



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

January 25, 2018

LICENSEE: Entergy Operations, Inc.

FACILITY: Waterford Steam Electric Station, Unit 3

SUBJECT: SUMMARY OF NOVEMBER 16, 2017, PUBLIC MEETING WITH ENTERGY OPERATIONS, INC. REGARDING PLANNED LICENSE AMENDMENT REQUEST TO REVISE THE WATERFORD STEAM ELECTRIC STATION, UNIT 3 TECHNICAL SPECIFICATION 3/4.3.2, TABLE 4.3-2 (EPID L-2017-LRM-0051)

On November 16, 2017, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Entergy Operation, Inc. (Entergy, the licensee). The purpose of the meeting was to discuss with NRC staff a planned license amendment request (LAR) to revise Technical Specification (TS) 3/4.3.2, Table 4.3-2, "Engineered Safety Features Actuation System Instrumentation [ESFAS] Surveillance Requirements," for Waterford Steam Electric Station, Unit 3 (Waterford 3). The meeting notice and agenda, dated November 2, 2017, is available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML17318A139. The licensee provided an initial slide presentation, which is available in ADAMS at Accession No. ML17318A123. A list of attendees at the meeting is also enclosed to this meeting summary.

During its presentation, the licensee stated that the current configurations of the main steam isolation signal (MSIS) and containment spray actuation signal (CSAS) relay circuits represent an adverse condition. Specifically, the circuit incorporates a single-point vulnerability such that if the circuit were to be tested at power, a single failure in the relay circuit may inadvertently actuate a spurious trip of the reactor. To reduce the potential for a spurious trip, the licensee was originally exempted from testing the circuit at power.

The licensee indicated that they plan to install a trip-hardening modification of the circuit, to be performed pursuant to Section 50.59 of Title 10 of the *Code of Federal Regulations* (10 CFR), "Changes, tests, and experiments," that would alter the circuit logic from one-out-of-one logic to parallel-two-out-of-two logic. The modification would remove the single-point vulnerability adverse condition and allow the MSIS and CSAS circuits to be tested quarterly, at power, with a reduced probability of actuating a spurious trip during testing. The licensee demonstrated the operation of the planned parallel-two-out-of-two logic and the function of light-emitting-diode (LED) indicator lights to be utilized during testing.

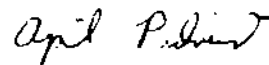
The licensee also presented circuit diagrams of the proposed design of both MSIS and CSAS ESFAS systems. The licensee stated that the new configuration will comply with Regulatory Guide 1.22, "Periodic Testing of Protection System Actuation Functions" (ADAMS Accession No. ML083300530). The NRC staff asked how many new relays were to be added for the MSIS valve actuation; the licensee responded that three new relays would be added to the circuitry, for a total of six relays. The staff also inquired whether only one test button would be used to

test the function of the LED indicator lights before performing the relay test. The licensee confirmed that one button would be used to test all four indicator lights.

The licensee described how the planned LAR will request to revise Note 3 of TS Table 4.3-2 to remove the exemption from testing at power for the affected MSIS and CSAS relays, and provided the planned markup for the affected TS pages. The NRC staff requested that the LAR submittal include the current baseline frequency of the current surveillance for the affected relays.

The licensee stated that the planned LAR is scheduled to be submitted by early December 2017. No regulatory decisions were reached at this meeting. No member of the public provided comments to the NRC staff after the business portion of the meeting and, thus, no Public Meeting Feedback forms were received.

Please direct any inquiries to me at 301-415-1390, or at [April.Pulvirenti@nrc.gov](mailto:April.Pulvirenti@nrc.gov).



April L. Pulvirenti, Project Manager  
Plant Licensing Branch IV  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-382

Enclosure:  
List of Attendees

cc: Listserv

LIST OF ATTENDEES

November 16, 2017, MEETING WITH ENTERGY OPERATIONS, INC.

REGARDING NEUTRON FLUENCE CALCULATION METHOD

WATERFORD STEAM ELECTRIC STATION, UNIT 3

Entergy Operations, Inc

Miguel Barreto

John Jarrell

Jason Laque

Paul Stanton

William Steelman

Maria Zamber

DP Engineering

Robert Finkenaur

U.S. Nuclear Regulatory Commission

Gursharan Singh

Pete Snyder

Robert Pascarelli

April Pulvirenti

Public

None

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**ADAMS Accession No.: ML18005A099**

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NAME	APuvirenti	PBlechman	RPascarelli	APuvirenti
DATE	01/16/18	01/08/18	01/18/18	01/25/18

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