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RS-02-124

July 8, 2002

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

> Dresden Nuclear Power Station, Units 2 and 3 Facility Operating License Nos. DPR-19 and DPR-25 NRC Docket Nos. 50-237 and 50-249

Subject:

Additional Information Regarding Request for Technical Specifications Changes Related to Reactor Protection System Instrumentation (Reactor Vessel Steam Dome Pressure – High)

Reference:

Letter from K. R. Jury (Exelon Generation Company, LLC) to U. S. NRC, "Request for Technical Specifications Changes Related to Reactor Protection System Instrumentation (Reactor Vessel Steam Dome Pressure – High)," dated April 15, 2002

In the referenced letter Exelon Generation Company (Exelon), LLC, requested changes to the Technical Specifications (TS) of Facility License Nos. DPR-19 and DPR-25 for the Dresden Nuclear Power Station, Units 2 and 3. The proposed changes modify the reactor vessel steam dome pressure – high surveillance requirements and allowable value specified in TS Table 3.3.1.1-1, "Reactor Protection System Instrumentation." In a teleconference on June 27, 2002, between Mr. A. R. Haeger and other members of Exelon and Mr. L. W. Rossbach and other members of the NRC, the NRC requested additional information regarding these proposed changes. The attachment to this letter provides the requested information.

Should you have any questions concerning his letter, please contact Mr. Allan R. Haeger at (630) 657-2807.

Respectfully,

Strick R. Smpron

Patrick R. Simpson Manager – Licensing, Dresden and Quad Cities Nuclear Power Stations Mid-West Regional Operating Group

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Attachment

cc: Regional Administrator – NRC Region III NRC Senior Resident Inspector – Dresden Nuclear Power Station Office of Nuclear Facility Safety – Illinois Department of Nuclear Safety

ATE OF ILLINOIS)	
COUNTY OF DUPAGE)	
IN THE MATTER OF)	
EXELON GENERATION COMPANY, LLC)	Docket Numbers
DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3)	50-237 and 50-249

SUBJECT: Additional Information Regarding Request for Technical Specifications Changes Related to Reactor Protection System Instrumentation (Reactor Vessel Steam Dome Pressure – High)

AFFIDAVIT

I affirm that the content of this transmittal is true and correct to the best of my knowledge, information, and belief.

m Patrick R. Simpson

Manager – Licensing Dresden and Quad Cities Nuclear Power Stations Mid-West Regional Operating Group

Subscribed and sworn to before me, a Notary Public in and

for the State above named, this _____ day of

____, 20_**02**



Attachment

Additional Information Regarding Request for Technical Specifications Changes Related to Reactor Protection System Instrumentation (Reactor Vessel Steam Dome Pressure – High)

Question

 The licensee stated in Attachment A, Page 6, paragraph 4, "The Rosemount transmitter drift is determined by the vendor using qualitative analysis. The drift value determined was used in the development of the proposed setpoint and TS AV." Is the licensee referring to GE Report NEDC 30851P-A and Exelon setpoint methodology, NES-EIC-20.04?

Response

As noted in Reference 1, NEDC 30851P-A (Reference 2) generically justifies the acceptability of an 18-month channel calibration when the analog trip units (ATUs) are calibrated on a 92-day frequency. The further extension of this surveillance frequency from 18 months to 24 months was evaluated in the improved technical specifications (ITS) submittal (Reference 3) for similar designs. The specific transmitter drift data for the Rosemount 1153GB9P transmitter was not addressed in NEDC 30851P-A. Rosemount, the transmitter vendor, determined the transmitter drift and supplied this value to Dresden Nuclear Power Station (DNPS). DNPS then compared this drift value with historical drift data for similar instruments, in accordance with its approved setpoint methodology, NES-EIC-20.04, "Analysis of Instrument Channel Setpoint Error and Instrument Loop Accuracy," and developed the proposed setpoint and TS AV. As noted in Reference 1, the setpoint methodology was submitted to the NRC in Reference 3 and approved by the NRC in Reference 4. Use of the vendor drift analysis, combined with drift data from similar instruments at DNPS and Quad Cities Nuclear Power Stations and the approved setpoint methodology confirms that the proposed 24-month surveillance frequency is appropriate for the 1153GB9P transmitter.

Question

2. The licensee also stated in Attachment A, Page 6, paragraph 4, "Review of historical surveillance data of similar pressure transmitters found no failures that would invalidate this conclusion." Provide details of the "similar pressure transmitters" and their failure data to justify this statement.

A similar statement was made in Attachment A, Page 5, paragraph 2, concerning the historical performance of the Rosemount Model 710DU and GE Model 184C5988G131 trip units. Provide details of the data to justify this statement.

Response

The pressure transmitters referred to as similar to the Rosemount 1153GB9P are the Rosemount 1153DB7PA, which is used for Reactor Vessel Water Level – Low at DNPS, and the Rosemount 1153GB7PA, which is used for Reactor Vessel Pressure - Low at DNPS. These transmitters are of the same basic design and construction as the 1153GB9P and differ from the 1153GB9P primarily in the pressure range.

The surveillance history for these transmitters was reviewed. Twelve surveillance tests at an eighteen-month frequency were reviewed on each of eight instruments of these models, for a total of 96 surveillance tests. In the 96 surveillance tests, all transmitters were found to actuate within TS allowable values and no other failures were observed that related to the safety function of the pressure transmitter.

Attachment

Additional Information Regarding Request for Technical Specifications Changes Related to Reactor Protection System Instrumentation (Reactor Vessel Steam Dome Pressure – High)

The surveillance history for the Rosemount and GE trip units was also reviewed. Twelve surveillance tests at an eighteen-month frequency were reviewed on each of eight instruments, for a total of 96 surveillance tests. In the 96 surveillance tests, all trip units were found within the TS allowable values. One "Gross Failure" alarm setpoint was found to have drifted out of tolerance, which had no effect on the safety function of the trip units.

References

- Letter from K. R. Jury (Exelon Generation Company, LLC) to U. S. NRC, "Request for Technical Specifications Changes Related to Reactor Protection System Instrumentation (Reactor Vessel Steam Dome Pressure – High)," dated April 15, 2002
- 2. General Electric Licensing Topical Report, NEDC 30851P-A, "Technical Specification Improvement Analysis for BWR Reactor Protection System," dated March 1988
- Letter from R. M. Krich (Commonwealth Edison Company) to U. S. NRC, "Request for Technical Specifications Changes for Dresden Nuclear Power Station, Units 2 and 3, LaSalle County Station, Units 1 and 2, and Quad Cities Nuclear Power Station, Units 1 and 2, to Implement Improved Standard Technical Specifications," dated March 3, 2000
- 4. Letter from Stewart N. Bailey (U. S. NRC) to O. D. Kingsley (Exelon), " Issuance of Amendments," dated March 30, 2001