



South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

July 9, 2020  
NOC-AE-20003746  
10 CFR 50.55a  
STI: 35034026

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

South Texas Project  
Unit 1  
Docket No. STN 50-498  
Inservice Inspection Summary Report – 1RE22

Attached is the South Texas Project Electric Generating Station Unit 1 summary report for inservice inspections performed prior to and during scheduled refueling outage 1RE22 completed in April 2020. This summary report satisfies the reporting requirements of American Society of Mechanical Engineers ASME Code Section XI, Article IWA-6230.

There are no commitments in this letter.

If there are any questions regarding this report, please contact Ali Albaaj at (361) 972-8949 or me at (361) 972-7806.

  
Chris Georgeson  
General Manager, Engineering

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Enclosure: Summary Report for the 1RE22 Inservice Inspection of Unit 1 South Texas Project Electric Generating Station

cc:

Regional Administrator, Region IV  
U.S. Nuclear Regulatory Commission  
1600 East Lamar Boulevard  
Arlington, TX 76011-4511

Chief Inspector  
Texas Department of Licensing and Regulation  
Boiler Program  
P.O. Box 12157  
Austin, TX 78711

**SUMMARY REPORT  
for the  
1RE22  
INSERVICE INSPECTION  
of  
UNIT 1  
SOUTH TEXAS PROJECT  
ELECTRIC GENERATING STATION**



**STP NUCLEAR OPERATING COMPANY**  
Spring 2020

COVER SHEET

1RE22 INSERVICE INSPECTION SUMMARY REPORT

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION, UNIT 1

P.O. BOX 289

WADSWORTH, TEXAS 77483

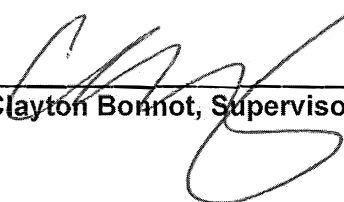
USNRC DOCKET NO: 50-498

OPERATING LICENSE NO: NPF-78

COMMERCIAL OPERATION DATE: AUGUST 25, 1988

Prepared by:   
Eric Lantz, ISI Program Owner

Date 16 June 2020

Reviewed by:   
Clayton Bonnot, Supervisor, /Testing Programs

Date 16 June 2020

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## SCOPE

### **COMPONENT SUPPORTS, STEAM GENERATOR TUBING, WELDS, THERMAL FATIGUE, REPAIR/REPLACEMENT, AND SYSTEM PRESSURE TESTING INSPECTION PROGRAMS (IWB, IWC, IWD, IWE, IWF)**

The examinations summarized in this report were performed in accordance with the 2004 Edition of the ASME Code, Section XI that is applicable to the South Texas Project, Unit 1, third ten-year interval (09/25/2010-09/24/2020), third period (12/20/2017-09/24/2020). This report covers selected ASME Code Class 1, 2, and 3 Systems/Components. This report is documented in accordance with the requirements of ASME Section XI Code Case N-532-4.

Examinations and tests required by the Code are scheduled in accordance with "Inspection Program B" as defined in IWB-2412 for ASME Code Class 1 Systems/Components, IWC-2412 for ASME Code Class 2 Systems/Components, IWD-2412 for ASME Code Class 3 Systems/Components, and IWF-2410 component supports.

ASME Code Class 1 components were examined as prescribed by Table IWB-2500-1 and the applicable Examination Categories, which established the examination frequency at each refueling outage. The ASME Code Class 2 Systems/Components were examined in accordance with Table IWC-2500-1, Examination Categories. The ASME Code Class 3 Systems/Components were examined in accordance with Table IWD-2500-1, Examination Categories. Component Supports were examined in accordance with IWF- Table 2500-1, Examination Categories.

