



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

June 18, 2019

Mr. Sonny Dean
Site Vice President
Southern Nuclear Operating Company, Inc.
Edwin I. Hatch Nuclear Plant
11028 Hatch Parkway North
Baxley, GA 31513

**SUBJECT: HATCH UNITS 1, 2 – NRC TRIENNIAL FIRE PROTECTION INSPECTION
REPORT 05000321/2019010 AND 05000366/2019010**

Dear Mr. Vehec:

On May 16, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Hatch Units 1, 2 and 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.

The NRC inspectors did not identify any finding or violation of more than minor significance.

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 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Scott M. Shaeffer, Chief
Engineering Branch 2
Division of Reactor Safety

Docket Nos.: 05000321 and 05000366
License Nos.: DPR-57 and NPF-5

Enclosure:
Inspection Report 05000321/2019010
and 05000366/2019010

cc: Distribution via ListServ

SUBJECT: HATCH UNITS 1, 2 – TRIENNIAL FIRE PROTECTION INSPECTION REPORT
05000321/2019010 AND 05000366/2019010

DISTRIBUTION:

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 ADAMS: Yes ACCESSION NUMBER **ML19171A206** SUNSI REVIEW COMPLETE FORM 665 ATTACHED

OFFICE	RII/DRS/EB2	RII/DRS/EB2	RII/DRS/EB2	RII/DRS/EB2	RII/DRS/EB2	RII/DRP	RII/DRS/EB2
SIGNATURE	RA	RA	RA	RA	RA	RA	RA
NAME	PBraaten	JDymek	LJones	DStrickland	SShaeffer	A. Blamey	SShaeffer
DATE	6/13/2019	6/15/2019	6/ /2019	6/18/2019	6/18 /2019	618/2019	6/ 18/2019
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

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U.S. NUCLEAR REGULATORY COMMISSION

Inspection Report

Docket Number(s): 05000321 and 05000366

License Number(s): DPR-57 and NPF-5

Report Number(s): 05000321/2019010 and 05000366/2019010

Enterprise Identifier: I-2019-010-0037

Licensee: Southern Nuclear Operating Company, Inc.

Facility: Hatch, Units 1 and 2

Location: Baxley, GA

Inspection Dates: April 29, 2019 to May 17, 2019

Inspectors: P. Braaten, Reactor Inspector
J. Dymek, Reactor Inspector
L. Jones, Senior Reactor Inspector
D. Strickland, Reactor Inspector

Approved By: Scott M. Shaeffer, Chief
Engineering Branch 2
Division of Reactor Safety

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a Triennial Fire Protection inspection at Hatch 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. Findings and violations being considered in the NRC's assessment are summarized in the table below.

List of Findings and Violations

No findings were identified.

INSPECTION SCOPE

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.

REACTOR SAFETY

71111.05T - Fire Protection

B.5.b Inspection Activities (IP Section 02.03) (1 Sample)

The inspectors evaluated the following B.5.b Mitigating Strategies:

Make-Up to the Spent Fuel Pool

Fire Protection Inspection Requirements (IP Section 02.02) (4 Samples)

The inspectors evaluated fire protection program implementation in the following selected areas and/or fire zones, including analyzed electrical circuits:

- (1) Fire Area 1412, DG 1A SWGR Room 1E [Elevation 130]
- (2) Fire Area 0014K, Control Building, North and South Corridors [Elevation 130]
- (3) Fire Area 1016, W 600V SWGR Room 1C [Elevation 130]
- (4) Fire Area 24A, Unit 1 Cable Spreading Rm [Elevation 147]

