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

August 13, 2019

LICENSEE: Florida Power & Light Company

FACILITY: St. Lucie Plant, Unit No. 2

SUBJECT: SUMMARY OF AUGUST 9, 2019, TELECONFERENCE WITH FLORIDA POWER & LIGHT COMPANY REGARDING VERBAL AUTHORIZATION OF REQUEST FOR ALTERNATIVE REPAIR OF THE 2B BORIC ACID MAKEUP PUMP (EPID L-2019-LLR-0074)

On August 9, 2019, the U.S. Nuclear Regulatory Commission (NRC) staff held a teleconference with representatives of Florida Power & Light Company (FPL, the licensee). The purpose of the call was to discuss FPL's emergent request for an alternative to certain requirements of the American Society of Mechanical Engineers Boiler & Pressure Vessel Code (ASME Code), Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," for St. Lucie Plant, Unit No. 2 (St. Lucie 2).

On August 6, 2019, a boric acid followup walkdown was performed, and dry boric acid residue was found at a previously identified and programmatically tracked location on the 2B boric acid makeup pump casing. A dye penetrant examination was performed with inconclusive results. No indications were identified; however, water weepage was observed through the developer in the area of the residue. To further investigate, the licensee ran the pump for 1 hour, after which a 1/32-inch diameter deposit of boric acid was visually identified in the same area. As a result, the licensee declared the pump inoperable due to evidence of through-wall leakage.

By letter dated August 9, 2019 (Agencywide Documents Access and Management System Accession No. ML19221B307), FPL submitted Relief Request RR-16 in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(z)(2), to propose an alternative to certain requirements in the ASME Code, Section XI, on the basis that complying with ASME Code Section XI would result in hardship or unusual difficulty, without a compensating increase in the level of quality and safety. Specifically, the licensee proposed to (1) observe leakage weekly and quarterly, and (2) perform visual examination and ultrasonic thickness measurement of the pump casing around the pin hole every 30 days.

The NRC staff reviewed the licensee's submittal and determined that the proposed alternative provides reasonable assurance that structural integrity of the "B" pump and its intended safety function will be maintained until the "A" pump is restored, the allowable leak rate exceeds 8 drops per minute, flaw characteristics are changed, or December 2020, whichever occurs first. During the call with the licensee at 1:30 p.m. EST on August 9, 2019, the NRC staff verbally authorized FPL to use Relief Request RR-16 for St. Lucie 2 in accordance with the regulations

at 10 CFR 50.55a(z)(2). Participants in the phone call are listed below, and the script used for the verbal authorization is enclosed.

Name	Organization
A. Buford	NRC
R. Davis	NRC
S. Roberts	NRC
U. Shoop	NRC
J. Tsao	NRC
M. Wentzel	NRC
B. Belts	FPL
S. Boggs	FPL
S. Catron	FPL
K. Frehafer	FPL
W. Godes	FPL
M. Jones	FPL
K. Paez	FPL
T. Ruiz	FPL
D. Shepherd	FPL

Please direct any inquiries to me at 301-415-6459 or Michael.Wentzel@nrc.gov.

/RA/

Michael J. Wentzel, Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-387

Enclosure:
Verbal Authorization

cc: Listserv

SUBJECT: SUMMARY OF AUGUST 9, 2019, TELECONFERENCE WITH FLORIDA POWER & LIGHT COMPANY REGARDING VERBAL AUTHORIZATION OF REQUEST FOR ALTERNATIVE REPAIR OF THE 2B BORIC ACID MAKEUP PUMP (EPID L-2019-LLR-0074) DATED AUGUST 13, 2019

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SRoberts, R-II

ADAMS Accession No.: ML19221B674 ***by e-mail**

OFFICE	NRR/DORL/LPL2-2/PM	NRR/DORL/LPL2-2/LA	NRR/DMLR/MHPB/BC(A)*
NAME	MWentzel	LRonewicz	ABuford
DATE	08/12/2019	08/09/2019	08/12/2019
OFFICE	NRR/DMLR/LPL2-2/BC(A)	NRR/DORL/LPL2-2/PM	
NAME	UShoop	MWentzel	
DATE	08/12/2019	08/13/2019	