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FORM OAR-1 OWNER'S ACTIVITY REPORT (Code Case N-532-4)

Report Number OAR-IRE22

Plant South Texas Project Electric Generating Station

Unit No. 1 Commercial service date August 25, 1988 Refueling outage no. IRE22  
(If applicable)

Current inspection interval IWB, IWC, IWD, IWF - 3<sup>rd</sup> ; IWE - 3<sup>rd</sup>  
(1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, other)

Current inspection period IWB, IWC, IWD, IWF - 3<sup>rd</sup> ;  
(1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>)

Edition and Addenda of Section XI applicable to the inspection plan 2004 Edition

Date and revision of inspection plan October 15, 2019 / Revision 9

Edition and Addenda of Section XI applicable to repairs/replacement activities, if different than the inspection plan N/A

Code Cases used: N-532-4, N-578-1, N-729-4, N-770-2, N-722-1

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of IRE22 conform to the requirements of Section XI.  
(Refueling outage number)

Signed ERIC LANTZ / Eric Lantz ISI Program Engineer Date: June 16, 2020  
(Owner or Owner's Designee, Title)

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and pressure Vessel Inspectors and the State or Province of Florida and employed by One CIS Insurance Co. of Lynn, Massachusetts have inspected the items described in this Owner's Activity Report, and state that, to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repairs/replacements activities and evaluation described this report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from the connected with this inspection.

[Signature]  
Inspector's Signature

Commissions HB 12442 AN1 FL-18-001345  
National Board, State, Province, and Endorsements

Date 06/22/2020

TABLE 1

ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT  
REQUIRE EVALUATION FOR CONTINUED SERVICE1RE22  
SPRING 2020

ASME Category	Item Number	Item Description	Evaluation Description
F-A	F1.43	LHX1A : Diesel Lube Oil 3 Heat Exchanger Support Skid [Summary 423700]	Inservice Inspection identified a loose bolt on LU Heat Exchanger Support Skid. [VTC-2020-051]  Corrective Action to tighten bolt. [CR 20-3928]  Inspection after Corrective Action. [VTC-2020-075]  Additional Exams performed in 1RE22 in accordance with IFW-2220.  Re-examination scheduled for 1RE23

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*06/22/2020*

TABLE 2  
ABSTRACT OF REPAIR/REPLACEMENT ACTIVITIES  
REQUIRED FOR CONTINUED SERVICE

CLASS	CORRECTIVE MEASURE	ITEM DESCRIPTION	SYSTEM	DESCRIPTION OF WORK	DATE COMPLETED	REPAIR / REPLACEMENT PLAN
3	REPLACEMENT	PIPE	ESSENTIAL COOLING WATER	Replaced piping. Welding.	3/7/2019	1-17-030
3	REPLACEMENT	PIPE	ESSENTIAL COOLING WATER	Replaced piping. Welding.	1/17/2019	1-17-031
3	REPLACEMENT	PIPE	MECHANICAL AUXILIARY BUILDING HVAC	Replaced Piping. Welding.	3/7/2019	1-17-036
3	REPLACEMENT	PIPE	MECHANICAL AUXILIARY BUILDING HVAC	Replaced Piping. Welding.	1/17/2019	1-18-002
2	REPLACEMENT	PIPE & VALVE	SAFETY INJECTION	Replaced valve and piping. Welding.	7/16/2019	1-18-029
3	REPLACEMENT	PIPE	ESSENTIAL COOLING WATER	Replaced piping and fittings. Welding.	3/7/2019	1-19-003
3	REPLACEMENT	SUPPORT	ESSENTIAL COOLING WATER	Removed/Installed pipe support. Welding.	3/7/2019	1-19-004
3	REPLACEMENT	PIPE	ESSENTIAL COOLING WATER	Replaced piping and fitting. Welding.	3/7/2019	1-19-005
3	REPLACEMENT	SUPPORT	ESSENTIAL COOLING WATER	Removed/Installed support. Welding.	3/7/2019	1-19-006
3	REPLACEMENT	PUMP	ESSENTIAL COOLING WATER	Replaced Pump.	2/18/2019	1-19-007