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

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

- On May 16, 2019, the inspector presented the Triennial Fire Protection inspection results to Tom Vehc and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.05T	Calculations	557V.1B.6	E. I. Hatch Units 1 and 2, Control Building and Reactor Building Peak Temperatures During Station Blackout	Rev. 0
		BH2-M-0578	HNP-1,2 Control Building Heat-up due to Station Blackout (SBO Temperature Profile)	Rev. 2
		SENH-15-009	FA 0014 Compliance Assessment Scenario	03/12/2018
		SENH-15-009	FA 1016 Compliance Assessment scenario	02/14/2018
		SENH-15-009	FA 1412 Compliance Assessment Scenario	02/16/2018
	Corrective Action Documents	10294125	Several Unit 2 Gaitronics Units Discovered not functional During PA UPS FT	11/03/2016
		10306120	Gaitronics System At The Intake Is Not Functioning	12/07/2016
		10325083	Remote Shutdown Panel Light (Procedure Enhancement)	01/31/2017
		10343412	Broken Phones in Case of Emergency	03/16/2017
		10417185	Unsatisfactory Fire Radio Checks	10/08/2017
		10439543	Ascom Phones Not Working Properly In Parts of Control	12/13/2017
		10548102	2018 TFPI FASA Identified	10/23/2018
		10575206	Fire Main Rupture	01/26/2019
		10581729	Underground Fire Protection Piping System Leaks	02/12/2019
		1060074	Fire Piping Break (Switchyard)	04/11/2019
		10606354	Leaking Isolation Valve	04/30/2019
		275606	Fire Protection Yard Piping Failure	02/29/2019
	Corrective Action Documents Resulting from Inspection	10597865	Lube Oil Storage Tank Room is flooded	04/03/2019
		10606267	2019 NRC TPFPI Inspection	04/30/2019
		10606354	Leaking isolation valve	04/30/2019
		10606415	Compensatory Fire watch personnel unaware of full duties	04/30/2019
		10610851	TFPI NRC Inspection	05/15/2019
		10610984	A potential NFPA 72E code compliance deviation has been identified	05/15/2019
	Drawings	10611136	600VAC Power Cables Identified in Cable Spreading Room	05/16/2019
		A-43965, Sheet 24A	Edwin I Hatch Nuclear Plant-Unit 1 & 2 Pre-Fire Plan General Area and Corridors Control Building Elevation 130'-0"	Rev. 4

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		A-43965, Sheet 24B	Edwin I Hatch Nuclear Plant-Unit 1 & 2 Pre-Fire Plan General Area and Corridors Control Building Elevation 130'-0"	Rev. 9
		A-43965, Sheet 28A	Edwin I Hatch Nuclear Plant-Unit 1 Pre-Fire Plan West 600V Switchgear Room 1C Control Building Elevation 130'-0"	Rev. 5
		A-43965, Sheet 28B	Edwin I Hatch Nuclear Plant-Unit 1 Pre-Fire Plan West 600V Switchgear Room 1C Control Building Elevation 130'-0"	Rev. 8
		A-43965, Sheet 44A	Edwin I Hatch Nuclear Plant-Unit 1 & 2 Pre-Fire Plan Cable Spreading Room 1C Control Building Elevation 147'-0"	Rev. 4
		A-43965, Sheet 44B	Edwin I Hatch Nuclear Plant-Unit 1 & 2 Pre-Fire Plan Cable Spreading Room 1C Control Building Elevation 147'-0"	Rev. 6
		A-43966, Sheet 17A	Edwin I Hatch Nuclear Plant-Unit 1 Pre-Fire Plan Diesel Generator Building Switchgear Room 1E	Rev. 2
		A-43966, Sheet 17B	Edwin I Hatch Nuclear Plant-Unit 1 Pre-Fire Plan Diesel Generator Building Switchgear Room 1E	Rev. 3
		B-13011, Sheet 17	Penetration List Under Control Room Panels	02/15/1972
		B-19631, Sheet 296	Edwin I. Hatch Nuclear Plant-Unit No. 2 Penetration Seals Type, Number and As-Built Location	Rev. 30
		B-19631, Sheet 306	Edwin I. Hatch Nuclear Plant-Unit No. 2, Penetration Seals Type, Number and As-Built Location	Rev. 5
		B-23276, Sheet 43	Edwin I. Hatch Nuclear Plant-Unit No. 2, Penetration Seals Type, Number and As-Built Location	Rev. 3
		H-11033, Sheet 1	Edwin I. Hatch Nuclear Plant Unit No. 1 Fire Protection – P & ID Pumphouse Layout	Rev. 53
		H-11151	Edwin I. Hatch Nuclear Plant Unit No. 1 Piping-Fire Protection Pump House Plan and Elevation	Rev. 13
		H-11153	Edwin I. Hatch Nuclear Plant Unit No. 1 Piping-Fire Protection Pump House Section and Details	Rev. 3
		H-11816	Edwin I. Hatch Nuclear Plant Unit No. 1-2, Fire Hazards Analysis Control Building E. 147'-0"	Rev. 2
		H-11884 Sheet 1	Edwin I. Hatch Nuclear Plant Unit No. 1, Equipment Layout Drawings Fire Detection/Fire Suppression Multiplex System 1Z43 Control Building Elevation 147'-0"	Rev. 2

