

July 12, 2016

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

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

**Subject:** Response to Request for Additional Information Regarding Proposed Relief Request I4R-10 for Limerick Generating Station, Units 1 and 2

- References:**
- 1) Letter from D. P. Helker (Exelon Generation Company, LLC) to the U.S. Nuclear Regulatory Commission, "Submittal of Relief Requests associated with the Fourth 10-Year Interval Inservice Inspection (ISI) Program," dated April 13, 2016 (ML16104A122).
  - 2) E-mail correspondence from R. Ennis (U.S. Nuclear Regulatory Commission) to S. J. Hanson (Exelon Generation Company, LLC), "Draft Request for Additional Information Regarding Proposed Relief Request I4R-10 for Limerick Generating Station, Units 1 and 2 (ML16174A298)," dated June 22, 2016.

By letter dated April 13, 2016, Exelon Generation Company, LLC (Exelon) submitted relief requests associated with the Fourth 10-Year Inservice Inspection Interval for Limerick Generating Station (LGS), Units 1 and 2. Specifically, Exelon submitted requests I4R-01, I4R-02, I4R-05, I4R-06, I4R-07, I4R-08, I4R-09, I4R-10, I4R-11, I4R-12, and I4R-13.

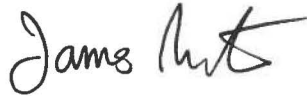
In the Reference 2 e-mail correspondence, the U.S. Nuclear Regulatory Commission (NRC) requested additional information relating to Relief Request I4R-10. The attached contains Exelon's response to the NRC request for additional information.

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Proposed Relief Request I4R-10  
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There are no regulatory commitments in this response.

If you have any questions concerning this response, please contact Stephanie J. Hanson at 610-765-5143.

Respectfully,



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James Barstow  
Director, Licensing and Regulatory Affairs  
Exelon Generation Company, LLC

Attachment: Response to Draft Request for Additional Information Regarding  
Proposed Relief Request I4R-10 for Limerick Generating Station, Units 1  
and 2

cc: USNRC Region I, Regional Administrator  
USNRC Senior Resident Inspector, LGS  
USNRC Project Manager, LGS  
R. R. Janati, Pennsylvania Bureau of Radiation Protection

**ATTACHMENT**

**Limerick Generating Station, Units 1 and 2**

**Renewed Facility Operating License Nos. DPR-39 and DPR-85**

**Docket Nos. 50-352 and 50-353**

**Response to Draft Request for Additional Information Regarding  
Proposed Relief Request Concerning 14R-10**

By letter dated April 13, 2016, Exelon Generation Company, LLC (Exelon) submitted relief requests associated with the Fourth 10-Year Inservice Inspection Interval for Limerick Generating Station (LGS), Units 1 and 2. Specifically, Exelon submitted requests I4R-01, I4R-02, I4R-05, I4R-06, I4R-07, I4R-08, I4R-09, I4R-10, I4R-11, I4R-12, and I4R-13.

The NRC staff has determined that additional information is needed to complete its review. On June 22, 2016, the NRC issued a draft request for additional information (RAI). This RAI supersedes a previous draft RAI sent to Exelon on June 14, 2016 (ML16166A086), regarding Relief Requests I4R-02 and I4R-10. Specifically, question EVIB-RAI-1 involving I4R-02 has been deleted since Exelon has identified that the requested information was previously docketed in a number of inservice inspection summary reports.

The RAI is restated below along with Exelon's response.

**EVIB-RAI-2:**

Relief request I4R-10 proposes an alternative to the requirements of the ASME Code, Section XI, Table IWB-2500-1, concerning nozzle-to-vessel weld and nozzle inner radii examination requirements.

- a. Please provide information related to the inspections that have already been performed on the components for which this alternative is requested. In addition, include all indications that were found and how these indications were dispositioned. If no indications were found during any inspections, please state so.
- b. Please provide information regarding the extent of inspection coverage that was obtained to date for nozzle-to-vessel welds and nozzle inner radii at LGS, Units 1 and 2.

**Response:**

The tables below provide information related to the inspections performed, inspection results, and extent of inspection coverage obtained during the third inspection interval for the nozzle-to-vessel welds and nozzle inside radius section exams covered by Relief Request I4R-10 at Limerick Generating Station, Units 1 and 2.

