed Operator Performance

Licensed Operator Performance in the Actual Plant/Main Control Room (IP Section 03.01) (1 Sample)

- (1) The inspectors observed and evaluated licensed operator performance in the control room during Unit 1 downpower for loss of heater drip pump on July 2, 2021.

Licensed Operator Regualification Training/Examinations (IP Section 03.02) (1 Sample)

- (1) The inspectors observed and evaluated an operations crew respond to a degraded reactor coolant system condition that resulted in a site area emergency on September 1, 2021.

71111.13 - Maintenance Risk Assessments and Emergent Work Control

Risk Assessment and Management Sample (IP Section 03.01) (10 Samples)

The inspectors evaluated the accuracy and completeness of risk assessments for the following planned and emergent work activities to ensure configuration changes and appropriate work controls were addressed:

- (1) Unit 2, train C emergency core cooling system scaffolding follow up for scaffold up since March 21, 2021
- (2) Unit 2, white risk for residual heat removal pump 2C maintenance on June 30, 2021
- (3) Unit 2, white risk for sequencer power supply 2A replacement on July 5, 2021
- (4) Unit 2, white risk for high head pump 2A maintenance on July 6, 2021
- (5) Unit 2, white risk for emergency diesel generator 22 maintenance on July 14, 2021
- (6) Unit 1, train B 125vds battery bank E1B11 for entry into the configuration risk management program during battery discharge testing on July 14, 2021
- (7) Unit 2, train C essential chill water maintenance on July 19, 2021
- (8) Unit 1, train C 125vdc battery bank E1C11 for entry into the configuration risk management program during battery discharge testing on July 22, 2021
- (9) Unit 1, white risk for emergency core cooling system maintenance the week of September 6, 2021
- (10) Unit 2, white risk for emergency diesel generator 21 maintenance the week of September 6, 2021

71111.15 - Operability Determinations and Functionality Assessments

Operability Determination or Functionality Assessment (IP Section 03.01) (8 Samples)

The inspectors evaluated the licensee's justifications and actions associated with the following operability determinations and functionality assessments:

- (1) Unit 1, various auxiliary feedwater isolation valve cubicle temperature alarms on June 24, and July 26, 2021
- (2) Unit 2, train A essential cooling water pump broken anchor bolt on lower seismic attachment point on July 1, 2021
- (3) Unit 1, train C essential chilled water chiller temperature excursions on August 7 and 9, 2021
- (4) Fire water storage tank 1 leak on underground pipe leak the week of September 6, 2021
- (5) Unit 1, steam generator blowdown radiation monitor RT-8022 Hi alarm and declared inoperable on September 6, 2021
- (6) Unit 1, solid state protection system actuation train A 15vdc power supply replacement on September 9, 2021
- (7) Unit 2, emergency diesel generator 22 failure to enter cooldown mode on September 12, 2021
- (8) Unit 2, train B essential service water self-cleaning strainer not rotating on September 23, 2021

71111.18 - Plant Modifications

Temporary Modifications and/or Permanent Modifications (IP Section 03.01 and/or 03.02) (1 Sample)

The inspectors evaluated the following temporary or permanent modifications:

- (1) Units 1 and 2, emergency core cooling seal drain line on September 27, 2021

71111.19 - Post-Maintenance Testing

Post-Maintenance Test Sample (IP Section 03.01) (8 Samples)

The inspectors evaluated the following post-maintenance test activities to verify system operability and functionality:

- (1) Unit 2, train D steam generator blowdown outside containment isolation valve found not fully isolating on July 1, 2021
- (2) Unit 1, train C residual heat removal pump following maintenance to replace upper bearing on July 21, 2021
- (3) Fire water storage tank 1 leak on underground pipe leak repaired the week of September 6, 2021
- (4) Unit 1, steam generator A blowdown radiation monitor RT-8022 Hi alarm repaired the week of September 6, 2021
- (5) Unit 2, level transmitter LT-0106 for boric acid tank 2B cracked weld repaired on September 9, 2021
- (6) Unit 1, train A solid state protection system actuation 15vdc power supply replacement on September 9, 2021
- (7) Unit 2, train B essential service water self-cleaning strainer not rotating on September 23, 2021
- (8) Unit 1, steam generator D blowdown radiation monitor on September 26, 2021

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Surveillance Tests (other) (IP Section 03.01) (1 Sample)

- (1) Unit 2, train B emergency diesel generator 24-hour load test on September 12, 2021

Inservice Testing (IP Section 03.01) (1 Sample)

- (1) Unit 1, train B essential cooling water pump inservice test on September 11, 2021

71114.01 - Exercise Evaluation

Inspection Review (IP Section 02.01-02.11) (1 Sample)

- (1) The inspectors evaluated the biennial emergency plan exercise conducted on July 28 and 29, 2021. The exercise scenario simulated an unexpected increase in reactor coolant system activity, failed automatic and manual trip of the reactor from the

control room, stuck open steam generator power operated relief valves, a steam generator tube rupture, and a release of radioactive materials offsite requiring the issuance of Protective Action Recommendations. The exercise also included demonstration of one of the station's extensive damage mitigation guideline strategies per the requirements of 10 CFR 50.155(b)(2).

71114.04 - Emergency Action Level and Emergency Plan Changes

Inspection Review (IP Section 02.01-02.03) (1 Sample)

- (1) The licensee submitted several summaries of emergency plan changes to the NRC:
 - South Texas Project Electric Generating Station (STPEGS) EAL Technical Basis Manual, revision 2 (submitted December 17, 2020)
 - STPEGS EAL Technical Basis Manual, revision 3 (submitted April 15, 2021)
 - STPEGS Emergency Plan, Change ICN 20-23 (submitted July 28, 2021)

The inspectors conducted a review of the changes from July 26 to August 5, 2021. This evaluation does not constitute NRC approval.

RADIATION SAFETY

71124.02 - Occupational ALARA Planning and Controls

Radiological Work Planning (IP Section 03.01) (4 Samples)

The inspectors evaluated the licensee's radiological work planning and reviewed the following activities:

- (1) Unit 2 Refueling Outage 2RE20 planning and implementation ALARA review package 19-3165-5, "Mechanical Stress Improvement Process," dated October 3, 2019, and its associated close out ALARA review package 19-3165-5 dated November 18, 2019
- (2) Unit 2 Refueling Outage 2RE20 ALARA planning and implementation ALARA review package 19-3165-7, "Non-Rapid Refuel," dated October 3, 2019, and its associated close out ALARA review package 19-3165-7 dated November 18, 2019
- (3) Unit 1 Refueling Outage 1RE22 ALARA planning and implementation ALARA review package 20-812-5, "Steam Generator Inspections," dated March 14, 2020; ALARA review package 20-812-5, revision 1 dated April 6, 2020; and its associated close out ALARA review package 20-812-5 dated June 11, 2020
- (4) Unit 2 Refueling Outage 2RE21 ALARA planning and implementation ALARA review package 21-190-3, "Non-Rapid Refuel," dated March 18, 2021; ALARA review package 21-190-3, supplement 1 dated April 8, 2021; ALARA review package 21-190-3, supplement 2 dated April 9, 2021; ALARA review package 21-190-3, supplement 3 dated April 9, 2021; and its associated close out ALARA review package 21-190-3 dated May 10, 2021

Verification of Dose Estimates and Exposure Tracking Systems (IP Section 03.02) (4 Samples)

The inspectors evaluated dose estimates and exposure tracking through the following as low as reasonably achievable planning documents and radiological outcome evaluations:

