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U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

LaSalle County Station, Units 1 and 2
Facility Operating License Nos. NPF-11 and NPF-18
NRC Docket Nos. 50-373 and 50-374

Subject: Response to Request for Additional Information Related to Relief Request I3R-01, "Alternate Risk-Informed Selection and Examination Criteria for Examination Category B-F, B-J, C-F-1, and C-F-2 Pressure Retaining Piping Welds"

References:

1. Letter from S. R. Landahl (Exelon Generation Company, LLC) to U. S. NRC, "Submittal of Relief Requests Associated with the Third Inservice Inspection (ISI) and the Second Containment Inservice Inspection (CISI) Interval," dated April 30, 2007

2. Letter from U. S. NRC to C. G. Pardee, (Exelon Generation Company, LLC), "LaSalle County Station, Units 1 and 2 – Request for Additional Information related to Request for Relief I3R-01 Associated with the Third 10-Year Inservice Inspection Interval, Inspection Program Plan Risk-Informed Inservice Inspection of Piping (TAC NOS. MD5457 AND MD5458)," dated January 22, 2008

As part of Reference 1, Exelon Generation Company, LLC, (EGC), requested NRC approval of a relief request for the Third Inservice Inspection (ISI) interval for LaSalle County Station (LSCS), Units 1 and 2. Specifically, relief request I3R-01 pertained to the alternate risk-informed selection and examination criteria for examination category B-F, B-J, C-F-1, and C-F-2 pressure retaining piping welds. The I3R-01 proposes an alternative to the existing American Society of Mechanical Engineers (ASME) Code, which is to use the Electric Power Research Institute (EPRI) Topical Report-112657, "Revised Risk-Informed Inservice Inspection Evaluation Procedure," Revision B-A, methodology for a risk-informed inservice inspection program.

In Reference 2, the NRC transmitted a Request for Additional Information to EGC concerning relief request I3R-01. The response to Reference 2 is provided in the attachment to this letter.

There are no regulatory commitments contained within this letter. Should you have any questions concerning this letter, please contact Alison Mackellar at (630) 657-2817.

Respectfully,

Patrick R. Simpson

Patrick R. Simpson
Manager - Licensing

Attachment: Response to Request for Additional Information Related to Relief Request I3R-01

## Response to Request for Additional Information
## Related to Relief Request I3R-01

### Request for Additional Information

"In reviewing the Exelon Generation Company's (Exelon's) submittal dated June 18, 2007 [actual date April 30, 2007], related to a relief request (RR) associated with the third inservice inspection interval, for the LaSalle County Station, Units 1 and 2. The submittal requests relief from the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, requirements for the selection and examination of Class 1 and 2 piping and welds. The NRC staff has determined that the following information is needed in order to complete its review:

1. Please confirm that the change in risk between the original ASME program and the program you are proposing to implement for the third interval meets all the risk acceptance guidelines in the Electric Power Research Institute (EPRI) methodology.

2. Provide an explanation as to why the change in risk is not expected to change from the last estimate.

3. Provide an estimate of the change in core damage frequency and large early release frequency between the original ASME program and the program you are proposing to implement for the next interval.

4. Confirm that the system level change in risk acceptance guidelines in the EPRI methodology are met. (This calculation must be based in an up-dated PRA model)."

### Question No.1

"Please confirm that the change in risk between the original ASME program and the program you are proposing to implement for the third interval meets all the risk acceptance guidelines in the Electric Power Research Institute (EPRI) methodology."

### Response

The change in risk compared to the original ASME program meets all of the risk acceptance guidelines provided in the EPRI methodology. For additional information refer to the response to Question 3.

### Question No.2

"Provide an explanation as to why the change in risk is not expected to change from the last estimate."

### Response

A complete risk evaluation, using the EPRI methodology, was performed in 2007 and the previous revision was updated in its entirety. The update was completed as part of the living program process using the current PRA model. The change in risk was determined as part of the evaluation for this new third interval program using the latest element selections. Since a change in risk has been determined for this new third interval as described, this question is not applicable.

