

Exelon Generation Company, LLC      www.exeloncorp.com  
Quad Cities Nuclear Power Station  
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Cordova, IL 61242-9740

**SVP-02-025**

**March 28, 2002**

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

**Quad Cities Nuclear Power Station, Unit 2  
Facility Operating License No. DPR-30  
NRC Docket Number 50-265**

**Subject:      10CFR50.46, 30-Day Report for Quad Cities Unit 2**

**Reference:    "Letter SVP-01-059 from Timothy J. Tulon (Exelon) to USNRC,  
Transmittal of 10 CFR 50.46, "Acceptance criteria for emergency  
core cooling systems for light water nuclear power reactors,"  
Annual Report for Quad Cities Units 1 and 2, dated May 9, 2001.**

The purpose of this report is to meet the 30-day 10CFR50.46(a)(3) reporting requirements for Quad Cities Station Unit 2 as a result of implementation of GE LOCA analysis on Quad Cities Unit 2 Cycle 17 startup. A new LOCA analysis was performed to support Extended Power Uprate (EPU) and transition to GE14 fuel; therefore, there is no prior or current assessment penalty.

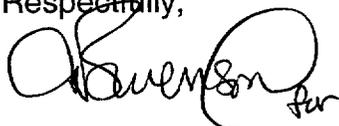
The last 10CFR50.46 report (referenced above) had a Unit 2 limiting Peak Cladding Temperature (PCT) of 1955°F for the ATRIUM-9B fuel type. With the introduction of GE14 fuel and the EPU ECCS configuration on Unit 2, the limiting PCT is 2110°F for GE14. The 10CFR50.46 report is attached.

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Should you have any questions concerning this letter, please contact Mr. W. J. Beck at (309) 227-2800.

Respectfully,

A handwritten signature in black ink, appearing to read "Tulon" with a stylized flourish at the end.

Timothy J. Tulon  
Site Vice President  
Quad Cities Nuclear Power Station

Attachment: 10CFR50.46 Report Quad Cities Unit 2 Cycle 17

cc: Regional Administrator – NRC Region III  
NRC Senior Resident Inspector – Quad Cities Nuclear Power Station

**Attachment 1**  
**Quad Cities Nuclear Power Station Unit 2**  
**10CFR50.46 Report**

PLANT NAME: Quad Cities Unit 2  
 ECCS EVALUATION MODEL: SAFER/GESTR-LOCA  
 REPORT REVISION DATE: 03/21/2002  
 CURRENT OPERATING CYCLE: 17

**ANALYSIS OF RECORD**

Evaluation Model: The GESTR-LOCA and SAFER Models for the Evaluation of the Loss-of-Coolant Accident, Volume III, SAFER/GESTR Application Methodology, NEDE-23785-1-PA, General Electric Company, Revision 1, October 1984.

Calculations:

"SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis for Dresden Nuclear Station 2 and 3 and Quad Cities Nuclear Station Units 1 and 2," NEDC-32990P, Revision 1, GE Nuclear Energy, September 2001.

Fuel Analyzed in Calculation: GE9/10, ATRIUM-9B and GE14  
 Limiting Fuel Type: GE14  
 Limiting Single Failure: Diesel Generator  
 Limiting Break Size and Location: 1.0 Double-Ended Guillotine in a Recirculation Suction Pipe

Reference Peak Cladding Temperature (PCT) (see note below) PCT = 2110°F

**MARGIN ALLOCATION**

**A. PRIOR LOCA MODEL ASSESSMENTS**

None (see note below)	$\Delta PCT = 0^{\circ}F$
<b>Net PCT</b>	<b>2110°F</b>

**Attachment 1**  
**Quad Cities Nuclear Power Station Unit 2**  
**10CFR50.46 Report**

**B. CURRENT LOCA MODEL ASSESSMENTS**

None (see note below)	$\Delta PCT = 0^{\circ}F$
Total PCT change from current assessments	$\Sigma \Delta PCT = 0^{\circ}F$
Cumulative PCT change from current assessments	$\Sigma \Delta PCT = 0^{\circ}F$
<b>Net PCT</b>	<b>2110<math>^{\circ}F</math></b>

**Note:**

Prior and Current LOCA Assessments

A new LOCA analysis was performed to support EPU and transition to GE14 fuel; therefore, there is no prior or current assessment penalty.

(Reference: "SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis for Dresden Nuclear Station 2 and 3 and Quad Cities Nuclear Station Units 1 and 2," NEDC-32990P, Revision 1, GE Nuclear Energy, September 2001.)