UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

December 10, 2019

Mr. Bryan C. Hanson
Senior Vice President, Exelon Generation Company, LLC
President and Chief Nuclear Officer, Exelon Nuclear
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: JAMES A. FITZPATRICK NUCLEAR POWER PLANT – TEMPORARY INSTRUCTION 2515/193 INSPECTION REPORT 05000333/2019013

Dear Mr. Hanson:

On November 7, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at James A. FitzPatrick Nuclear Power Plant and discussed the results of this inspection with Mr. Chris Adner, Operations Director, and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

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,

/RA/

Marc S. Ferdas, Team Leader
Technical Support and Administrative Team
Division of Reactor Projects

Docket No. 05000333
License No. DPR-59

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV®

SUBJECT: JAMES A. FITZPATRICK NUCLEAR POWER PLANT – TEMPORARY INSTRUCTION 2515/193 INSPECTION REPORT 05000333/2019013 DATED DECEMBER 10, 2019

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U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report

Docket Number:	05000333
License Number:	DPR-59
Report Number:	05000333/2019013
Enterprise Identifier:	I-2019-013-0019
Licensee:	Exelon Generation Company, LLC
Facility:	James A. FitzPatrick Nuclear Power Plant
Location:	Oswego, NY
Inspection Dates:	November 4, 2019 to November 8, 2019
Inspectors:	F. Arner, Senior Reactor Analyst T. Daun, Resident Inspector
Approved By:	Marc S. Ferdas, Team Leader Technical Support and Administrative Team Division of Reactor Projects

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a Temporary Instruction 2515/193 inspection at James A. FitzPatrick Nuclear Power Plant, 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

No findings or violations of more than minor significance were identified.

Additional Tracking Items

None.

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.

OTHER ACTIVITIES – TEMPORARY INSTRUCTIONS, INFREQUENT AND ABNORMAL

2515/193 - Inspection of the Implementation of EA-13-109: Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation under Severe Accident Conditions

Inspection of the Implementation of EA-13-109: Order Modifying Licenses with Regard to Reliable Hardened Containment Vents Capable of Operation under Severe Accident Conditions (1 Sample)

(1) Based on samples selected for review, the inspectors verified that Exelon implemented appropriate elements of the reliable hardened containment wetwell vent as described in the plant specific submittal and the associated safety evaluation (ADAMS Accession No. ML18360A635) and NRC Order EA-13-109 Phase 1, "Reliable, Severe Accident Capable Wetwell Venting System" (ADAMS Accession No. ML13143A321).

The inspectors verified that Exelon:

- installed the hardened containment vent system (HCVS) to meet the performance objectives outlined in Section A.1.1 of Attachment 2 to the Order EA-13-109;
- installed the HCVS system with the design features specified in Section A.1.2 of Attachment 2 to the Order EA-13-109;
- designed the HCVS to meet the quality standards described in Section A.2 of Attachment 2 to the Order EA-13-109;
- developed and implemented adequate maintenance and testing of HCVS equipment to ensure their availability and capability;
- developed and issued procedures to safely operate the HCVS using normal power supplies, during extended loss of alternating current power (ELAP), and a postulated severe accident scenario, and integrated the procedures into existing plant procedures; and
- trained their staff to assure personnel can proficiently operate the HCVS.

Based on samples selected for review, the inspectors verified that Exelon implemented appropriate elements of the reliable wetwell venting strategy as described in the plant specific submittal and the associated safety evaluation (ADAMS Accession No. ML18360A635) and NRC Order EA-13-109 Phase 2,

"Reliable, Severe Accident Capable Drywell (or alternative strategy) Venting System" (ADAMS Accession No. ML13143A321).

The inspectors verified that Exelon:

- developed a strategy making it unlikely that Exelon would need to vent from the containment drywell;
- implemented the severe accident water addition (SAWA)/severe accident water management (SAWM) systems as defined and fulfilled functional requirements for installed and portable equipment;
- installed and/or identified the previously installed instrumentation necessary to implement SAWM;
- developed and implemented adequate maintenance and testing of SAWA/SAWM equipment to ensure availability and capability;
- developed and issued procedures to safely operate the SAWA/SAWM during an ELAP and during postulated severe accident scenario, and integrated their procedures into their existing plant procedures such that entry into and exiting from the procedures are clear when using existing plant procedures; and
- trained their staff to assure personnel can proficiently operate the HCVS during an ELAP and accident scenario.

The inspectors verified that any noncompliance with requirements, and standards identified during the inspection, were entered into Exelon's corrective action program.

INSPECTION RESULTS

No findings were identified.

EXIT MEETINGS AND DEBRIEFS

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

- On November 7, 2019, the inspectors presented the Temporary Instruction 2515/193 inspection results to Mr. Chris Adner, Operations Director, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
2515/193	Calculations	JAF-CALC-15-00013	Hardened Containment Vent System: N2 Bottle and Venting Capacity	0
		JAF-CALC-15-00031	FLEX Strategy – Portable Generator System Sizing	0
		JAF-CALC-17-00104	HCVS Phase 2 SAWA Hydraulic Analysis	0
	Corrective Action Documents	04220576		
		04288408		
		3992547		
		4084456		
		4084578		
		4088244		
		4091301		
		4091760		
		4091828		
		4109111		
		4120276		
		4126448		
		4159500		
		CR-JAF-2017-01155		
	Corrective Action Documents Resulting from Inspection	04295041		
		04295115		
		4295114		
	Drawings	FB-48A	Flow Diagram Fire Protection Water Piping System 76	34
		FB-48B	Site Utilities Fire Protection Water Supply Flow Diagram	11
		FM-18B	Flow Diagram Drywell Inerting CAD	45
		FM-20A	Flow Diagram Residual Heat Removal System 10	72
		FM-20B	Flow Diagram Residual Heat Removal System 10	72
		FM-39C	Flow Diagram Instrument Air Reactor Building and Drywell	33

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			System 39	
		SK-EC620605-01	Process Flow Diagram Severe Accident Water Addition (SAWA) Severe Accident Water Management (SAWM)	0
	Procedures	AOP-49	Station Blackout	25
		CC-JF-118-1004	HVCS Final Integrated Plan	0
		CC-JF-118-101	Beyond Design Basis Administrative Controls	2
		EOP-2	RPV Control	11
		ESP-37.002	HCVS Manual Valve Panel Valve Testing	0
		FSG-001	Initial Assessment and FLEX Equipment Staging	6
		FSG-003	Alternate Reactor Vessel Cooling	6
		FSG-004	Alternate Containment Cooling	2
		FSG-101	Beyond Design Basis External Events EP Communications	4
		FSG-ELAP	Extended Loss of AC Power (ELAP)	6
		SAOG-1	RPV and Primary Containment Injection	0
		SAOG-2	RPV, Containment, and Radioactivity Release Control	4
		SPEC-15-00001	Hardened Containment Vent System: Instrumentation and Batteries	0
		ST-76AD	East Diesel Fire Pump 76 P-4 Performance Test	2-15-19
	Work Orders	336844		
		374741		
		4666902		
		4935135		
		52336966		
		82619359		