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		H-12631	Edwin I. Hatch Nuclear Plant Unit No. 1 Architectural Control Building-Detailed Floor Plan at El. 147'-0"	Rev. 11
		H-13350	Edwin I. Hatch Nuclear Plant Unit No. 1 Master Single Line Diagram	Rev. 29.0
		H-13395	Edwin I. Hatch Nuclear Plant Unit No. 1 Elementary Diagram Diesel Generator !A Heating and Ventilation	Rev. 20
		H-14836	Edwin I. Hatch Plant Unit No. 1 Conduit and Grounding Penetrations Under Control Room Panels Plan- El - 164'-0"	
		H-14837, Sheet 1	Edwin I. Hatch Plant Unit No. 1 Conduit and Grounding Spreading Room Exposed Conduit Plan – El. 147'-0"	
		H-16329	Edwin I. Hatch Nuclear Plant Unit No. 1 R.H.R System P&ID SHT. 1	Rev. 71.0
		H-16334	Edwin I. Hatch Nuclear Plant No. 1 RCIC System P& ID Sheet No. 1	Rev. 44.0
		H-16335	Edwin I. Hatch Nuclear Plant Unit No. 1 RCIC System P&ID Sheet No. 2	Rev. 29
		H-17163	Edwin I. Hatch Nuclear Plant Unit No. 1 High Pressure Coolant System E41 Elementary Diagram Sheet 7	Rev. 26.0
		H-17164	Edwin I. Hatch Nuclear Plant Unit No. 1 High Pressure Coolant Injection SYS. E41 Elementary Diagram Sheet 8 of 11	Rev. 33.0
		H-17774	Edwin I. Hatch Nuclear Plant Unit No. 1 Residual Heat Removal System E11 Elementary Diagram Sheet 15 of 25	Rev. 25.0
		H-19614	Edwin I. Hatch Nuclear Plant Unit No. 1 Remote Shutdown System (C82) Sheet 7 of 9	Rev. 17.0
		H-23350	Edwin I. Hatch Nuclear Plant Unit No. 2 Master Single Line Diagram	Rev. 15.0
		H-40178	Edwin I. Hatch Nuclear Plant Unit No. 1 Appendix "R" Raceways Cont. BLDG. EL. 130' - 0" TA-TE & T10-T13	Rev. 15.0
		H-40433	Edwin I. Hatch Nuclear Plant Unit No. 1 Fire Protection Piping Cable Spreading Room Sprinkler System, Unit 1 East	Rev. 1
		H-40434	Edwin I. Hatch Nuclear Plant Unit No. 1 Fire Protection Piping Cable Spreading Room Sprinkler System, Unit 1 East	
		H-41497	Edwin I. Hatch Nuclear Plant Unit No. 1 Reactor BLDG. EL.	Rev. 2.0