Limerick Generating Station Unit 1						
Summary #	Component ID	Description	Last Inspected	Coverage Obtained	Indications	Comments
600700	N2A	Nozzle to Vessel	1R12 (2008)	76%	NRI	no indications found
600710	N2A-IR	Nozzle Inner Radius	1R12 (2008)	100%	NRI	no indications found
600730	N2B	Nozzle to Vessel	-	-	-	no 3rd interval inspection
600740	N2B-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
600760	N2C	Nozzle to Vessel	1R15 (2014)	essentially 100%	NRI	no indications found
600770	N2C-IR	Nozzle Inner Radius	1R15 (2014)	100%	NRI	no indications found
600790	N2D	Nozzle to Vessel	-	-	-	no 3rd interval inspection
600800	N2D-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
600820	N2E	Nozzle to Vessel	-	-	-	no 3rd interval inspection
600830	N2E-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
600850	N2F	Nozzle to Vessel	1R12 (2008)	76%	NRI	no indications found
600860	N2F-IR	Nozzle Inner Radius	1R12 (2008)	100%	NRI	no indications found
600800	N2G	Nozzle to Vessel	-	-	-	no 3rd interval inspection
600890	N2G-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
600910	N2H	Nozzle to Vessel	-	-	-	no 3rd interval inspection
600920	N2H-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
600940	N2J	Nozzle to Vessel	-	-	-	no 3rd interval inspection
600950	N2J-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
600970	N2K	Nozzle to Vessel	-	-	-	no 3rd interval inspection
600990	N2K-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
601000	N3A	Nozzle to Vessel	-	-	-	no 3rd interval inspection
601010	N3A-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
601030	N3B	Nozzle to Vessel	-	-	-	no 3rd interval inspection
601040	N3B-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
601060	N3C	Nozzle to Vessel	-	-	-	no 3rd interval inspection
601070	N3C-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
601090	N3D	Nozzle to Vessel	1R12 (2008)	75.1%	NRI	no indications found
601100	N3D-IR	Nozzle Inner Radius	1R12 (2008)	100%	NRI	no indications found
601300	N5A	Nozzle to Vessel	1R12 (2008)	77.6%	NRI	no indications found
601310	N5A-IR	Nozzle Inner Radius	1R12 (2008)	100%	NRI	no indications found
601330	N5B	Nozzle to Vessel	1R12 (2008)	77.6%	NRI	no indications found
601340	N5B-IR	Nozzle Inner Radius	1R12 (2008)	100%	NRI	no indications found
601360	N6A	Nozzle to Vessel	-	-	-	no 3rd interval inspection
601370	N6A-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
601380	N6B	Nozzle to Vessel	-	-	-	no 3rd interval inspection
601390	N6B-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
601400	N7	Nozzle to Vessel	1R16 (2016)	essentially 100%	NRI	no indications found
601410	N7-IR	Nozzle Inner Radius	1R16 (2016)	100%	NRI	no indications found
601420	N8A	Nozzle to Vessel	-	-	-	no 3rd interval inspection
601420	N8A-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
601440	N8B	Nozzle to Vessel	1R15 (2014)	essentially 100%	NRI	no indications found
601450	N8B-IR	Nozzle Inner Radius	1R15 (2014)	100%	NRI	no indications found
601490	N17A	Nozzle to Vessel	-	-	-	no 3rd interval inspection
601500	N17A-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
601520	N17B	Nozzle to Vessel	1R12 (2008)	77.6%	NRI	no indications found
601530	N17B-IR	Nozzle Inner Radius	1R12 (2008)	100%	NRI	no indications found
601550	N17C	Nozzle to Vessel	-	-	-	no 3rd interval inspection
601560	N17C-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
601580	N17D	Nozzle to Vessel	-	-	-	no 3rd interval inspection
601590	N17D-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection

