



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

February 14, 2011

Mr. Michael J. Pacilio
President and Chief Nuclear Officer
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: BYRON STATION, UNIT NOS. 1 AND 2 - REQUEST FOR ADDITIONAL
INFORMATION RELATED TO LICENSE AMENDMENT REGARDING
ULTIMATE HEAT SINK (TAC NOS. ME1669 AND ME1670)

Dear Mr. Pacilio:

By letter to the Nuclear Regulatory Commission (NRC) dated June 30, 2009, as supplemented by letters dated January 25, July 1, and November 11, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML091831253, ML100280553, ML101830041, and ML103120556, respectively), Exelon Generation Company, LLC (the licensee), submitted a license amendment request for the Byron Station, Unit Nos. 1 and 2, to revise Technical Specification 3.7.9, "Ultimate Heat Sink (UHS)," to add additional essential service water (SX) cooling tower fan requirements as a function of SX pump discharge temperature to reflect the results of a revised analysis for the UHS.

The NRC staff is reviewing your submittals, and has determined that additional information is required to complete its review. The specific information requested is addressed in the enclosure to this letter. During a discussion with your staff on February 9, 2011, it was agreed that you would provide a response within 30 days from the date of this letter.

Please note that if you do not respond to this letter by the agreed-upon date or provide an acceptable alternate date in writing, we may reject your request for approval under the provisions of 10 CFR 2.108.

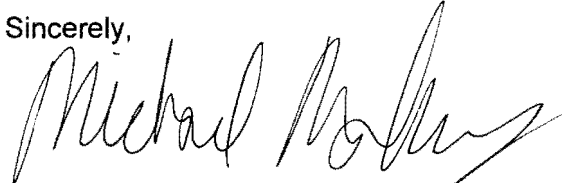
The NRC staff considers that timely responses to requests for additional information help ensure that sufficient time is available for the NRC staff to review and contribute toward the NRC's goal of efficient and effective use of staff resources.

M. Pacilio

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If circumstances result in the need to revise the requested response date, please contact me at 301-415-3867 or Nicholas DiFrancesco at 301-415-1115.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Mahoney". The signature is fluid and cursive, with a long horizontal stroke at the end.

Michael Mahoney, Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. STN 50-454 and STN 50-455

Enclosure:
Request for Additional Information

cc w/encl: Distribution via

REQUEST FOR ADDITIONAL INFORMATION

BYRON STATION, UNIT NOS. 1 AND 2

EXELON GENERATION COMPANY, LLC

DOCKET NOS. 50-454 AND 50-455

The Nuclear Regulatory Commission (NRC) staff is reviewing Exelon Generation Company, LLC's (the licensee) license amendment request (LAR) for the Byron Station, Unit Nos. 1 and 2 (Byron) dated June 30, 2009, as supplemented by letters dated January 25, July 1, and November 11, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML091831253, ML100280553, ML101830041, and ML103120556, respectively).

The LAR requests to revise Technical Specification (TS) 3.7.9, "Ultimate Heat Sink (UHS)," to add additional essential service water (SX) cooling tower fan requirements as a function of SX pump discharge temperature to reflect the results of a revised analysis for the UHS.

The NRC staff has determined that the following additional information is required to complete its review.

1. The UHS is required to be OPERABLE in MODES 1 through 4. Eight cooling tower fans running in fast speed are necessary to ensure basin temperature does not reach 100°F following a LOCA /loss of offsite power at one unit concurrent with the safe shutdown from maximum power of the other unit under bounding conditions. When 8 fans are not OPERABLE and in fast speed while the plant is in MODES 1 through 4 under bounding conditions, LCO 3.7.9 is not met. As an alternative to shutting down the reactor, the TS allow entry into LCO 3.7.9 Condition A and performance of REQUIRED ACTIONS A.1 and A.2.

The Facility Operating License (FOL) for Byron contains a set of rules for the use and application of Byron TS's. The BACKGROUND section on Page 1.3-1 of Byron TS states "The ACTIONS associated with an LCO state Conditions that typically describe the ways in which the requirements of the LCO can fail to be met. Specified with each stated Condition are Required Action(s) and Completion Time(s)."

The proposed TS 3.7.9 changes do not appear to conform to the use and application section of Byron TS. That is, the proposed Conditions do not describe the ways in which cooling tower fan requirements can fail to be met.

Explain why this unusual format is required, or provide revised proposed TS that conform to the TS use and application section of the Byron FOL.

ENCLOSURE

M. Pacilio

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If circumstances result in the need to revise the requested response date, please contact me at 301-415-3867 or Nicholas DiFrancesco at 301-415-1115.

Sincerely,

/RA/

Michael Mahoney, Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. STN 50-454 and STN 50-455

Enclosure:
Request for Additional Information

cc w/encl: Distribution via Listserv

DISTRIBUTION:

PUBLIC

RidsNrrPMBByron Resource
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ADAMS Accession No. ML110341352

*By Memo Dated

OFFICE	LPL3-2/PM	LPL3-2/LA	LPL3-2/BC	DIRS/ITSB/BC	LPL3-2/PM
NAME	MMahoney	SRohrer	RCarlson (EBrown for)	RElliott*	MMahoney
DATE	2/8/11	2/8/11	2/14/11	*2/4/11	2/14/11

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