

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

April 15, 2009

Mr. Charles G. Pardee President and Chief Nuclear Officer Exelon Nuclear 4300 Winfield Road Warrenville, IL 60555

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2, AND BYRON STATION, UNIT NOS. 1 AND 2 - REQUEST FOR ADDITIONAL INFORMATION RELATED TO GENERIC LETTER 2004-02 (TAC NOS. MC4667, MC4668, MC4669, AND MC4670)

Dear Mr. Pardee:

By letter to the Nuclear Regulatory Commission (NRC) dated September 19, 2008, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML082660245), Exelon Generation Company, LLC (the licensee), provided a response to the NRC staff's Request for Additional Information (RAI) dated July 24, 2008 (ADAMS Accession No. ML081930604), related to NRC Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors," dated September 13, 2004.

The NRC staff is reviewing your September 19, 2008, response and has determined that additional information is required to complete its review. The specific information requested is addressed in the enclosed RAI. During a discussion with your staff on April 14, 2009, it was agreed that you would provide a response within 45 days from the date of this letter.

The NRC staff considers that timely responses to requests for additional information help ensure sufficient time is available for staff review and contribute toward the NRC's goal of efficient and effective use of staff resources. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-1547.

Sincerely.

Marshall J. David, Senior Project Manager Plant Licensing Branch III-2 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. STN-456, STN-457, STN 50-454, and STN 50-455

Enclosure: Request for Additional Information

cc w/encls: Distribution via ListServ

# REQUEST FOR ADDITIONAL INFORMATION

# BRAIDWOOD STATION, UNITS 1 AND 2

### AND BYRON STATION, UNIT NOS. 1 AND 2,

## DOCKET NOS. STN 50-456, STN 50-457

#### STN 50-454, AND STN 50-455

The Nuclear Regulatory Commission (NRC) staff is reviewing Exelon Generation Company, LLC's (the licensee's) letter dated September 19, 2008 (Agencywide Documents Access and Management System Accession No. ML082660245), which responded to the NRC staff's Request for Additional Information dated July 24, 2008 (ADAMS Accession No. ML081930604), related to NRC Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors," dated September 13, 2004. The NRC staff has determined that additional information is required to complete its review.

Specifically, in your September 19, 2008, response, you indicated that hydrodynamic loading need not be evaluated with respect to the structural adequacy of the strainers. Your justification was stated as "...the interaction between the strainer and the water inside the sump pit is not relevant due to the small volume of the sump..." Based on the high maximum stress ratios provided in your December 31, 2007, supplemental submittal (ADAMS Accession No. ML080280562) for certain components (notably, Strut Head No. 1 and Side Wall with Discontinuity Stress), even a small hydrodynamic loading value could have a large impact with respect to the structural qualification of the strainer components. Given these implications, please provide additional justification regarding the omission of the hydrodynamic loading term in the previous submittals. Justification could include, but is not limited to, additional analyses of vulnerable components (i.e., Strut Head No. 1 and Side Wall) and/or discussions of conservatisms, inherent or otherwise, not explicitly stated in the previous submittals.

Mr. Charles G. Pardee President and Chief Nuclear Officer Exelon Nuclear 4300 Winfield Road Warrenville, IL 60555

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2, AND BYRON STATION, UNIT NOS. 1 AND 2 - REQUEST FOR ADDITIONAL INFORMATION RELATED TO GENERIC LETTER 2004-02 (TAC NOS. MC4667, MC4668, MC4669, AND MC4670)

Dear Mr. Pardee:

By letter to the Nuclear Regulatory Commission (NRC) dated September 19, 2008, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML082660245), Exelon Generation Company, LLC (the licensee), provided a response to the NRC staff's Request for Additional Information (RAI) dated July 24, 2008 (ADAMS Accession No. ML081930604), related to NRC Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors," dated September 13, 2004.

The NRC staff is reviewing your September 19, 2008, response and has determined that additional information is required to complete its review. The specific information requested is addressed in the enclosed RAI. During a discussion with your staff on April 14, 2009, it was agreed that you would provide a response within 45 days from the date of this letter.

The NRC staff considers that timely responses to requests for additional information help ensure sufficient time is available for staff review and contribute toward the NRC's goal of efficient and effective use of staff resources. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-1547.

Sincerely,

/RA/

Marshall J. David, Senior Project Manager Plant Licensing Branch III-2 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

\*RAI memo date

Docket Nos. STN-456, STN-457, STN 50-454, and STN 50-455

Enclosure: Request for Additional Information

cc w/encls: Distribution via ListServ

DISTRIBUTION:

PUBLIC LPL3-2 R/F RidsNrrDorlLpl3-2 Resource RidsNrrLATHarris Resource RidsNrrDorlDpr Resource RidsNrrPMByron Resource RidsNrrPMBraidwood Resource RidsAcrsAcnw\_MailCTR Resource RidsRgn3MailCenter Resource RidsNrrDeEmcb Resource RidsOgcRp Resource WJessup, NRR

NRR-088

ADAMS Accession No.: ML090960135

OFFICE	LPL3-2/PM	LPL3-2/LA	DE/EMCB/BC	LPL3-2/BC
NAME	MDavid	THarris	MKhanna *	RGibbs CGratton for
DATE	4/14/09	4/14/09	03/20/09	4 /15/09

OFFICIAL RECORD COPY