## Question No.3

"Provide an estimate of the change in core damage frequency and large early release frequency between the original ASME program and the program you are proposing to implement for the next interval."

## Response

The following tables document the change in CDF and LERF for LSCS Units 1 and 2 over the original ASME program. The values provided in the two tables below are by system and for the plant as a whole.

**Change in CDF and LERF for Unit 1 over the original ASME program**

| | ΔCDF Events/Reactor-Year | | | ΔLERF Events/Reactor-Year | | |
|---|---|---|---|---|---|---|
| System | EPRI | No Inspection | Acceptance Criteria | EPRI | No Inspection | Acceptance Criteria |
| CRD | 8.28E-11 | 8.28E-11 | 1.00E-07 | 1.72E-12 | 1.72E-12 | 1.00E-08 |
| ECCS | 5.96E-11 | 3.23E-09 | 1.00E-07 | 2.23E-11 | 3.07E-09 | 1.00E-08 |
| FW | 1.51E-09 | 6.97E-09 | 1.00E-07 | 1.28E-09 | 6.42E-09 | 1.00E-08 |
| HPCS | 2.44E-10 | 4.68E-10 | 1.00E-07 | 1.36E-10 | 2.90E-10 | 1.00E-08 |
| MS | 1.11E-09 | 2.71E-09 | 1.00E-07 | 1.08E-09 | 2.58E-09 | 1.00E-08 |
| RCIC | 5.82E-10 | 8.26E-10 | 1.00E-07 | 4.73E-10 | 6.63E-10 | 1.00E-08 |
| RCS | 1.85E-09 | 2.12E-09 | 1.00E-07 | 3.06E-10 | 3.47E-10 | 1.00E-08 |
| RWCU | 1.45E-09 | 1.46E-09 | 1.00E-07 | 1.46E-09 | 1.46E-09 | 1.00E-08 |
| Total | 6.89E-09 | 1.79E-08 | <1.00E-06 | 4.76E-09 | 1.48E-08 | <1.00E-07 |

**Change in CDF and LERF for Unit 2 over the original ASME program**

| | ΔCDF Events/Reactor-Year | | | ΔLERF Events/Reactor-Year | | |
|---|---|---|---|---|---|---|
| System | EPRI | No Inspection | Acceptance Criteria | EPRI | No Inspection | Acceptance Criteria |
| CRD | 5.37E-11 | 5.37E-11 | 1.00E-07 | 3.46E-12 | 3.46E-12 | 1.00E-08 |
| ECCS | 2.28E-10 | 3.40E-09 | 1.00E-07 | -9.02E-11 | 3.00E-09 | 1.00E-08 |
| FW | 4.14E-09 | 8.72E-09 | 1.00E-07 | 3.87E-09 | 8.02E-09 | 1.00E-08 |
| HPCS | 6.68E-11 | 2.91E-10 | 1.00E-07 | 2.76E-11 | 1.82E-10 | 1.00E-08 |
| MS | 4.41E-10 | 2.01E-09 | 1.00E-07 | 4.64E-10 | 1.90E-09 | 1.00E-08 |
| RCIC | 5.18E-10 | 7.52E-10 | 1.00E-07 | 4.45E-10 | 5.88E-10 | 1.00E-08 |
| RCS | 1.49E-09 | 1.76E-09 | 1.00E-07 | 2.14E-10 | 2.55E-10 | 1.00E-08 |
| RWCU | 1.46E-09 | 1.47E-09 | 1.00E-07 | 1.46E-09 | 1.46E-09 | 1.00E-08 |
| Total | 8.40E-09 | 1.85E-08 | <1.00E-06 | 6.39E-09 | 1.54E-08 | <1.00E-07 |

**Question No.4**

"Confirm that the system level change in risk acceptance guidelines in the EPRI methodology are met. (This calculation must be based in an up-dated PRA model)."

**Response**

The two tables provided in the response to Question 3 above provide the change in risk by system for both LSCS Units 1 and 2 including change in CDF and LERF. The cited results reflect the impact of the model of record for both units. The results of this current analysis meet the system level change in risk acceptance guidelines provided in the EPRI methodology.