



Exelon Generation®

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10 CFR 50
10 CFR 51
10 CFR 54

June 14, 2012

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

Limerick Generating Station, Units 1 and 2
Facility Operating License Nos. NPF-39 and NPF-85
NRC Docket Nos. 50-352 and 50-353

- Subject:** Response to NRC Request for Additional Information, dated June 5, 2012, related to the Limerick Generating Station License Renewal Application
- Reference:**
1. Exelon Generation Company, LLC letter from Michael P. Gallagher to NRC Document Control Desk, "Application for Renewed Operating Licenses", dated June 22, 2011
 2. Letter from Robert F. Kuntz (NRC) to Michael P. Gallagher (Exelon), "Requests for Additional Information for the review of the Limerick Generating Station, Units 1 and 2, License Renewal Application (TAC Nos. ME6555, ME6556)", dated June 5, 2012

In the Reference 1 letter, Exelon Generation Company, LLC (Exelon) submitted the License Renewal Application (LRA) for the Limerick Generating Station, Units 1 and 2 (LGS). In the Reference 2 letter, the NRC requested additional information to support the staffs' review of the LRA.

Enclosed are the responses to these requests for additional information.

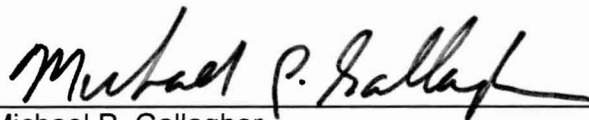
This letter and its enclosure contain no new or revised regulatory commitments.

If you have any questions, please contact Mr. Al Fulvio, Manager, Exelon License Renewal, at 610-765-5936.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 06-14-2012

Respectfully,



Michael P. Gallagher
Vice President - License Renewal Projects
Exelon Generation Company, LLC

Enclosure: Response to Request for Additional Information

cc: Regional Administrator – NRC Region I
NRC Project Manager (Safety Review), NRR-DLR
NRC Project Manager (Environmental Review), NRR-DLR
NRC Project Manager, NRR- DORL Limerick Generating Station
NRC Senior Resident Inspector, Limerick Generating Station
R. R. Janati, Commonwealth of Pennsylvania

Enclosure

**Response to Requests for Additional Information related to various sections of the LGS
License Renewal Application (LRA)**

RAI B.2.1.32-2.1

RAI B.2.1.32-2.1

Background

The Limerick Generating Station (LGS) license renewal application (LRA) section B.2.1.32 states that the ASME Section XI, Subsection IWF program, with enhancement, will be consistent with GALL Report AMP XI.S3. The response to RAI B.2.1.32-2, provided by letter dated February 28, 2012, stated that there are no ASTM A325, F1852, or A490 bolts within the scope of the ASME Section XI, Subsection IWF program. Therefore, the response stated that the GALL Report recommended preventive actions in Section 2 of Research Council for Structural Connections (RCSC) publication "Specification for Structural Joints Using ASTM A325 or A490 Bolts" do not apply.

The response to RAI 3.5.2.1.1-1, provided by letter dated February 16, 2012, regarded stress corrosion cracking (SCC) in high strength bolts. The response stated that A325 or A490 bolts are used for high strength structural bolts and that structural bolting is within the scope of license renewal and is managed by the Structures Monitoring Program. The response further stated that SCC potential need not be evaluated for these bolts based on guidance in SRP-LR Table 3.5-1, ID 69.

Issue

The staff agrees that SCC potential need not be evaluated for ASTM A325 and A490 structural bolts; however, the preventive actions discussed in Section 2 of RCSC publication "Specification for Structural Joints Using ASTM A325 or A490 Bolts," should still be addressed if A325 or A490 bolts are in the scope of a program.

The staff reviewed Table 3.9-6, "Loading Combinations, Stress Limits, and Allowable Stresses," in the LGS UFSAR and noted several components which appear to be within the scope of ASME Section XI, Subsection IWF that either called out SA325 bolts, which are equivalent to ASTM A325 bolts, or referenced ASME Division III, Subsection NF, which allows the use of SA325 bolts. It appears to the staff that there may be a discrepancy between the information in the UFSAR, and the information provided in the response to RAI B.2.1.32-2. The UFSAR appears to allow the use of SA325 bolts, and in at least one instance calls out SA325 bolts, while the RAI B.2.1.32-2 response claims there are no ASTM A325 bolts within the scope of the program. Based on the information in the UFSAR, along with the RAI responses, it is not clear to that staff whether or not there are A325 or A490 bolts within the scope of the ASME Section XI, Subsection IWF program.

Request

Verify that there are no ASTM A325, F1852, or A490, or ASME equivalent, bolts in the scope of the ASME Section XI, Subsection IWF program. If there are no ASTM A325, F1852, or A490 bolts within the scope of the program, explain the discrepancy in the UFSAR. If the bolts are within the scope of the ASME Section XI, Subsection IWF program, explain how the preventive actions discussed in Section 2 of "Specification for Structural Joints Using ASTM A325 or A490 Bolts" are addressed, or why they are unnecessary. If ASTM A325, F1852, or A490 bolts typically within the scope of ASME Section XI, Subsection IWF program are being managed by a different program (e.g. Structures Monitoring) explain how that program addresses the recommendations of the GALL Report ASME Section XI, Subsection IWF program.

Exelon Response

UFSAR Table 3.9-6 contains only one entry for SA325 bolting which indicates that the RCIC (Reactor Core Isolation Cooling) Pump hold down bolting is SA325 material. The vendor documents and a walkdown in LGS Unit 2 identify hold down bolts which mount the RCIC pump to the base plate support as ASTM A449 bolts, with bolt head markings consistent with ASTM A449 material, rather than ASTM A325 bolts. These bolts are within the scope of ASME Section XI, Subsection IWF.

Corrective Action Program issue report 01375064 was initiated to identify and resolve this discrepancy. UFSAR Table 3.9-6 "Loading Combinations, Stress Limits, and Allowable Stresses" is not intended to identify the materials of construction but rather loads and stresses.

Vendor supplied equipment supports, such as for the RCIC pump, utilize material that is equivalent to ASTM A325 (i.e., ASTM A449). ASTM A325 or ASTM equivalent bolting material is not prohibited for future installations or maintenance by the ASME B&PV Code Section III, Division I, Subsection NF or LGS procedures. Therefore, ASTM A325, F1852, A490 and ASME equivalent bolts are in the scope of the ASME Section XI, Subsection IWF program.

Appendix A, Table A.5, Commitment 35 for the Structures Monitoring program regarding bolting, addresses the preventive actions discussed in RCSC "Specification for Structural Joints Using ASTM A325 or A490 Bolts", Section 2. The storage and handling requirements for high strength bolts in Commitment 35 applies to all carbon steel high strength structural bolting. These bolts may be used for applications that are within the scope of the Structures Monitoring program or the ASME Section XI, Subsection IWF program. Therefore, Commitment 35 is adequate to address the storage and handling requirements for carbon steel high strength structural bolting identified by RCSC, irrespective of the ultimate use of the bolting material, and a new commitment for the ASME section XI, Subsection IWF program is not necessary.