\*NRI - no recordable indications

Limerick Generating Station Unit 2						
Summary #	Component ID	Description	Last Inspected	Coverage Obtained	Indications	Comments
	N2A	Nozzle to Vessel	2R10 (2009)	83.7%	NRI	no indications found
	N2A-IR	Nozzle Inner Radius	2R10 (2009)	100%	NRI	no indications found
	N2B	Nozzle to Vessel	2R12 (2013)	essentially 100%	NRI	no indications found
	N2B-IR	Nozzle Inner Radius	2R12 (2013)	100%	NRI	no indications found
	N2C	Nozzle to Vessel	-	-	-	no 3rd interval inspection
	N2C-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
	N2D	Nozzle to Vessel	2R10 (2009)	79.9%	NRI	no indications found
	N2D-IR	Nozzle Inner Radius	2R10 (2009)	100%	NRI	no indications found
	N2E	Nozzle to Vessel	-	-	-	no 3rd interval inspection
	N2E-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
	N2F	Nozzle to Vessel	2R12 (2013)	essentially 100%	NRI	no indications found
	N2F-IR	Nozzle Inner Radius	2R12 (2013)	100%	NRI	no indications found
	N2G	Nozzle to Vessel	-	-	-	no 3rd interval inspection
	N2G-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
	N2H	Nozzle to Vessel	2R09 (2007)	80%	NRI	no indications found
	N2H-IR	Nozzle Inner Radius	2R09 (2007)	100%	NRI	no indications found
	N2J	Nozzle to Vessel	2R09 (2007)	80%	NRI	no indications found
	N2J-IR	Nozzle Inner Radius	2R09 (2007)	100%	NRI	no indications found
	N2K	Nozzle to Vessel	2R10 (2009)	80.3%	NRI	no indications found
	N2K-IR	Nozzle Inner Radius	2R10 (2009)	100%	NRI	no indications found
	N3A	Nozzle to Vessel	-	-	-	no 3rd interval inspection
	N3A-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
	N3B	Nozzle to Vessel	2R11 (2011)	essentially 100%	NRI	no indications found
	N3B-IR	Nozzle Inner Radius	2R11 (2011)	100%	NRI	no indications found
	N3C	Nozzle to Vessel	2R09 (2007)	82%	NRI	no indications found
	N3C-IR	Nozzle Inner Radius	2R09 (2007)	100%	NRI	no indications found
	N3D	Nozzle to Vessel	2R09 (2007)	82%	NRI	no indications found
	N3D-IR	Nozzle Inner Radius	2R09 (2007)	100%	NRI	no indications found
	N5A	Nozzle to Vessel	-	-	-	no 3rd interval inspection
	N5A-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
	N5B	Nozzle to Vessel	2R09 (2007)	85%	NRI	no indications found
	N5B-IR	Nozzle Inner Radius	2R09 (2007)	100%	NRI	no indications found
	N6A	Nozzle to Vessel	-	-	-	no 3rd interval inspection
	N6A-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
	N6B	Nozzle to Vessel	-	-	-	no 3rd interval inspection
	N6B-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
	N7	Nozzle to Vessel	2R13 (2015)	essentially 100%	NRI	no indications found
	N7-IR	Nozzle Inner Radius	2R13 (2015)	100%	NRI	no indications found
	N8A	Nozzle to Vessel	2R10 (2009)	83.7%	NRI	no indications found
	N8A-IR	Nozzle Inner Radius	2R10 (2009)	100%	NRI	no indications found
	N8B	Nozzle to Vessel	2R10 (2009)	83.7%	NRI	no indications found
	N8B-IR	Nozzle Inner Radius	2R10 (2009)	100%	NRI	no indications found
	N17A	Nozzle to Vessel	-	-	-	no 3rd interval inspection
	N17A-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
	N17B	Nozzle to Vessel	2R10 (2009)	81.8%	NRI	no indications found
	N17B-IR	Nozzle Inner Radius	2R10 (2009)	100%	NRI	no indications found
	N17C	Nozzle to Vessel	-	-	-	no 3rd interval inspection
	N17C-IR	Nozzle Inner Radius	-	-	-	no 3rd interval inspection
	N17D	Nozzle to Vessel	2R09 (2007)	84%	NRI	no indications found
	N17D-IR	Nozzle Inner Radius	2R09 (2007)	100%	NRI	no indications found

\*NRI - no recordable indications