

## NRR-PMDAPEm Resource

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**From:** DiFrancesco, Nicholas  
**Sent:** Saturday, April 09, 2011 7:19 PM  
**To:** 'Richard.McIntosh@exeloncorp.com'  
**Cc:** Carlson, Robert; Lupold, Timothy; Wohl, Marilyn; 'Lisa.Schofield@exeloncorp.com'; 'jeff.hansen@exeloncorp.com'  
**Subject:** Byron Station, Unit No. 1 - Request for Additional Information Re: Relief Request I3R-19 (TAC Nos. ME5877, ME5948, AND ME5961)

Mr. McIntosh,

By letter dated March 24, 2011, as supplemented by letters dated March 25 and 31, 2011 (Agencywide Documents Access and Management Systems (ADAMS) Accession No. ML110830837, ML110870236, ML110910156, respectively ), Exelon Generation Company, LCC (EGC, the licensee) submitted a relief request (RR) for Byron Station, Unit No. 1. The RR proposed an alternative to certain American Society of Mechanical Engineer's Boiler and Pressure Vessel Code requirements to use an imbedding seal weld methodology on the reactor vessel head penetration (VHP) housing and J-groove welds. EGC by letter dated April 8, 2011, requested use of additional alternatives from the ASME code requirements to repair mechanical discontinuities in the seal welds associated with repair of reactor VHP nozzles 31 and 64.

The NRC staff is reviewing your submittal and has determined that additional information is required to complete its review. The specific information requested is contained in the Request for Additional Information (RAI) below. Your staff has agreed to provide a response to the RAI by 9:00 AM EST on April 10, 2011.

The NRC staff considers that timely responses to RAIs help ensure sufficient time is available for NRC staff review and contribute toward the NRC's goal of efficient and effective use of its staff resources. If circumstances result in the need to revise the requested response date, please contact me.

Sincerely,

*Nicholas DiFrancesco*

Project Manager - Braidwood, Byron, and Clinton  
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REQUEST FOR ADDITIONAL INFORMATION  
REQUEST FOR RELIEF FROM ASME CODE REQUIREMENTS FOR  
REPAIR OF REACTOR VESSEL HEAD PENETRATION NUMBERS 64 AND 76 (ME5877)  
REPAIR OF REACTOR VESSEL HEAD PENETRATION NUMBERS 31 AND 43 (ME5948)  
ALTERNATIVE FOR REPAIR OF REACTOR VESSEL HEAD PENETRATIONS (ME5961)  
EXELON GENERATION COMPANY, LLC,  
BYRON STATION, UNIT NO. 1  
DOCKET NO. 50-454

By letter dated March 24, 2011, as supplemented by letters dated March 25, 2011, March 31, 2011 and April 8, 2011, Exelon Generation Company, LCC (the licensee), proposed an alternative to certain American Society of

Mechanical Engineer's Boiler and Pressure Vessel Code requirements for Byron Station, Unit 1. The requirements pertain to the repair of the reactor pressure vessel upper head penetration nozzle numbers 31, 43, 64 and 76 and future defects that may be identified at Byron Station, Unit No. 1. The duration of request is for the third 10-year inservice inspection (ISI) interval.

The NRC staff has reviewed and evaluated the information provided by the licensee and has determined that the following information is needed in order to complete its review of the relief request.

RAI-1: By letter dated March 25, 2011, the licensee noted for penetration nozzle number 64 the following;

For the ISI NDE of the repair for Penetrations 64 and 76 starting with refueling outage B1 R18, Note 3 does not apply since the repair location is in the "VHP Nozzle OD below J-groove weld." Therefore, ISI NDE of the repair for Penetrations 64 and 76 will be performed in accordance with Code Case N-729-1, as amended by 10 CFR 50.55a(g)(6)(ii)(D).

By letter dated April 8, 2011, the licensee requests relief from NB-4450 for the repair of six rejectable liquid dye penetration surface indications in the seal weld of head penetration nozzle number 64.

The Table of Item 3 of Section 5.0, "Conditions and Limitations" of Reference 2 of the March 24, 2011 submittal requires only a volumetric or surface examination for the ISI inspection of a penetration with a flaw in the nozzle below the J-groove weld.

In addition to the volumetric examination of the nozzle, will a surface examination be performed on wetted surface of the entire seal weld for penetration number 64 at the same frequency requirement of the volumetric examination of penetration number 64 in accordance with 10 CFR 50.55a(g)(6)(ii)(D)?

RAI-2: For all unacceptable linear indications in the seal weld, provide each new second seal weld's minimum area of coverage? Will this area of coverage be based on a distance beyond each indication's dye penetrant length and width result? Provide a description of application and the number of the weld beads applied to address Indications #2 and #3 of Penetration number 31.

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**Subject:** Byron Station, Unit No. 1 - Request for Additional Information Re: Relief Request I3R-19 (TAC Nos. ME5877, ME5948, AND ME5961)  
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**From:** DiFrancesco, Nicholas

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