

South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77-183

July 15, 2021 NOC-AE-21003819 10 CFR 50.55a STI: 35187483

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

South Texas Project
Unit 2
Docket No. STN 50-499
Inservice Inspection Summary Report – 2RE21

Attached is the South Texas Project Electric Generating Station Unit 2 summary report for inservice inspections performed prior to and during scheduled refueling outage 2RE21 completed in April 2021. 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 2RE21 Inservice Inspection of Unit 2 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
2RE21
INSERVICE INSPECTION
of
UNIT 2
SOUTH TEXAS PROJECT
ELECTRIC GENERATING STATION



STP NUCLEAR OPERATING COMPANY
Spring 2021

COVER SHEET

2RE21 INSERVICE INSPECTION SUMMARY REPORT

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION, UNIT 2

P.O. BOX 289

WADSWORTH, TEXAS 77483

USNRC DOCKET NO: 50-499

OPERATING LICENSE NO: NPF-80

COMMERCIAL OPERATION DATE: JUNE 19, 1989

Prepared by: Eric Lantz, ISI Program Owner

Reviewed by: Date 6/22/2 (
Clayton Bonnot, Supervisor, Testing Programs

SCOPE

COMPONENT SUPPORTS, WELDS, THERMAL FATIGUE, REPAIR/REPLACEMENT, AND SYSTEM PRESSSURE TESTING INSPECTION PROGRAMS (IWB, IWC, IWD, IWE, IWF)

The examinations summarized in this report were performed in accordance with the 2013 Edition of the ASME Code, Section XI that is applicable to the South Texas Project, Unit 2, fourth ten-year interval (09/25/2020-09/08/2029), first period (09/25/2020-09/24/2023). 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-532-5.

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.

FORM OAR-1 OWNER'S ACTIVITY REPORT (Code Case N-532-5)
Report Nunmber OAR-2RE21
Plant South Texas Project Electric Generating Station
Unit No. 2 Commercial service date June 19, 1989 Refueling outage no. 2RE21 (If applicable)
Current inspection interval IWB, IWC, IWD, IWF - 4 th ; IWE -4 th (1 st , 2 nd , 3 rd , 4 th , other)
Current inspection period IWB, IWC, IWD, IWF – 1 st ; (1 st , 2 nd , 3 rd)
Edition of Section XI applicable to the inspection plan 2013 Edition
Date and revision of inspection plan September 25, 2020 / Revision 10
Edition and Addenda of Section XI applicable to repairs/replacement activities, if different than the inspection plan $\underline{N/A}$
Code Cases used: N-532-5, N-593-2, N-716-1, N-729-6, N-770-5, 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 2RE21 conform to the requirements of Section XI. (Refueling outage number)
Signed Eric Lantz Eric ISI Program Engineer Date: June 30, 2021 (Owner or Owner's Designee, Title)
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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.
Roy A On Commissions NR 12442 Aug Fe 18-001345 Inspector's Senature National Board, State, Province, and Endorsements
Date_09/02/2021

TABLE 1

ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRE EVALUATION FOR CONTINUED SERVICE

2RE21 SPRING 2021

ASME Category	Item Number	Item Description	Evaluation Description
F-A	F1.20C	MS-2001-HL5014 : Main Steam Spring Hangar [2-CS-224000]	Inservice Inspection identified Spring Hangar MS-2001-HL5014 setpoint out of tolerance per procedure. [VTC-2021-016] Corrective Action to perform Evaluation per ASME XI IWF-3122.3. Results determined Acceptable for Service at current setpoint. [21-3514-2] Work Order adjusted Spring Hangar back to original design setpoint. [21-3514-1]
B-D	B3.110	Safety Nozzle to Shell weld PRZ-2-N4C [Summary 2-WD-011000]	Historical: 2RE20 - Inservice Inspection identified an area of interest, requiring evaluation. [UT-2019-031] Analytical Evaluation performed by Westinghouse determined indication is acceptable in accordance with IWB-3132.3 and IWB-3600. (applicable until 2RE22) [LTR-SDA-19-095-P Rev 0] - [STI 34937975] Re-examination scheduled for 2RE21 in accordance with IWB-2420(b) and (c). Current: 2RE21 Examination found flaw did not increase in size. [UT-2021-025] Westinghouse Analytical Evaluation to accept condition for Life of Plant scheduled prior to 2RE22. [CR-19-11865-8]