- (1) Unit 2 Refueling Outage 2RE20 ALARA review Package 19-3165-5, "Mechanical Stress Improvement Process" and its associated close out package:
 - Work activity number (WAN) 564157, "Implementation of Mechanical Stress Improvement Process," under radiation work permit (RWP) 2019-2-136, "2RE20 Maintenance and Support Work," revision 0 and RWP 2019-2-167, "2RE20 Mechanical Stress Improvement Process Work Activities (High Radiation Area (HRA))," revision 0
 - WAN 564158, "Remove/Reinstall Mechanical Stress Improvement Process Interferences," under RWP 2019-2-136, "2RE20 Maintenance and Support Work," revision 0 and RWP 2019-2-167, "2RE20 Mechanical Stress Improvement Process Work Activities (HRA)," revision 0
 - WAN 564159, "Mechanical Stress Improvement Process Shim Gap Measurements," under RWP 2019-2-167, "2RE20 Mechanical Stress Improvement Process Work Activities (HRA)," revision 0 and RWP 2019-2-170, "2RE20 Mechanical Stress Improvement Process Work Activities (Locked High Radiation Area (LHRA))," revision 0
- (2) Unit 2 Refueling Outage 2RE20 ALARA Review Package 19-3165-7, "Non-Rapid Refuel" and its associated close out package:
 - WAN 4522, "Stud Tensioning" under RWP 2019-2-145, "2RE20 Maintenance Support for Work in and Around the Reactor Cavity, Spent Fuel Pool and Transfer Canal (HRA)," revision 0
 - WAN 4523, "Core Exit Thermocouple Nozzle Assemblies" under RWP 2019-2-148, "2RE20 Maintenance Inside Shroud Doors (HRA) - Medium Radiological Risk," revision 0
- (3) Unit 1 Refueling Outage 1RE22 ALARA Review Package 20-815-5, "Steam Generator Inspections" and its associated close out package:
 - WAN 607341, "Removal/Install Primary Manways," under RWP 2020-1-103, "1RE22 Maintenance and Support Work," revision 0; RWP 2020-1-132, "1RE22 Steam Generator - Primary Side Support and Equipment Setup/Teardown (HRA) - Medium Radiological Risk," revision 0; RWP 2020-1-133, "1RE22 Steam Generator - Primary Side Manway/Inserts Removal (LHRA) - High Radiological Risk," revision 0; and RWP 2020-1-136, "1RE22 Steam Generator - Reinstall Primary Side Manways (HRA) - Medium Radiological Risk," revision 0
 - WAN 607341, "Remove/Install Primary Nozzle Dams/Cover," under RWP 2020-1-057, "Maintenance and Inspection of Items >200,000 dpm/100cm² - Medium Radiological Risk," revision 0; RWP 2020-1-132, "1RE22 Steam Generator -

Primary Side Support and Equipment Setup/Teardown (HRA) - Medium Radiological Risk,” revision 0; RWP 2020-1-134, “1RE22 Steam Generator - Primary Side- Nozzle Dams (LHRA) - High Radiological Risk,” revisions 0, 1, and 2; and RWP 2020-1-165,”1RE22 – Steam Generator Primary Side - Nozzle Dam Removal, Install Inserts and Manways (LHRA) - High Radiological Risk,” revisions 0 and 1

- WAN 607342, “Steam Generator Eddy Current Testing,” under RWP 2020-1-132, “1RE22 Steam Generator - Primary Side Support and Equipment Setup/Teardown (HRA) - Medium Radiological Risk,” revision 0 and RWP 2020-1-165,”1RE22 Steam Generator - Eddy Current Testing (LHRA) - High Radiological Risk,” revision 0
 - WAN 607343, “Steam Generator Sludge Lance,” and WAN 607344, “Foreign Object Search and Retrieval,” under RWP 2020-1-130, “1RE22 Steam Generator - Secondary Side Inspections - Radiation Area,” revision 0 and RWP 2020-1-131, “1RE22 Steam Generator - Secondary Side Inspections (HRA),” revision 0
- (4) Unit 2 Refueling Outage 2RE21 ALARA Review package 21-190-3, “Non-Rapid Refuel,” and ALARA Review Package 21-190-6, “2RE21 Nuclear Instrument NI-0046 Detector Replacement” and their associated close out packages:
- WAN 4500, “Reactor Head Disassembly,” under RWP 2021-2-103, “2RE21 Maintenance and Support Work,” revision 0 and RWP 2021-2-114, “2RE21 - Maintenance Support for Work in and Around Reactor Cavity, Spent Fuel Pool and Transfer Canal (HRA) - Medium Radiological Risk,” revision 0
 - WAN 4504, “O-ring Groove Cleaning and Reactor Head Lift/Set,” under RWP 2021-2-113, “2RE21 - Maintenance Support for Work in and Around Reactor Cavity, Spent Fuel Pool and Transfer Canal - Medium Radiological Risk,” revisions 0 and 1; RWP 2021-2-114, “2RE21 - Maintenance Support for Work in and Around Reactor Cavity, Spent Fuel Pool and Transfer Canal (HRA) - Medium Radiological Risk,” revision 0; RWP 201-2-115, “2RE21 - Maintenance Support for Work in and Around Reactor Cavity, Spent Fuel Pool and Transfer Canal (HRA) - Medium Radiological Risk,” revision 0; RWP 2021-2-117, “2RE21 - Maintenance Support for Work in and Around Reactor Cavity, Spent Fuel Pool and Transfer Canal (LHRA) - Medium Radiological Risk,” revision 0; RWP 2021-2-121, “2RE21 - Reactor Head Lift Activities (LHRA) - High Radiological Risk,” revision 0; and RWP 2021-2-133, “2RE21 - Maintenance Support for Work in and Around Reactor Cavity, Spent Fuel Pool and Transfer Canal (LHRA) - Medium Radiological Risk,” revision 0
 - WAN 4518, “Reactor Head Reassembly,” under RWP 2021-2-103, “2RE21 Maintenance and Support Work,” revision 0; RWP 2021-2-104, “2RE21 Maintenance and Support Work - HRA,” revision 0; RWP 2021-2-114, “2RE21 - Maintenance Support for Work in and Around Reactor Cavity, Spent Fuel Pool and Transfer Canal (HRA) - Medium Radiological Risk,” revision 0; RWP 2021-2-115, “2RE21 - Maintenance Support for Work in and Around Reactor Cavity, Spent Fuel Pool and Transfer Canal (HRA) - Medium Radiological Risk,” revision 0

- WAN 650205, "Nuclear Instrument NI-0046 Detector Replacement," under RWP 2021-2-104, "2RE21 Maintenance and Support Work (HRA)," revision 0; RWP 2021-2-105, "2RE21 - Maintenance and Support Work (LHRA)," revision 0; and RWP 2021-2-147, "2RE21 Replace Extended Range Detector NI-0046 (LHRA) - High Radiological Risk," revision 0

71124.04 - Occupational Dose Assessment

Source Term Characterization (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated licensee performance as it pertains to radioactive source term characterization.

External Dosimetry (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated licensee performance as it pertains to external dosimetry that is used to assign occupational dose.

Internal Dosimetry (IP Section 03.03) (2 Samples)

The inspectors evaluated the internal dosimetry program implementation.

- (1) Whole-body-count internal dose assessment associated with personnel contamination event number: 7689 dated March 25, 2020
- (2) Whole-body-count internal dose assessment for three individuals associated with personnel contamination event numbers: 7649, 7659, and 7652 dated October 24, 2019

Special Dosimetric Situations (IP Section 03.04) (2 Samples)

The inspectors evaluated the following special dosimetric situation:

- (1) Dose assessments for three declared pregnant workers during the inspection period of March 16, 2019, through September 2, 2021
- (2) Effective dose equivalent for external exposure (EDEX) evaluation for WAN 607341, "Remove/Install Steam Generator Nozzle Dams/Covers"

71124.06 - Radioactive Gaseous and Liquid Effluent Treatment

Walkdowns and Observations (IP Section 03.01) (4 Samples)

The inspectors evaluated the following radioactive effluent systems during walkdowns:

- (1) Unit-1 Main Plant Vent Exhaust Monitors, RE-8010A, RE-8010B, RE-8010C, RE-8010D, and RE-8010E
- (2) Unit-2 Liquid Waste Tanks Monitor, RE-8038
- (3) Unit-2 Turbine Building Drain Monitor, RE-8041
- (4) Unit-2 Condensate Polishing System Liquid Effluent Monitor, RE-8042

Sampling and Analysis (IP Section 03.02) (4 Samples)

The inspectors evaluated the following sampling and analyses:

- (1) Liquid effluent sampling and analyses for liquid release permit 2021-3259
- (2) Liquid effluent sampling and analyses for liquid release permit 2021-3271
- (3) Gaseous effluent sampling and analyses for gaseous release permit 2021-0624
- (4) Routine sampling of the Unit 1 vent particulate (VE9111) and iodine (VE9112) effluent monitor RT-8010B on July 21, 2021

Dose Calculations (IP Section 03.03) (2 Samples)

The inspectors evaluated the following dose calculations:

- (1) Doses to members of the public associated with liquid effluent release permits: 2021-3259 and 2021-3271
- (2) Doses to members of the public associated with gaseous effluent sampling and analyses for gaseous release permits: 2021-0624 and 2021-0626

Abnormal Discharges (IP Section 03.04)

There were no abnormal discharges during this monitoring period.