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VERBAL AUTHORIZATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELIEF REQUEST RR-16

ALTERNATE REPAIR OF "B" BORIC ACID MAKEUP PUMP

ST. LUCIE PLANT, UNIT NO. 2

FLORIDA POWER & LIGHT COMPANY

DOCKET NO. 50-389

Technical Evaluation Read by Angela Buford, Acting Chief of the Piping and Head Penetrations Branch, Office of Nuclear Reactor Regulation

By letter dated August 9, 2019 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19221B307), Florida Power & Light Company requested relief from certain requirements of the American Society of Mechanical Engineers Boiler & Pressure Vessel Code (ASME Code), Section XI, IWB-3142, at St. Lucie Plant, Unit No. 2.

Pursuant to Title 10 of the *Code of Federal Regulations* (CFR) 50.55a(z)(2), the licensee submitted Relief Request RR-16, proposing an alternate repair of the degraded "B" boric acid makeup pump on the basis that complying with ASME Code, Section XI, would result in hardship or unusual difficulty, without a compensating increase in the level of quality and safety.

On August 6, 2019, the licensee identified leakage from the casing of the "A" and "B" boric acid makeup pumps. The licensee detected a 1/32 inch round pin hole on the "B" pump. The proposed relief request is applicable only to the "B" boric acid makeup pump. In lieu of repairing or replacing the "B" pump, the licensee proposed the following alternatives to support structural integrity of the "B" pump. The licensee proposed to (1) observe leakage weekly and quarterly, and (2) perform visual examination and ultrasonic thickness measurement of the pump casing around the pin hole every 30 days. The licensee stated that if the leak rate exceeds 8 drops per minute or the flaw characteristics changes, the relief request is no longer valid.

The NRC staff determines that: (1) the current leakage and pin hole size are small. If the leak rate increases to 8 drops per minute, the relief request becomes invalid. The leak rate limit will protect structural integrity of the pump; (2) the "B" pump operates occasionally (it operates for 30 minutes weekly to support chemistry sampling and a 15-minute inservice testing quarterly); (3) the "B" pump does not leak if it is not being operated; (4) the "B" pump is functional albeit it leaks; (5) the licensee stated that failure of the pump results in no impact to the plant's probabilistic risk assessment model; and (6) there is no flooding concern with the leaking "B" pump.

The NRC staff further determines that performing an ASME Code repair/replacement activity of the "B" pump is a hardship because it will require the plant to shut down, which could lead to transients and potential risk, without a compensating increase in the level of quality and safety.

The NRC finds that the licensee has demonstrated that the proposed alternative provides reasonable assurance that structural integrity of the "B" pump and its intended safety function

will be maintained until the “A” pump is restored, the allowable leak rate exceeds 8 drops per minute, flaw characteristics is changed, or December 2020, whichever occurs first.

Authorization Read by Undine Shoop, Chief of the Plant Licensing Branch II-2, Office of Nuclear Reactor Regulation

As Chief of the Plant Licensing Branch II-2, Office of Nuclear Reactor Regulation, I concur with the conclusions of the Piping and Head Penetrations Branch.

The NRC staff determines that the proposed alternative provides reasonable assurance of structural integrity of the “B” boric acid makeup pump. The NRC staff finds that complying with the requirements of the ASME Code, Section XI, would result in hardship or unusual difficulty, without a compensating increase in the level of quality and safety. Accordingly, the NRC staff concludes that the licensee has adequately addressed all the regulatory requirements set forth in 10 CFR 50.55a(z)(2). Therefore, on August 9, 2019, the NRC authorizes the use of Relief Request RR-16 at St. Lucie Plant, Unit No. 2, until the completion of restoring “A” boric acid makeup pump to an operable condition, the allowable leak rate exceeds 8 drops per minute, a change in flaw characteristics, or December 2020, whichever occurs first.

All other requirements in ASME Code, Section XI, for which relief was not specifically requested and approved in this proposed alternative remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector.

This verbal authorization does not preclude the NRC staff from asking additional clarification questions regarding the proposed alternative while preparing subsequent written safety evaluation.