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CLASS	CORRECTIVE MEASURE	ITEM DESCRIPTION	SYSTEM	DESCRIPTION OF WORK	DATE COMPLETED	REPAIR / REPLACEMENT PLAN
3	REPLACEMENT	SUPPORT	ESSENTIAL COOLING WATER	Replaced NF seismic support.	2/18/2019	1-19-008
3	REPLACEMENT	FLANGE	ESSENTIAL COOLING WATER	Replaced flange and returned to WHSE. Weld Cut.	2/25/2019	1-19-009
3	REPLACEMENT	FLANGE	ESSENTIAL COOLING WATER	Replaced flange and returned to WHSE. Weld Cut.	2/25/2019	1-19-010
3	REPLACEMENT	FASTENER	ESSENTIAL COOLING WATER	Replaced fasteners.	2/19/2019	1-19-012
3	REPLACEMENT	FASTENER	ESSENTIAL COOLING WATER	Replaced fasteners.	3/7/2019	1-19-013
3	REPLACEMENT	THERMOWELL	ESSENTIAL COOLING WATER	Replaced Thermowell and SOL. Welding.	2/6/2019	1-19-014
1	REPLACEMENT	VALVE	REACTOR COOLANT	Removal of valve.	3/29/2020	1-19-017
1	REPLACEMENT	VALVE	REACTOR COOLANT	Removal of valve.	3/29/2020	1-19-018
1	REPLACEMENT	VALVE	REACTOR COOLANT	Removal of valve.	3/29/2020	1-19-019
1	REPLACEMENT	VALVE	REACTOR COOLANT	Installed rebuilt valve.	4/6/2020	1-19-020
1	REPLACEMENT	VALVE	REACTOR COOLANT	Installed rebuilt valve.	4/6/2020	1-19-021
1	REPLACEMENT	VALVE	REACTOR COOLANT	Installed rebuilt valve.	4/6/2020	1-19-022
1	REPLACEMENT	FITTING	INCORE INSTRUMENTATION	Replaced fitting at Thimble D-12 and C-8.	4/5/2020	1-19-023
1	REPLACEMENT	FITTING	INCORE INSTRUMENTATION	Replaced fitting and adapter at Thimble P-4.	4/5/2020	1-19-024



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REQUIRED FOR CONTINUED SERVICE

CLASS	CORRECTIVE MEASURE	ITEM DESCRIPTION	SYSTEM	DESCRIPTION OF WORK	DATE COMPLETED	REPAIR / REPLACEMENT PLAN
1	REPLACEMENT	FITTING	INCORE INSTRUMENTATION	Replaced fitting and adapter at Thimble B-3.	4/5/2020	1-19-025
1	REPLACEMENT	VALVE	SAFETY INJECTION	REPLACED DISC, SI0010B.	3/28/2020	1-19-033
1	REPLACEMENT	VALVE	SAFETY INJECTION	REPLACED DISC, SI0010A.	3/29/2020	1-19-034
1	REPLACEMENT	DIAPHRAGM	STEAM GENERATOR	Removed/Installed diaphragm on inspection ports SG-1A. Welding.	4/1/2020	1-19-044
1	REPLACEMENT	HATCH	STEAM GENERATOR	Removed/Installed Hatch to MSA. SG-1B.	4/1/2020	1-19-045
3	REPLACEMENT	VALVE	COMPONENT COOLING	Replaced PSV.	9/25/2019	1-19-046
3	REPLACEMENT	PIPE	DIESEL GENERATOR	Replaced DG Intercooler Piping.	2/7/2020	1-19-049
3	REPLACEMENT	FLANGE	ESSENTIAL COOLING WATER	Replaced downstream EW Flange. Welding.	11/21/2019	1-19-051
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Replaced valve.	2/6/2020	1-20-003
2	REPLACEMENT	FASTENER	DIESEL GENERATOR	Replaced fasteners.	2/10/2020	1-20-004
2	REPLACEMENT	SNUBBER	FEEDWATER	Replaced snubber.	3/27/2020	1-20-010

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