71124.07 - Radiological Environmental Monitoring Program

Environmental Monitoring Equipment and Sampling (IP Section 03.01) (1 Sample)

- (1) The inspectors evaluated environmental monitoring equipment and observed collection of environmental samples.

Radiological Environmental Monitoring Program (IP Section 03.02) (1 Sample)

- (1) The inspectors evaluated the implementation of the licensee's radiological environmental monitoring program.

GPI Implementation (IP Section 03.03) (1 Sample)

- (1) The inspectors evaluated the licensee's implementation of the Groundwater Protection Initiative program to identify incomplete or discontinued program elements. There were no incomplete or discontinued program elements identified.

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification

The inspectors verified licensee performance indicators submittals listed below:

MS06: Emergency AC Power Systems (IP Section 02.05) (2 Samples)

- (1) Unit 1 (July 1, 2020, through June 30, 2021)
- (2) Unit 2 (July 1, 2020, through June 30, 2021)

MS07: High Pressure Injection Systems (IP Section 02.06) (2 Samples)

- (1) Unit 1 (July 1, 2020, through June 30, 2021)
- (2) Unit 2 (July 1, 2020, through June 30, 2021)

MS08: Heat Removal Systems (IP Section 02.07) (2 Samples)

- (1) Unit 1 (July 1, 2020, through June 30, 2021)
- (2) Unit 2 (July 1, 2020, through June 30, 2021)

EP01: Drill/Exercise Performance (DEP) Sample (IP Section 02.12) (1 Sample)

- (1) October 1, 2020, through June 30, 2021

EP02: Emergency Response Organization (ERO) Drill Participation (IP Section 02.13) (1 Sample)

- (1) October 1, 2020, through June 30, 2021

EP03: Alert and Notification System (ANS) Reliability Sample (IP Section 02.14) (1 Sample)

- (1) October 1, 2020, through June 30, 2021

71153 - Follow Up of Events and Notices of Enforcement Discretion

Event Report (IP Section 03.02) (1 Sample)

The inspectors evaluated the following licensee event reports (LERs):

- (1) LER 05000499/2021-001-00, Unit 2, Condition Prohibited by Technical Specifications Due to Inoperable Containment Isolation Valve (ADAMS Accession No. ML21252A756). The inspection conclusions associated with this LER are documented in this report under Inspection Results Section 71111.19.

INSPECTION RESULTS

Inadequate Maintenance and Post-Maintenance Test Procedures			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Barrier Integrity	Green NCV 05000499/2021003-01 Open/Closed	[H.11] - Challenge the Unknown	71111.19
A self-revealed green finding and associated non-cited violation (NCV) of Technical Specification (TS) 6.8.1.a, for the licensee's failure to properly preplan and implement adequate written procedures as required by Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)," revision 2, Appendix A, Section 9, "Procedures for			

Performing Maintenance,” was identified. Specifically, steps in the work instructions provided for disassembling and reassembling the actuator for Unit 2 steam generator D blowdown containment isolation valve could not be accomplished as written, and the post-maintenance test was not adequate to verify that valve FV-4150 was physically able to shut which resulted in the valve failing its subsequent surveillance test.

Description: Valve FV-4150 is the single containment isolation valve in the steam generator D blowdown line. The steam generator blowdown lines are considered a closed loop per General Design Criteria (GDC) 57, “Closed System Isolation Valves.” GDC 57 defines a closed loop as lines that penetrate the primary reactor containment that are neither part of the reactor coolant pressure boundary nor connected directly to the containment atmosphere. The blowdown lines are separated from the reactor coolant pressure boundary by the steam generator u-tubes and separated from the containment atmosphere by the steam generator shell and system piping.

The licensee completed an actuator overhaul on valve FV-4150 on March 29, 2021, during the Unit 2 refueling outage (2RE21). On July 1, 2021, the licensee performed a surveillance test on valve FV-4150 by measuring the flow rate through the steam generator 2D blowdown piping following a closed stroke of valve FV-4150. Flow through the pipe went from 36 klbm/hr to 33 klbm/hr after a closed stroke of the valve. The licensee found that the valve plug did not contact the valve seat allowing nearly full flow through the “shut” valve.

After discovery that valve FV-4150 was not capable of being shut, the licensee declared the valve inoperable, and entered the applicable action statement in Technical Specification 3.6.3, “Containment Isolation Valves.” The licensee also submitted License Event Report 05000499/2021001, “Condition Prohibited by Technical Specifications Due to Inoperable Containment Isolation Valve.”

The first example of an inadequate maintenance procedure (as required by Regulatory Guide 1.33) is the maintenance work instructions in WAN 604821 - the work package that detailed the steps to overhaul the valve FV-4150 actuator. Step 3.4 of the work instructions directs maintenance craft to perform steps on pages 1-8 and 1-9 in the vendor technical document VTD-V037-0001, “Valtek Inc Installation, Operation, Maintenance Instructions for Mark One and Two Control Valves.”

Per the notes on page 1-8 of VTD-V037-0001 for actuator disassembly, the actuator may be disassembled while still on the valve, and that steps 1 through 4 could be skipped since they prescribe how to remove the actuator from the valve. After the valve is disassembled, the applicable step for verifying the valve plug position during reassembly of the actuator in the same document is not possible to accomplish if the actuator is left in place. Specifically, step 10 of reassembly has the user apply air over the actuator piston, which drives the valve plug down into the seat and forces the yoke away from the bonnet by 1/16 inch. This is the positive check that the valve can be shut. This step cannot be performed if the yoke was never removed or loosened as directed in step 3 of disassembly, one of the steps that is skipped if the actuator is left in place. The licensee did not properly preplan the maintenance in this work instruction.

The second example of an inadequate maintenance procedure (as required by Regulatory Guide 1.33) is procedure 0PSP03-SB-0001, “Steam Generator Blowdown System Valve Operability Test,” revision 32. Step 5.2.3.2 of the post-maintenance test procedure requires that flow through the blowdown containment isolation valve be recorded with the valve open, and step 5.2.3.6 requires flow to be recorded after the valve indicates shut. Both steps are

only required if the unit is in mode 1. After the valve actuator overhaul was complete, the unit was in mode 6 so this portion of the post-maintenance test was not performed. The issue with the valve was not found until the unit was in mode 1 on July 1, 2021, and that portion of the same procedure was performed as a regularly scheduled surveillance test. The post-maintenance test after the overhaul required a valve stroke timing test and a comparison of the remote position indication with the local indication, neither of which ensures that the valve is physically shut. Therefore, the post-maintenance test was inadequate in showing that the valve was operable.

Corrective Actions: The licensee adjusted the valve stem for valve FV-4150 so that the valve plug would make physical contact with the valve seat when the valve was shut. The valve was then tested in mode 1 by measuring the flow rate through valve FV-4150 before and after a closed stroke with satisfactory results and returned to service on July 3, 2021. The licensee initiated corrective actions to correct the steps in the work instructions, so they could be accomplished as written. The licensee also initiated corrective actions to include conducting a valve diagnostic test and reviewing the data in the work instructions to ensure that the steam generator blowdown containment isolation valves physically seat as acceptance criteria in post-maintenance and surveillance tests when flow rates are not possible to obtain.

Corrective Action References: WAN 655533, CR 2021-7397

Performance Assessment:

Performance Deficiency: The inspectors determined that the licensee's failure to preplan and implement adequate maintenance procedures for valve FV-4150 actuator overhaul and post-maintenance testing was a performance deficiency that was within the licensee's ability to foresee and correct and therefore should have been prevented.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the SSC and Barrier Performance attribute of the Barrier Integrity cornerstone and adversely affected the cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. Specifically, valve FV-4150 could not provide a means of containment isolation after the valve actuator overhaul and subsequent post-maintenance test.

Significance: The inspectors assessed the significance of the finding using Appendix A, "The Significance Determination Process (SDP) for Findings At-Power." The finding was determined to be of very low safety significance (Green) under Exhibit 3, "Barrier Integrity Screening Questions," because the performance deficiency did not represent an actual open pathway in the physical integrity of reactor containment, failure of containment isolation system, failure of containment pressure control equipment, failure of containment heat removal, or an actual reduction in function of hydrogen igniters in the reactor containment. Specifically, while valve FV-4150 was a barrier that was not able to be shut, the closed loop system acted as the second isolation barrier and remained intact.

