

10 CFR 54

RS-03-082

April 17, 2003

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 No. 50-237 and 50-249

Quad Cities Nuclear Power Station, Units 1 and 2
Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket No. 50-254 and 50-265

Subject: Corrected Fluence Tables for Dresden Nuclear Power Station, Units 2 and 3
License Renewal Application

- References:
- (1) Letter from J. A. Benjamin (EGC) to USNRC, "Application for Renewed Operating Licenses," dated January 3, 2003
 - (2) Letter from P. R. Simpson (EGC) to USNRC, "Request for Changes Related to Technical Specifications Section 3.4.9, 'Reactor Coolant System Pressure and Temperature (P/T) Limits,'" dated February 27, 2003

Exelon Generation Company, LLC (EGC) is submitting corrections to Tables 4.2.6-1 and 4.2.7-1 which were previously submitted as part of the Application for Renewed Operating Licenses for Dresden Nuclear Power Station (DNPS) and Quad Cities Nuclear Power Station (QCNPS) in Reference 1. The corrections are included in Attachment 1 and are shown with a shaded background.

While performing a similar scope of work for a different customer, General Electric (GENE) discovered errors in Tables 4.2.6-1 and 4.2.7-1. GENE determined that an incorrect fluence value was used to calculate the mean adjusted reference temperature (mean RT_{NDT}) and the delta reference temperature (delta RT_{NDT}) for the DNPS, Units 2 and 3 reactor vessel circumferential and axial welds. Rather than using peak surface fluence as specified in BWRVIP-05, "BWR Reactor Pressure Vessel Shell Weld Inspection Recommendations," the peak fluence at $\frac{1}{4}$ depth of reactor vessel plate was used. This resulted in incorrect values for delta RT_{NDT} and mean RT_{NDT} being submitted in Tables 4.2.6-1 and 4.2.7-1. The corrected

A097
A098

April 17, 2003
U. S. Nuclear Regulatory Commission
Page 2

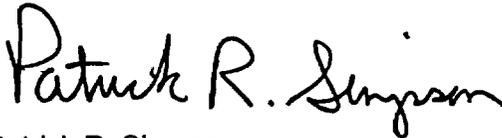
mean RT_{NDT} values are still well below the recommended BWRVIP-05 requirements for circumferential and axial welds. The peak surface fluence was correctly presented in the tables.

The QCNPS information within Reference 1 is not impacted by the above described error.

This error had no impact on the pressure-temperature curve report submitted for DNPS as part of Reference 2.

Should you have any questions, please contact Al Fulvio at 610-765-5936.

Respectfully,



Patrick R. Simpson
Manager – Licensing
Mid-West Regional Operating Group

Attachments:

Affidavit

Attachment 1: Corrected LRA Tables 4.2.6-1 and 4.2.7-1

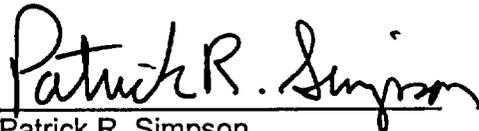
cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – Quad Cities Nuclear Power Station
NRC Senior Resident Inspector – Dresden Nuclear Power Station
Office of Nuclear Facility Safety – Illinois Department of Nuclear Safety

STATE OF ILLINOIS)
COUNTY OF DUPAGE)
IN THE MATTER OF)
EXELON GENERATION COMPANY, LLC) Docket Numbers
Dresden Nuclear Power Station - Unit 2 and Unit 3) 50-237 and 50-249
Quad Cities Nuclear Power Station - Unit 1 and Unit 2) 50-254 and 50-265

SUBJECT: Corrected Fluence Tables for Dresden Nuclear Power Station, Units 2 and 3 License Renewal Application

AFFIDAVIT

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

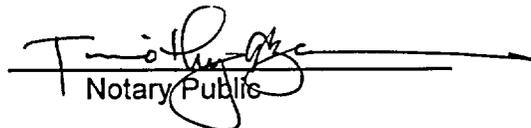


Patrick R. Simpson
Manager - Licensing
Mid-West Regional Operating Group

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

for the State above named, this 17th day of

April, 2003



Notary Public

Attachment 1

Corrected LRA Tables 4.2.6-1 and 4.2.7-1

Dresden Nuclear Power Station

**Table 4.2.6-1 Effects for Irradiation on RPV Circumferential Weld Properties
Dresden Units 2 & 3**

Group	B&W 64 EFPY	Dresden Unit 2 54 EFPY	Dresden Unit 3 54 EFPY
Cu%	0.31	0.23	0.34
Ni%	0.59	0.59	0.68
CF	196.7	168	221
Fluence at clad/weld interface (10^{19} n/cm ²)	0.19	0.042	0.041
ΔRT_{NDT} w/o margin (°F)	109.4	44	58
$RT_{NDT(U)}$ (°F)	20	10	-5
Mean RT_{NDT} (°F)	129.4	54	53
P(FIE) NRC	4.83×10^{-4}	---	---
P(FIE) BWRVIP	---	---	---

**Table 4.2.7-1 Effects for Irradiation on RPV Axial Weld Properties
Dresden Units 2 & 3**

Value	B&W 64 EFPY	SER Supplement (Clinton)	DRE 2 54 EFPY	DRE 3 54 EFPY
Cu%	.25	0.10	0.24	0.24
Ni%	.35	1.08	0.37	0.37
CF	142.5	----	141	141
Fluence x 10 ¹⁹ n/cm ²	0.35	0.69	0.057	0.057
ΔRT_{NDT} °F	88.9	121	44	44
$RT_{NDT(U)}$ °F	10	-30	23	23
Mean RT_{NDT} °F	98.9	91	67	67
P(FIE) NRC	1.87×10^{-1}	2.73×10^{-3}	3.89×10^{-8}	5.07×10^{-8}
P(FIE) BWRVIP	----	1.52×10^{-3}	----	----