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			130' - 0" Northeast Emergency Lighting	
		H-42102	Edwin I. Hatch Nuclear Plant Unit No. 2 Fire Protection Protectowire-Plan Control Building El. 130'-0" Columns 1-10 to T-14 / TA to TF	06/29/1989
		H-42103	Edwin I. Hatch Nuclear Plant Unit No. 2 Fire Protection Protectowire-Plan Control Building El. 130'-0" Columns 1-10 to T-14 / TA to TF	06/29/1989
		PSI Drawing 3074 Sheet 1	Access Door Location 4 Fire Barrier Elevation 130'-0" Control Building 1 Hour Fire Rated Promat Assembly	07/14/1998
		S-11185	Fire Pump Engine Driven 550 Gallon Fuel Tank Outline	06/23/1969
		S-13699	1000 Gallon Fuel Oil Day Tank	06/01/1971
		S-51118	Fire Protection System Mechanical Outline 20 Zone 9090 Detection	08/15/1985
		S-54873B Sheet 1 & 2	Promatec Technologies Inc. Unit 2 Control Building Corridor Elevation 130'-0" Control Building 1-hour Fire Rated Promat Assembly	12/15/1998
	Engineering Changes	CCP SNC933694	Install 120v Power Receptacle	Rev. 2
		DCP SNC937823	NFPA 805 Project Fusible Links	Rev. 1
	Engineering Evaluations		Risk Based Analysis, Unit No. 2 CSR Thermoset Cable Percentage Analysis	04/22/2016
		S-52429	BISCO Fire Rated Penetration Seal Details and Cross Reference Matrix for Edwin I. Hatch Nuclear Plant	04/1990
		S-52439	Fire Rated Penetration Seal Qualification Data SWRI Project No. 01-8821-028B	08/16/1990
		S-52483	Hatch Unit 1, 2 Fire Rated Penetration Seal Qualification Data-Variou Sealing Products and Configurations	04/17/1991
		SMNH-16-026	NFPA 13 Code Compliance Review (Sprinkler Systems)	03/20/2018
	Miscellaneous		NANTel Generic Plant Access Training	12/2018
			Technical Evaluation of Promatec Technologies, 1 & 3 Hour Fire Barriers Installed at Plant Hatch, Baxley GA	09/16/1998
		ENG-0246	Fire Fighting Equipment Inspection Inventory	Rev. 24.3
		Mann Wireless, LTD.	Edwin I. Hatch Nuclear Plant In-Building Enhancement Project Baxley, Georgia	06/26/2006
		NL-15-2023	Edwin I. Hatch Nuclear Plant - Units 1 and 2, Commitment to	12/23/2015

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Maintain Severe Accident Management Guidelines	
	Procedures	20AC-IRS-001-0	Control of Portable RF Transmitting Devices	Rev. 3.0
		34-AB-X43-001-1	Fire Procedure	Rev. 16.0
		34-GO-OPS-031.1	ISI Pump and Valve Operability Test	Rev. 21.30
		34IT-EOP-001-0	EOP Equipment Checks	07/15/2018
		34IT-R25-001-0	Control Room Emergency Lighting Supply Weekly Test	Rev. 1.10
		34SO-X43-001-1	Fire Pumps Operating Procedure	Rev. 6.5
		34SV-E51-005-2	RCIC OPS From RSDP	03/06/2018
		42SV-FPX-003-0	Emergency Lighting Surveillance	Rev. 16.6
		42SV-FPX-008-0	Fire Protection Water Suppression System Flow Test	Rev. 4.2
		42SV-FPX-013-0	Rolling Fire Door Surveillance	Rev. 4.1
		51GMM-FPX-004-0	Installation and Repair of Rolling Fire Doors	Rev. 1.4
		NMP-ES-035-007	Fleet Fire Watch Instruction	Rev. 5
		NMP-ES-035-007-F01	Hourly Fire Watch	Rev. 4
		NMP-ES-035-007-F02	Continuous Fire Watch	Rev. 2.1
		NMP-OS-007-007	Rounds	Rev. 4
		NMP-OS-019-010	Emergency Management Guideline (EMG)	Rev. 1.1
		NMP-OS-019-268	Hatch Unit 1 SIG-8, Spent Fuel Pool Makeup	Rev. 3.2
		NMP-OS-019-288	Hatch Unit 2 SIG-8, Spent Fuel Pool Makeup	Rev. 2.2
	Work Orders	SNC218170	DG Low Pressure CO2 System Surveillance	
		SNC602101	Investigate / Repair Valve that is Hard to Operate	
		SNC852429	Valve Leaking from Packing	
		SNC884460	Emergency Lighting Surveillance Group 2	02/05/2018
		SNC904439	Packing Leak	