Cross-Cutting Aspect: H.11 - Challenge the Unknown: Individuals stop when faced with uncertain conditions. Risks are evaluated and managed before proceeding. The inspectors reviewed IMC 0310, "Aspects Within Cross-Cutting Areas," and determined that this finding had a cross-cutting aspect in the area of Human Performance, Challenge the Unknown, because individuals failed to stop when faced with uncertain conditions. Specifically,

individuals performing maintenance on valve FV-4150 should have stopped when they realized that the procedure could not be performed as written.

Enforcement:

Violation: Technical Specification 6.8.1.a requires, in part, that written procedures shall be established, implemented, and maintained covering activities referenced in appendix A of Regulatory Guide 1.33, revision 2. Appendix A, Section 9 of Regulatory Guide 1.33 states that maintenance that can affect the performance of safety-related equipment should be properly preplanned and performed in accordance with written procedures or documented instructions appropriate to the circumstances.

Contrary to the above, on March 29, 2021, the procedures and work instructions for the valve FV-4150 actuator overhaul and subsequent testing were not properly preplanned and performed in accordance with written procedures or documented instructions appropriate to the circumstances. Specifically, the steps in the work instructions provided in WAN 604821 for disassembling and reassembling the actuator for valve FV-4150 could not be accomplished as written and the post-maintenance test was not adequate to verify that valve FV-4150 was physically capable of being shut. This resulted in the valve failing to shut during a surveillance test on July 1, 2021.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

Failure to Perform Analyses of Changes Made to the Emergency Plan

Cornerstone	Severity	Cross-Cutting Aspect	Report Section
Not Applicable	Severity Level IV NCV 05000498,05000499/2021003-02 Open/Closed	Not Applicable	71114.04

The inspectors identified a Severity Level IV non-cited violation of 10 CFR 50.54(q)(3), for a change to the licensee’s emergency plan associated with the emergency classification process for failure to demonstrate that the changes would not reduce the effectiveness of the plan. Specifically, the licensee did not perform an analysis demonstrating that changes made to the EAL downgrade process described in the EAL technical basis document was not a reduction in effectiveness of the plan.

Description: During the review of the recent change to the “STPEGS Emergency Action Level Technical Bases Document Revision 3” (effective date March 18, 2021), the inspectors determined that the licensee failed to conduct adequate analysis demonstrating that changes to emergency preparedness documentation did not reduce the effectiveness of the emergency plan.

In the 10 CFR 50.54(q) evaluation for “STPEGS Emergency Action Level Technical Bases Document, Revision 3” (CR Number 20-10986, dated February 4, 2021), the licensee did evaluate a proposed removal of the EAL downgrade process in Sections 4.2 and 5.6. However, the evaluation focused on whether the change would provide alignment with other site procedures, vice evaluating whether the process removal would have a negative effect on the EAL process as defined in the EAL license amendment approval from 2015. Further, evaluation failed to assess the effects of eliminating this part of the EAL process versus “South Texas Project Electric Generating Station Emergency Plan (Revision ICN 20-22),” Sections F.8.2 through F.8.4, which states, in part, that the licensee maintains the capability

to downgrade/de-escalate from Alert, Site Area Emergency, and General Emergency classification levels as directed by the Emergency Director. This capability is stated separately from that of terminating an emergency classification in effect.

The inspector's review of the licensee's 10 CFR 50.54(q) evaluation procedure indicates that that both of these sets of documentation were to be included in the review. Procedure OPGP05-ZV-0010, "Emergency Plan Change," revision 19, Section 3.5, defines the emergency plan for the review, which includes, in part, "the plan the NRC originally approved and all subsequent changes made by the licensee with, and without, prior NRC review and approval." Further, to understand the basis for emergency plan changes, licensing amendments related to the plan are to be included in evaluation per Addendum 1, Section 3.4 (the latter references Regulatory Guide 1.219, Section 1.6 which includes related license amendment documentation and commitments in the scope of the review).

Downgrading EALs is part of the EAL classification process. It is described as part of industry standard NEI 99-01, revision 6, which the licensee's NRC approved EAL scheme is based upon (license amendments 194 and 206; Accession Number ML15201A195; dated August 20, 2015). Changes to the process have an effect on the information provided to offsite response organizations (OROs) via the notification process. This information can have an effect on actions OROs are required to complete in response procedures. The inspectors asked if this change to the EAL classification process was discussed with the OROs to determine if there would be any negative effects on their response actions. The licensee indicated that this was not discussed with the OROs prior to making the change.

Corrective Actions: The licensee initiated discussions with the OROs regarding the protocol for downgrading EALs to identify and resolve any issues this may cause on July 27, 2021. Also, the licensee entered these issues into the corrective action program.

Corrective Action References: CR 2021-8130

Performance Assessment: The inspectors determined this violation was associated with a minor performance deficiency. The NRC determined that this violation was associated with a reactor oversight process minor performance deficiencies for failure to maintain the effectiveness of the plan.

Enforcement: The ROP's significance determination process does not specifically consider the regulatory process impact in its assessment of licensee performance. Therefore, it is necessary to address this violation which impedes the NRC's ability to regulate using traditional enforcement to adequately deter non-compliance.

Severity: This issue was is determined to be a Severity Level IV violation using the NRC Enforcement Policy, dated January 15, 2020, Section 6.6.d.1 of the Enforcement Policy because it involves the licensee's ability to meet or implement a regulatory requirement not related to assessment or notification such that the effectiveness of the emergency plan is reduced. Specifically, the regulatory requirement not met was not related to assessment or notification, in that the licensee's 10 CFR 50.54(q)(3) evaluation was not adequate to demonstrate that the change did not reduce the effectiveness of the emergency plan.

Violation: Title 10 CFR 50.54(q)(3) states, that the licensee may make changes to its emergency plan without NRC approval only if the licensee performs and retains an analysis demonstrating that changes do not reduce the effectiveness of the plan.

Contrary to the above, on March 18, 2021, changes were made to the emergency plan

without performing and retaining an analysis demonstrating the changes did not reduce the effectiveness of the plan. Specifically, the licensee did not retain an analysis of the change demonstrating that the change would not negatively affect the implementation of all emergency plan and licensing action commitments, nor the ability of OROs to take response actions consistent with their procedures.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

Failure to Correct Weaknesses During Drills

Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Emergency Preparedness	Green NCV 05000498,05000499/2021003-03 Open/Closed	[H.8] - Procedure Adherence	71151

The inspectors identified a Green, non-cited violation of 10 CFR 50.47(b)(14) for the licensee’s failure to identify and correct weaknesses in ERO performance during control room simulator drills conducted on November 24, 2020, December 8, 2020, and December 15, 2020. Specifically, the licensee did not identify performance that would have precluded effective implementation of the emergency plan if it occurred during an actual radiological emergency.

Description: The inspectors reviewed drill documentation associated with performance opportunities that were inputs into the NRC Drill and Exercise Performance (DEP) performance indicator for the fourth quarter 2020. Report “STP 2020 Licensed Operator Requal Cycle 204 EPlan Scenarios Evaluation Report, November 10th – December 16th, 2020,” (dated July 1, 2021) indicated that control room crews in the simulator were evaluated for the ability to timely and accurately notify OROs of declared EAL SU1, EAL-1, for loss of all offsite AC power capability to all three AC ESF buses for 15 minutes or longer. In the scenario, the loss of power affected both Units 1 and 2. According to the notification forms, five crews indicated that SU1, EAL-1 was applicable to Unit 1 only (crews 1E and 2E on November 24, 2020; crew 2B on December 15, 2020; crews 1C and 2C on December 8, 2020). Procedure 0PGP05-ZV-0013, “Performance Indicator Tracking Guide,” (revision 10) addendum 1, section 1.7 defines what is considered an accurate notification related to an emergency classification. One characteristic included which needs to be correct for the notification to be considered accurate is which unit(s) (one or both) are affected by the emergency classification.

The inspectors reviewed licensee documentation to determine if corrective action was implemented for the crews’ inaccurate notification forms. In the previously cited drill report, the licensee indicated that offsite notifications were evaluated as part of the control room simulator sessions (drill objective E-1). Further, it was noted that there were differences in the notification forms with respect to which units were identified as being associated with the emergency, but there was no condition report generated to document any corrective action.