CLASS	CORRECTIVE MEASURE	ITEM DESCRIPTION	SYSTEM	DESCRIPTION OF WORK	DATE COMPLETED	REPAIR / REPLACMENT PLAN
3	REPLACEMENT	VALVE	AUXILIARY FEEDWATER	Installed new by-pass body.	10/12/2020	2-18-019
2	REPAIR	VALVE	COMPONENT COOLING	Reworked Spare valve.	11/1/2019	2-19-034
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Valve internals replaced.	2/12/2020	2-19-043
3	REPLACEMENT	STRAINER	ESSENTIAL COOLING WATER	Replaced packing fasteners, cover fasteners, back wash arm/shat assembly.	1/24/2020	2-20-003
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Replaced valve.	1/22/2020	2-20-004
3	REPLACEMENT	FLANGE	ESSENTIAL COOLING WATER	Replaced flange.	2/26/2020	2-20-005
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Replace valve.	10/20/2020	2-20-007
1	REPLACEMENT	SEAL PACKAGE	REACTOR COOLANT	Replaced Seal Pkg	04/09/2021	2-20-009
2	REPLACEMENT	VALVE	CHEMICAL VOLUME CONTROL	Plug replaced.	4/4/2021	2-20-012
2	REPLACEMENT	VALVE	MAIN STEAM	Plug replaced.	4/8/2021	2-20-017
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Replace valve.	2/27/2021	2-20-019
2	REPAIR	VALVE	CONTAINMENT HVAC	Refurbished valve and return to warehouse.	04/12/2021	2-20-021
1	REPLACEMENT	VALVE	REACTOR COOLANT	Removed Old Valve.	4/3/2021	2-20-026

CLASS	CORRECTIVE MEASURE	ITEM DESCRIPTION	SYSTEM	DESCRIPTION OF WORK	DATE COMPLETED	REPAIR / REPLACMENT PLAN
1	REPLACEMENT	VALVE	REACTOR COOLANT	Installed New Valve.	4/4/2021	2-20-027
3	REPAIR	THERMOWELL	ESSENTIAL COOLING WATER	Thermowell not replaced. Welding repair performed.	10/23/2020	2-20-030
3	REPLACEMENT	PIPE & FLANGE	ESSENTIAL COOLING WATER	Spool replaced.	10/21/2020	2-20-031
3	REPLACEMENT	THERMOWELL	ESSENTIAL COOLING WATER	Thermowell replaced.	10/21/2020	2-20-032
3	REPAIR	FLANGE	ESSENTIAL COOLING WATER	Removed flange from damaged spool.	2/9/2021	2-20-035
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Replaced valve with blind flange.	2/27/2021	2-20-036
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Replaced valve with blind flange.	2/27/2021	2-20-037
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Replaced valve with pipe spool.	2/27/2021	2-20-038
3	REPLACEMENT	PIPE	ESSENTIAL COOLING WATER	Replaced piping spool.	2/27/2021	2-20-039
3	REPLACEMENT	PIPE	ESSENTIAL COOLING WATER	Replaced tee with straight piping.	2/27/2021	2-20-040
3	REPLACEMENT	PIPE	ESSENTIAL COOLING WATER	Piping Spool Replaced.	1/29/2021	2-20-041
3	REPLACEMENT	FLANGE	ESSENTIAL COOLING WATER	Replaced Flange.	2/27/2021	2-20-042
3	REPLACEMENT	TRANSMITTER	CHEMICAL VOLUME CONTROL	Replaced transmitter.	12/6/2020	2-20-043
3	REPLACEMENT	VALVE	DIESEL OIL	Replaced valve.	1/29/2021	2-20-044
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Replaced valve.	2/22/2021	2-20-045
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Replaced valve.	2/27/2021	2-20-046

CLASS	CORRECTIVE MEASURE	ITEM DESCRIPTION	SYSTEM	DESCRIPTION OF WORK	DATE COMPLETED	REPAIR / REPLACMENT PLAN
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Replaced valve.	2/27/2021	2-20-047
3	REPLACEMENT	PIPE & FLANGE	ESSENTIAL COOLING WATER	Replaced spools, flanges, and fasteners.	2/27/2021	2-21-002
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Valve replaced with piping spool.	2/27/2021	2-21-003
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Replace valve.	2/27/2021	2-21-005
3	REPLACEMENT	PIPE	ESSENTIAL COOLING WATER	Replaced piping spool.	2/27/2021	2-21-006
3	REPLACEMENT	PIPE	ESSENTIAL COOLING WATER	Replaced piping spool.	2/27/2021	2-21-007
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Replaced Valve Seat. Machined Valve Plates.	2/11/2021	2-21-010
3	REPLACEMENT	VALVE	ESSENTIAL COOLING WATER	Replaced valve.	01/27/2021.	2-21-011
3	REPAIR	SPRING CAN	FEEDWATER	Spring Can Support adjustment.	4/9/2021	2-21-014
3	REPAIR	SNUBBER	FEEDWATER	Feed Water Support/Snubber removed.	4/9/2021	2-21-015

CLASS	CORRECTIVE MEASURE	ITEM DESCRIPTION	SYSTEM	DESCRIPTION OF WORK	DATE COMPLETED	REPAIR / REPLACMENT PLAN
2	REPLACEMENT	VALVE	COMPONENT COOLING	Replaced valve with new one.	3/11/2021	2-21-017
1	REPLACEMENT	SNUBBER	REACTOR COOLANT	Replaced Snubber.	4/7/2021	2-21-022
2	REPLACEMENT	SNUBBER	MAIN STEAM	Replaced Snubber.	4/10/2021	2-21-023
2	REPLACEMENT	VALVE	CONTAINMENT HVAC	Replaced valve seat.	4/11/2021	2-21-024