Drill and exercise program procedures were reviewed to see if this approach to the issues was acceptable. Applicable direction was as follows:

Procedure 0PGP05-ZV-0001, “Emergency Response Exercises and Drills,” (revision 17), defines “weakness” in Section 2.21. It states that a weakness is “a level of performance demonstrated during an exercise, drill, or training ... that would preclude effective

implementation of the E-Plan if it were to occur during an actual radiological emergency.” Further, it says, “Drill objectives that are not satisfactorily demonstrated shall be considered a weakness. Weaknesses are a condition adverse to quality in the Station’s Corrective Action Program.”

- Procedure ZV-0027, “Drill and Exercise Performance Objectives and Demonstration Criteria,” (revision 6), defines drill objective E-1 as “[d]emonstrate the ability to provide an accurate initial offsite notification message within 15 minutes of emergency declaration.” Demonstration criteria 4 for this drill objective states, in part, that “[t]he initial offsite notification message was accurate in accordance with 0ERP01-ZV-IN02.”
- Procedure 0ERP01-ZV-IN02, “Notifications to Site Agencies,” (revision 35), Section 5.1.1.a, says to complete offsite notification forms in accordance with Addendum 1. Addendum 1, step 1.1, item 4, says with regards to “Affected Units”: “Mark the affected Unit. If the event is common to both Units, then mark both.”

Therefore, the notification forms in the subject simulator drills did not accurately communicate that EAL SU1 applied to both units. The drill objective was not met, so it should have been identified as a weakness. Conditions adverse to quality have corrective action applied to them, as documented in the corrective action program. There was no corrective action documentation generated to show that corrective action took place after this observed performance.

Discussion with the licensee staff revealed that there were proposed changes to the procedures regarding what defines offsite notification form accuracy being considered at the time of the control room simulator drills. However, those proposed changes had not been evaluated or discussed with OROs prior to these evaluations. Further, the proposed changes were in conflict with requirements in the effective procedures at the time of evaluation.

The inspectors concluded that providing inaccurate information on initial offsite notification forms following an emergency classification is performance that would have precluded effective implementation of the emergency plan during a radiological emergency. This constituted a weakness in ERO performance. However, the licensee graded the performance as satisfactory. The licensee’s failure to identify the weakness and correct it was a performance deficiency.

Corrective Actions: The licensee entered these issues into the corrective action program.

Corrective Action References: CR 21-8107

Performance Assessment:

Performance Deficiency: The licensee’s failure to correct weaknesses that occurred during a drill or exercise was a performance deficiency which was within the licensee’s ability to foresee and correct. A weakness is defined in Section 2.0(o) of Inspection Manual Chapter 0609, Appendix B, “Emergency Preparedness Significance Determination Process,” (dated September 22, 2015) as ERO performance that would have prevented the effective implementation of the licensee’s emergency plan had the circumstances occurred. The ERO’s failure to provide accurate initial offsite notifications during simulator drills conducted on November 24, 2020, December 8, 2020, and December 15, 2020, were weaknesses requiring correction.

Screening: The inspectors determined the performance deficiency was more than minor because it was associated with the ERO performance attribute of the Emergency Preparedness cornerstone and adversely affected the cornerstone objective to ensure that the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The performance deficiency was determined to be more than minor, and therefore a finding, because it was associated with the ERO performance cornerstone attribute (training, exercises) and adversely affected the cornerstone objective to ensure the licensee is capable of implementing adequate measures to protect the health and safety of the public in the event of a radiological emergency. The licensee's ability to ensure that adequate measures will be taken to protect the health and safety of the public is degraded when weak ERO performance is not corrected.

Significance: The inspectors assessed the significance of the finding using Appendix B, "Emergency Preparedness SDP." Using Manual Chapter 0609, "Significance Determination Process," Attachment 4, Tables 1, 2, and 3 worksheets (effective date December 20, 2019); and the corresponding Appendix B, "Emergency Preparedness Significance Determination Process, Attachment 2 (issue date September 22, 2015); the performance deficiency was determined have very low safety significance (Green) because it was a failure to comply with NRC requirements, was not a loss of planning standard function, and was not a degraded risk significant planning standard function. The finding was not a loss of planning standard function because the issues involved limited facility interaction drills with a limited team of evaluators.

Cross-Cutting Aspect: H.8 - Procedure Adherence: Individuals follow processes, procedures, and work instructions. The finding had a cross-cutting aspect in the area of procedure adherence associated with human performance because the licensee failed to follow procedures and processes for evaluating ERO performance to identify weaknesses. Specifically, the performance evaluations were completed using understanding of future proposed changes that were not vetted and were in contrast to the procedures in effect at the time.

Enforcement:

Violation: 10 CFR 50.54(q)(2), requires, in part, that a power reactor licensee follow and maintain the effectiveness of an emergency plan which meets the requirements of Appendix E to 10 CFR Part 50 and the standards of 10 CFR 50.47(b). 10 CFR 50.47(b)(14) requires, in part, that deficiencies identified as a result of exercises or drills are (will be) corrected.

Contrary to the above, on July 1, 2021, the licensee failed to correct deficiencies identified as a result of exercises or drills. Specifically, the licensee failed to identify ERO performance deficiencies (weaknesses) occurring during simulator drills on November 24, 2020, December 8, 2020, and December 15, 2020, and did not ensure correction of the weaknesses. There was no actual or potential safety significance because the weaknesses in performance occurred during drills.

Enforcement Action: This violation is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.

EXIT MEETINGS AND DEBRIEFS

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

- On July 22, 2021, the inspectors presented the Public Radiation Safety Inspection results to Mr. G. Powell, President and CEO and other members of the licensee staff.
- On August 31, 2021, the inspectors presented the biennial emergency preparedness exercise inspection results to Mr. G. Powell, President and CEO, and other members of the licensee staff.
- On September 2, 2021, the inspectors presented the Occupational Radiation Safety Inspection results to Mr. G. Powell, President and CEO and other members of the licensee staff.
- On October 7, 2021, the inspectors presented the integrated inspection results to Mr. G. Powell and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.04	Drawings	5N129F05013, #1	P&ID, Safety Injection System	12
		5N129F05013, #2	P&ID, Safety Injection System	13
		5N129F05014, #1	6.3.3 P&ID, Safety Injection System	10
		5N129F05014, #2	6.3.3 P&ID, Safety Injection System	11
		5N129F05015, #1	6.3.4 P&ID, Safety Injection System	11
		5N129F05015, #2	6.3.4 P&ID, Safety Injection System	12
		5N129MB01045	Design Basis Document, Safety Injection (SI) System	8
		5N129F05016, #1	6.3.5 P&ID, Safety Injection System,	8
		5N129F05016, #2	6.3.5 P&ID, Safety Injection System	9
71111.05	Procedures	0EAB65-FP-0057	Fire Preplan Electrical Auxiliary Building, Cable Spreading/Power Cable Area, Train C	2
		0FHP59-FP-0900	Fire Preplan for Fire Pump House	2
		0IVC51-FP-0400	Fire Preplan Isolation Valve Cubicle Pump Room Train D	2
71111.11Q	Procedures	0POP01-2A-0018A	EOP Generic Guidance	8
71111.13	Calculations	Calculation 3884		
		Calculation 3890		
	Procedures	0PGP03-ZA-0091	Configuration Risk Management Program	14
		0PGP03-ZG-RMTS	Risk Managed Tech Specs Program	2
		0PGP03-ZO-0055	Protected Components	15
71111.15	Calculations	Calculation MC6426	IVC/AFW Cooling Load and Room Heat-Up	0
	Corrective Action Documents	CR-YYYY-NNNN	2021-8104, 2021-7039, 2021-883, 2016-6143, 2020-11256, 2021-9293, 2021-9447, 2021-9789	
	Engineering Evaluations	11-14080-1		
		CREE 16-6143-1, 18-6504-04		
	Procedures	0PGP03-ZF-0018	Fire Protection System Functionality Requirements	22
0PSP03-DG-0017		Standby Diesel 12(22) Twenty-Four Hour Load Test	59	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Work Orders	Work Authorization Number	646840, 539902, 655986	
71111.19	Corrective Action Documents	CR-YYYY-NNNN	2021-7931, 2021-7397, 2021-9376, 2021-9293, 2021-9789, 2021-9853	
	Procedures	OPGP03-ZF-0018	Fire Protection System Functionality Requirements	22
		0PMP04-RH-0001	Residual Heat Removal Pump Maintenance	19
		0PMP05-RH-0001	Residual Heat Removal Pump Motor Inspection	14
		0PMP05-RH-0001	Residual Heat Removal Pump Motor Inspection	15
		0PMP08-ZI-0225	RHR and CCP Vibration Monitoring Equipment Calibration	16
		0POP04-RA-0001		
Work Orders	Work Authorization Number	527886, 655533, 659274, 655986, 659898		
71111.22	Procedures	0PSP03-DG-0017	Standby Diesel 12(22) Twenty-Four Hour Load Test	59
		0PSP03-EW-0018	Essential Cooling Water System Train B Testing	58
71114.01	Corrective Action Documents	CR-YYYY-NNNN	2018-6901, 2018-7645, 2018-7668, 2017-7669, 2018-7737, 2018-8226, 2018-8529, 2018-8648, 2018-9162, 2018-9265, 2018-9618, 2018-10229, 2018-11032, 2018-12701, 2018-13937, 2019-0480, 2019-1602, 2019-1641, 2019-1722, 2019-2103, 2019-2351, 2019-2464, 2019-3566, 2019-4749, 2019-4887, 2019-4944, 2019-6527, 2019-6682, 2019-7274, 2019-10295, 2019-10296, 2020-1203, 2020-1908, 2020-2746, 2020-4789, 2020-7088, 2020-7341, 2020-8043, 2020-9454, 2020-10909, 2020-10986, 2020-10997, 2020-11216, 2020-12159, 2020-12160, 2020-12185, 2021-525, 2021-1697, 2021-5165, 2021-5882, 2021-6054, 2021-6107, 2021-6794, 2021-6803, 2021-6843, 2021-8173, 2021-8219	
	Corrective Action	CR-YYYY-NNNN	2021-8107, 2021-8202, 2021-9144	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Documents Resulting from Inspection			
	Engineering Changes		DCP 07-755-14	
	Miscellaneous		Participant records and logs from the July 28 and 29, 2021 EP Exercises (from CR/Simulator, OSC, TSC, EOF, and JIC)	07/28/2021
			South Texas Project Electric Generating Station Emergency Plan	ICN 20-21
	Procedures	0ERP01-ZV-EF01	EOF Director	19
		0ERP01-ZV-EF03	Radiological Director	14
		0ERP01-ZV-IN01	Emergency Classifications	12
		0ERP01-ZV-IN02	Notification to Offsite Agencies	35
		0ERP01-ZV-IN06	Radiological Exposure Guidelines	8
		0ERP01-ZV-IN07	Offsite Protective Action Recommendations	19
		0ERP01-ZV-OS01	OSC Coordinator	10
		0ERP01-ZV-OS03	Radiological Coordinator	11
		0ERP01-ZV-OS04	Security Coordinator	6
		0ERP01-ZV-OS06	Emergency Teams	12
		0ERP01-ZV-SH02	Acting Radiological Manager	13
		0ERP01-ZV-TP01	Offsite Dose Calculations	27
		0ERP01-ZV-TS01	TSC Manager	19
		0ERP01-ZV-TS011	Engineering Supervisor	5
		0ERP01-ZV-TS03	Operations Manager	8
		0ERP01-ZV-TS04	Radiological Manager	12
0ERP01-ZV-TS05	Chemical/Radiological Manager	6		
0ERP01-ZV-TS06	Maintenance Manager	6		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		0ERP01-ZV-TS07	Technical Manager	6
		0ERP01-ZV-TS08	Security Manager	19
		0PGP03-ZV-0005	Equipment Important to Emergency Response	7
		0POP02-AF-0001	Auxiliary Feedwater	57
		0POP04-RC-0004	Steam Generator Tube Leakage	34
		0POP05-EO-EC31	SGTR with Loss of Reactor Coolant - Subcooled Recovery Desired	22
		0POP05-EO-EC32	SGTR with Loss of Reactor Coolant - Saturated Recovery Desired	17
		0POP05-EO-EO20	Faulted Steam Generator Isolation	12
		0POP05-EO-EO30	Steam Generator Tube Rupture	28
		0POP10-ZO-EDMG	Extensive Damage Mitigation Guideline	7
		ZV-0027	Drill and Exercise Performance Objectives And Demonstration Criteria, Eight-Year Objective Master Plan	01/14/2021
		Work Orders	CRWO	WAN 578742, WAN 511734, WAN 571664, WAN 565286, WAN 559773
71114.04	Corrective Action Documents Resulting from Inspection	CR-YYYY-NNNN	2021-8130	
	Miscellaneous		STPEGS Emergency Action Level Technical Bases Document	2
		AE-NOC-20003282	South Texas Project, Units 1 and 2 - Issuance of Amendments No. 220 and 205 to Revise Technical Specifications to Adopt TSTF-490, "Deletion of E Bar Definition and Revision to RCS Specific Activity Tech Spec" (EPID-L-2019-LLA-0207)	9/29/2020
		AE-NOC-5002695	South Texas Project, Units 1 and 2 - RE: Upgrade to Emergency Action Level Scheme (TAC Nos. MF4195 and MF4196)	8/20/2015
		CR 20-10997	Apparent Cause Evaluation, Title: Technical Issues	0, 1

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Associated with the 10 CFR 50.54(q) Screening Process	
		Form 1, Screen Evaluation Form	Screen Evaluation Form, Section B of STPEGS Emergency Plan, CR Tracking Numbers 19-13721 and 20-10207	5/5/2021
		Form 1, Screen Evaluation Form	OPGP05-ZV-0007, Prompt Notification System (CR 20-8182, 20-9902)	4/8/2021
		Form 1, Screen Evaluation Form	STPEGS Emergency Action Level Technical Bases Document, revision 3 (CR 15-18253)	2/4/2021
		Form 1, Screen Evaluation Form	STPEGS Emergency Action Level Technical Bases Document, revision 3 (CR 20-10986)	2/4/2021
		Form 1, Screen Evaluation Form	ZV-0006, Letters of Agreement, Evaluation CR Tracking Number: 19-13721	6/17/2021
		Form 2, Effectiveness Evaluation Form	0ERP01-ZV-IN01, revision 12 (Emergency Classification) - Change to Mode Definition & Criteria Table (CR Number 20-7088)	2/3/2021
		Form 2, Effectiveness Evaluation Form	0ERP01-ZV-IN01, revision 12 (Emergency Classification) - Change to Addendums 1 & 5 for IC SU3	2/4/2021
		Form 2, Effectiveness Evaluation Form	STPEGS Emergency Action Level Technical Bases Document, revision 3 (CR 20-10986)	2/4/2021
		Form 2, Effectiveness Evaluation Form	STPEGS Emergency Action Level Technical Bases Document, revision 3 (CR 15-18253)	2/8/2021
		NOC-AE-14003087	South Texas Project Units 1 and 2, Docket Nos. STN 50-498, STN 50-499; License Amendment Request for revision to Unit 1 and Unit 2 Emergency Action Levels	5/15/2014
		NOC-AE-19003677	South Texas Project, Units 1 and 2; Docket Nos. STN 50-498, STN 50-499; License Amendment Request to Revise Technical Specifications to Adopt TSTF-490, revision 0, "Deletion of E Bar Definition and revision to RCS Specific Activity Tech Spec"	9/26/2019
		NOC-AE-20003778	South Texas Project Units 1 and 2, Docket Nos. STN 50-498, STN 50-499, 72-1041; Changes to South Texas Project Electric Generating Station Emergency Plan	12/17/2020

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		NOC-AE-21003799	South Texas Project Units 1 and 2, Docket Nos. STN 50-498, STN 50-499, 72-1041; Changes to South Texas Project Electric Generating Station (STPEGS) Emergency Plan	4/15/2021
		NOC-AE-21003826	South Texas Project Units 1 and 2, Docket Nos. STN 50-498, STN 50-499, 72-1041; Change to South Texas Project Electric Generating Station Emergency Plan	7/28/2021
	Procedures	0ERP-ZV-EF01	EOF Director	19
		0ERP-ZV-IN01	Emergency Classifications	10, 11, 12
		0PGP05-ZV-0010	Emergency Plan Change	19, 20
		ZV-0006	Letters of Agreement	23
	71124.02	ALARA Plans	CR 2019-11387	Tracking Condition Report for 2RE20 ALARA In Process Reviews
CR 2019-3165			Tracking Condition Report for 2RE20 ALARA Review Packages	02/13/2020
CR 2020-3367			Tracking Condition Report for 1RE22 In Process Reviews	05/26/2020
CR 2020-812			Tracking Condition Report for 1RE22 ALARA Review Packages	06/16/2020
CR 2021-190			Tracking Condition Report for 2RE21 ALARA Review Packages	06/15/2021
CR 2021-3154			Tracking Condition Report for 2RE21 ALARA In Process Reviews	04/20/2021
Corrective Action Documents		CR-YYYY-NNNN	2019-11529, 2020-3396, 2020-3407, 2020-3555, 2020-4175, 2020-5740, 2020-7173, 2020-9828, 2020-11384, 2021-334, 2021-3468, 2021-4120, 2021-4140, 2021-4231, 2021-8488, 2021-8490	
Corrective Action Documents Resulting from Inspection		CR-YYYY-NNNN	2021-9179, 2021-9229	
Miscellaneous			Dry Active Waste - Common 2021	1/12/2021
			Refuel Outage 2RE20 ALARA Report	08/24/2020
			Refuel Outage 1RE22 ALARA Report	09/12/2020
Procedures		0PGP03-ZR-0052	ALARA Program	19
		0PGP03-ZR-0052	ALARA Program	19

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		0PRP07-ZR-0001	ALARA Engineering and Procedure Review	4
		0PRP07-ZR-0010	Radiation Work Permits/Radiological Work ALARA Reviews	40
		0PRP07-ZR-0034	Radiological Risk Management	6
	Self-Assessments	20-10240-1	Occupational ALARA Planning and Controls	08/04/2021
		CR 2020-8258	Perform Post-Outage Alpha Evaluation In Accordance with Procedure 0PRP04-ZR-0013 step 6.11.2	08/25/2020
		CR 2021-2588	Perform 2RE21 Post-Outage Alpha Evaluation In Accordance With Procedure 0PRP04-ZR-0013 step 6.11.2.	04/27/2021
71124.04	Corrective Action Documents	CR-YYYY-NNNN	2019-03573, 2019-04003, 2019-05107, 2019-05318, 2019-05630, 2019-05943, 2019-08744, 2019-09085, 2019-09176, 2019-11555, 2019-11557, 2019-12399, 2019-12450, 2019-12497, 2019-14321, 2019-14753, 2020-01946, 2020-02234, 2020-04331, 2020-09813, 2020-09814, 2021-05720, 2021-08571	
	Miscellaneous	0PGP03-ZR-0050, Form 1	Declaration of Pregnancy dated and/or active from March 16, 2019 through September 2, 2021	
		Personnel Contamination Events	7649, 7650, 7652, 7672, 7712, 7717	
	Procedures	0PGP03-ZR-0048	Personnel Dosimetry Program	24
		0PRP01-ZA-0042	Job Coverage	1
		0PRP02-ZR-0005	Operation of the Canberra Accuscan Whole Body Counting System	23
		0PRP02-ZR-0007	Evaluation of Intakes	15
		0PRP04-ZR-0016	Radiological Air Sampling & Analysis	33
		0PRP05-ZR-0010	Health Physics Instrumentation Program	28
		0PRP07-ZR-0034	Radiological Risk Management	6
		0PRP08-ZR-0001	Personnel Decontamination	22
		0PRP09-ZI-0002	Standardization and Use of the Ludlum Bonner Spheres for Neutron Measurements	3
		0PRP09-ZQ-0001	Quality Assurance for TLD Assessment Activities	18
		0PRP09-ZX-0001	Quality Control Checks for Dosimeters of Legal Record	16
CORP-CHAPTER 01	Radiation Protection Organization and Responsibilities	25		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date	
	Radiation Surveys	106003	Shutdown Survey	10/05/2019	
		106082	Post CRUD Burst	10/06/2019	
	Self-Assessments	OPGP03-ZX-0003, Form 2	Snapshot Self Assessment	10/06/2020	
		Audit Report Number 20-02	STP Nuclear Operating Company Radiological Controls Quality Audit Report	03/11/2020	
71124.06	Corrective Action Documents	CR-YYYY-NNNN	2018-9002, 2018-9619, 2018-9684, 2018-11458, 2018-13256, 2018-14467, 2019-438, 2019-4010, 2019-4701, 2019-4966, 2019-5141, 2019-5143, 2019-5295, 2019-5422, 2019-5423, 2019-5765, 2019-5766, 2019-6591, 2019-6704, 2019-6704, 2019-6993, 2019-6993, 2019-6994, 2019-6995, 2019-7438, 2019-7438, 2019-8376, 2019-8376, 2019-9342, 2019-10699, 2019-10823, 2019-10823, 2019-11030, 2019-12917, 2019-13054, 2019-13662, 2019-13662, 2019-14855, 2019-14940, 2020-3386, 2020-3386, 2020-4897, 2020-5863, 2020-6309, 2020-9885, 2020-9993, 2020-9993, 2020-10251, 2020-11285, 2020-11911, 2020-11911, 2020-12063, 2021-895, 2021-1658, 2021-1658, 2021-2083, 2021-2083, 2021-4409, 2021-4409, 2021-6100, 2021-6100		
	Corrective Action Documents Resulting from Inspection	CR-YYYY-NNNN	2021-7940, 2021-7976, 2021-7982		
	Miscellaneous			2018 Land Use Census	11/04/2018
				2019 Land Use Census	12/05/2019
				2020 Land Use Census	11/17/2020
				2018 Annual Effluent Release Report April 2019	
				2019 Annual Effluent Release Report April 2020	
				2020 Annual Effluent Release Report April 2021	
				Offsite Dose Calculation Manual (ODCM)	21
	Procedures	OPCP07-ZS-0016		Continuous Atmospheric Monitors	51

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		0PCP09-0010	Determination of Radionuclides by Apex Gamma	10
		0PCP09-ZR-0016	Off-Normal and Abnormal Radiological Effluent Monitoring	4
		0PCP09-ZR-0017	Permit Generation - Chemistry Technician	24
		0PCP09-ZR-0022	Permit Generation - Chemistry Staff	0
		0PSP07-RD-0001	Gas Storage Tank Activity Determination	3
		0PSP07-VE-0002	Gaseous Effluent Particulate and Iodine Sampling and Analysis	20
		0PSP07-VE-0006	Gaseous Effluent Noble Gas and Tritium Sampling and Analysis	3
		0PSP07-WL-0002	Liquid Effluent Composites	17
		0PSP07-WL-LDP1	Liquid Effluent Permit	26
		0PSP07-WL-LDP2	Liquid Effluent Permit with RT-8038 Inoperable	16
		0PSP07-ZR-0003	Offsite Dose	5
		0PSP07-ZR-0004	Total Dose	4
		AD-0019	Effluent Monitoring for Reactor Containment Building Leakage Rate Test	4
	Self-Assessments	MN-18-0-107381	Quality Monitoring Report	11/29/2018
		MN-19-0-107455	Quality Monitoring Report	02/20/2019
		MN-19-0-107533	Quality Monitoring Report	05/09/2019
		MN-19-0-107537	Quality Monitoring Report	05/14/2019
		MN-19-0-107910	Quality Monitoring Report	11/19/2019
		MN-20-0-108100	Quality Monitoring Report	05/30/2020
MN-20-0-108251		Quality Monitoring Report	12/17/2020	
MN-21-0-108468	Quality Monitoring Report	05/17/2021		
71124.07	Calibration Records	523078	Calibration Data Package: Primary Meteorological System Calibration (60 Meter Tower)	11/29/2018
		529986	Calibration Data Package: Backup Meteorological System Calibration (10 Meter Tower)	12/05/2018
		534472	Calibration Data Package: Primary Meteorological System Calibration (60 Meter Tower)	03/21/2019
		541512	Calibration Data Package: Backup Meteorological System	05/15/2019

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Calibration (10 Meter Tower)	
		546951	Calibration Data Package: Primary Meteorological System Calibration (60 Meter Tower)	08/15/2019
		552184	Calibration Data Package: Backup Meteorological System Calibration (10 Meter Tower)	11/01/2019
		557795	Calibration Data Package: Primary Meteorological System Calibration (60 Meter Tower)	01/31/2020
		563142	Calibration Data Package: Backup Meteorological System Calibration (10 Meter Tower)	03/11/2020
		569380	Calibration Data Package: Primary Meteorological System Calibration (60 Meter Tower)	08/12/2020
		575140	Calibration Data Package: Backup Meteorological System Calibration (10 Meter Tower)	09/28/2020
		580319	Calibration Data Package: Primary Meteorological System Calibration (60 Meter Tower)	01/21/2021
		586110	Calibration Data Package: Backup Meteorological System Calibration (10 Meter Tower)	03/10/2021
	Corrective Action Documents	CR-YYYY-NNNN	2018-10710, 2018-11163, 2019-411, 2019-1309, 2019-1804, 2019-1813, 2019-2830, 2019-5722, 2019-6343, 2019-7118, 2019-7711, 2020-39, 2020-1121, 2020-5226, 2020-5930, 2020-6009, 2020-9255, 2020-10234, 2020-10239, 2020-11256, 2020-11531, 2020-11816, 2021-55, 2021-364, 2021-2892, 2021-3317	
	Corrective Action Documents Resulting from Inspection	CR-YYYY-NNNN	2021-7940, 2021-8114	
	Miscellaneous		STPNOC Measurement Assurance Program (MAP) Report Package: 2018, 1st Quarter	03/28/2018
			STPNOC Measurement Assurance Program (MAP) Report Package: 2018, 2nd Quarter	07/18/2018
			STPNOC Measurement Assurance Program (MAP) Report Package: 2018, 3rd Quarter	11/28/2018
		STPNOC Measurement Assurance Program (MAP) Report	01/10/2019	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Package: 2018, 4th Quarter	
			STPNOC Measurement Assurance Program (MAP) Report Package: 2019, 1st Quarter	04/03/2019
			STPNOC Measurement Assurance Program (MAP) Report Package: 2019, 2nd Quarter	07/23/2019
			STPNOC Measurement Assurance Program (MAP) Report Package: 2019, 3rd Quarter	11/13/2019
			STPNOC Measurement Assurance Program (MAP) Report Package: 2019, 4th Quarter	01/08/2020
			STPNOC Measurement Assurance Program (MAP) Report Package: 2020, 1st Quarter	03/21/2020
			STPNOC Measurement Assurance Program (MAP) Report Package: 2020, 2nd Quarter	06/29/2020
			STPNOC Measurement Assurance Program (MAP) Report Package: 2020, 3rd Quarter	10/22/2020
			STPNOC Measurement Assurance Program (MAP) Report Package: 2020, 4th Quarter	01/12/2021
			STPNOC Measurement Assurance Program (MAP) Report Package: 2021, 1st Quarter	05/20/2021
			2018 Annual Environmental Operating Report	05/29/2019
			2019 Annual Environmental Operating Report	04/23/2020
			2020 Annual Environmental Operating Report	04/26/2021
			2018 Land Use Census	11/04/2018
			2019 Land Use Census	12/05/2019
			2020 Land Use Census	11/17/2020
			Inspection Report for STP Nuclear Operating Station at Bay City, TX for the: 60M Rohn #80 Guyed Tower, Below Grade Anchor, and TS-2500 Elevator Inspections	03/02/2020
			Offsite Dose Calculation Manual (ODCM)	21
			Updated Conceptual Site Model, Groundwater Protection Initiative, South Texas Project Electric Generating Station, July 2018	
			2021 Groundwater Protection Plan, South Texas Project	0
	Procedures	OPGP03-ZH-0006	Non-Radioactive Spill Response, Cleanup, and Reporting	10

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		0PGP03-ZH-0006	Non-Radioactive Spill Response, Cleanup, and Reporting	6
		0PGP03-ZO-0053	Radiological Ground Water Protection Program	7
		0PGP03-ZV-0005	Equipment Important to Emergency Response	9
		0POP02-EM-0001	Alternate Meteorological Instrumentation Data Retrieval	9
		0POP04-ZO-0005	Chemical Spills / Toxic Gas Release	10
		0PRP10-ZL-0002	Quality Assurance for the Radiological Laboratory	17
		0PRP10-ZL-0006	Sample Receipt, Accountability and Storage	16
		0PRP10-ZL-0010	Preparation of Samples for Tritium Analysis by Liquid Scintillation Counting	14
		0PRP10-ZL-0011	Preparation of Samples for Gamma Analysis	10
		0PRP10-ZL-0022	Quality Control of Radiological Laboratory Equipment	9
		0PRP10-ZL-0023	REMP Interlaboratory Comparison Program	11
		0PRP10-ZL-0029	NRMAP Measurement Assurance Program	2
		0PRP10-ZL-0030	Interlaboratory Radioassay Measurement Assurance Program	3
		0PRP10-ZU-0001	REMP Sample Collection	13
		0PRP10-ZU-0007	Environmental TLD Monitoring	11
		0PRP11-ZR-0007	Radiation Protection Fire and Spill Response	3
		0PRP11-ZR-0008	Soil and Groundwater Remediation Evaluations	1
		0PSP05-EM-0001	Primary Meteorological System Calibration (60 Meter Tower)	41
		0PSP05-EM-0002	Backup Meteorological System Calibration (10 Meter Tower)	28
		Self-Assessments	EN-0002	Reportable Quantity Determination
Audit 19-01 (EP)			Emergency Preparedness Audit Report	02/28/2019
Audit 20-01 (EP)			Emergency Preparedness Audit Report	03/11/21
71151	Miscellaneous	Audit 20-02 (RC)	Radiological Controls Quality Audit Report	03/11/2020
			STP 2020 Licensed Operator Requal Cycle 204 EPlan Scenarios Evaluation Report, November 10th - December 16th, 2020	7/1/2021
			South Texas Project Electric Generating Station, Tabletop Evaluation Report, Red Team - January 21, 2021	7/1/2021
		STP 2021 Licensed Operator Requal Cycle 212; EPlan Scenarios Evaluation Report; May 4th - June 1st, 2021	7/1/2021	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		Form 1	Siren Tests or Inspection Results, Date of Test: 10/14/20; Type of Test: Bi-Weekly Silent	11/16/2020
		Form 1	Siren Tests or Inspection Results, Date of Test: 10/28/20; Type of Test: Bi-Weekly Silent	11/16/2020
		Form 1	Siren Tests or Inspection Results, Date of Test: 11/11/20; Type of Test: Bi-Weekly Silent	12/7/2020
		Form 1	Siren Tests or Inspection Results, Date of Test: 11/25/20; Type of Test: Bi-Weekly Silent	11/30/2020
		Form 1	Siren Tests or Inspection Results, Date of Test: 12/9/20; Type of Test: Bi-Weekly Silent	1/5/2021
		Form 1	Siren Tests or Inspection Results, Date of Test: 12/30/20; Type of Test: Bi-Weekly Silent	1/13/2021
		Form 1	Siren Tests or Inspection Results, Date of Test: 12/9/20; Type of Test: Quarterly Growl	1/5/2021
		Form 1	Siren Tests or Inspection Results, Date of Test: 3/31/21; Type of Test: Quarterly Growl	4/28/2021
		Form 1	Siren Tests or Inspection Results, Date of Test: 1/6/21; Type of Test: Bi-Weekly Silent	1/31/2021
		Form 1	Siren Tests or Inspection Results, Date of Test: 1/20/21; Type of Test: Bi-Weekly Silent	1/31/2021
		Form 1	Siren Tests or Inspection Results, Date of Test: 2/3/21; Type of Test: Bi-Weekly Silent	2/17/2021
		Form 1	Siren Tests or Inspection Results, Date of Test: 3/3/21; Type of Test: Bi-Weekly Silent	3/15/2021
		Form 1	Siren Tests or Inspection Results, Date of Test: 3/17/21; Type of Test: Bi-Weekly Silent	3/23/2021
		Form 1	Siren Tests or Inspection Results, Date of Test: 3/31/21; Type of Test: Bi-Weekly Silent	4/28/2021
		Form 1	Siren Tests or Inspection Results, Date of Test: 4/14/21; Type of Test: Bi-Weekly Silent	4/28/2021
		Form 1	Siren Tests or Inspection Results, Date of Test: 4/28/21; Type of Test: Bi-Weekly Silent	4/28/2021
		Form 1	Siren Tests or Inspection Results, Date of Test: 6/23/21; Type of Test: Bi-Weekly Silent	6/30/2021

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
	Procedures	0ERP01-ZV-IN02	Notifications to Offsite Agencies	35
		0PGP03-ZX-0002	Condition Reporting Process	53
		0PGP03-ZX-0002A	CAQ Resolution Process	13
		0PGP05-ZV-0001	Emergency Response Exercises and Drills	17
		0PGP05-ZV-0007	Prompt Notification System	13
		0PGP05-ZV-0013	Performance Indicator Tracking Guide	10
		ZV-0027	Drill and Exercise Performance Objectives and Demonstration Criteria	6
71153	Corrective Action Documents	CR-YYYY-NNNN	2021-7397	
	Work Orders	Work Authorization Number	655533	