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RS-01-113

June 7, 2001

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

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

Quad Cities Nuclear Power Station, Units 1 and 2
Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254 and 50-265

Subject: Additional Materials Information Supporting the License Amendment
Request to Permit Up-rated Power Operation

Reference: Letter from R. M. Krich (Commonwealth Edison Company) to U. S. NRC,
"Request for License Amendment for Power Up-rate Operation," dated
December 27, 2000

In the referenced letter, Commonwealth Edison (ComEd) Company, now Exelon Generation Company (EGC), LLC, submitted a request for changes to the operating licenses and Technical Specifications (TS) for Dresden Nuclear Power Station (DNPS), Units 2 and 3, and Quad Cities Nuclear Power Station (QCNPS), Units 1 and 2, to allow operation at up-rated power levels. In a discussion between EGC and Mr. L. W. Rossbach and other members of the NRC on May 21, 2001, the NRC requested additional information regarding these requested changes. The attachment to this letter provides the requested information.

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Should you have any questions related to this request, please contact Mr. Allan R. Haeger at (630) 657-2807.

Respectfully,

A handwritten signature in black ink, appearing to read 'J. A. Benjamin', followed by a long horizontal flourish.

J. A. Benjamin
Vice President
Licensing and Regulatory Affairs

Attachments:

Affidavit
Additional Materials Information Supporting the License Amendment Request to Permit
Up-rated Power Operation


cc: Regional Administrator – NRC Region III
 NRC Senior Resident Inspector – Dresden Nuclear Power Station
 NRC Senior Resident Inspector – Quad Cities 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, UNITS 2 AND 3) 50-237 AND 50-249
QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2) 50-254 AND 50-265

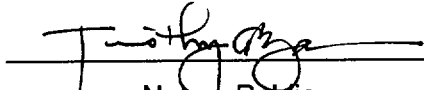
SUBJECT: Additional Materials Information Supporting the License Amendment Request to Permit Upgraded Power Operation

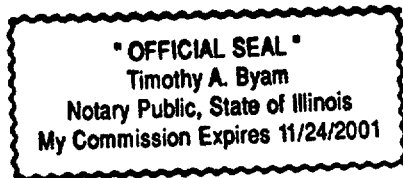
AFFIDAVIT

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


J. A. Benjamin
Vice President – Licensing and Regulatory
Affairs

Subscribed and sworn to before me, a Notary Public in and
for the State above named, this 7th day of
June, 2001.


Notary Public



Attachment
Dresden Nuclear Power Station, Units 2 and 3
Quad Cities Nuclear Power Station, Units 1 and 2
Additional Materials Information Supporting the License Amendment Request to
Permit Uprated Power Operation

Question

Flow Accelerated Corrosion - (Paragraphs 3.5.2.3, 3.5.3.3, 3.5.4.3): Specify which parameters, affecting flow accelerated corrosion (FAC), are expected to change after power uprate and what effect this change may have on wall thinning in the components subjected to FAC in the main steam and associated piping system, the feedwater system, and the other RCPB piping systems.

Response

The main steam and feedwater systems are the only two systems involving potential FAC concerns that constitute the reactor coolant pressure boundary (RCPB).

The RCPB portion of the main steam system operates with steam from the reactor, which has a design quality level above 99.5%. The lines containing this steam are classified as non-susceptible by FAC criteria developed to assess the susceptibility of piping. As a part of the power uprate implementation, the reactor vessel moisture separation equipment is being modified to maintain moisture carryover levels consistent with pre-power uprate levels. This will ensure that the main steam lines will continue to not be susceptible to FAC after power uprate.

Because of the change in feedwater system operation due to the operation of an additional pump and the pressure and temperature changes, wear rates are expected to decrease in some feedwater lines and increase in others. The change in feedwater system conditions has been modeled in the Electric Power Research Institute's (EPRI) CHECWORKS program to assess the overall impact on FAC wear rates. Feedwater temperature and overall system flow increase as a result of the uprate. The increase in temperature will result in both increased and decreased wear rates depending on where the system temperature falls within the FAC susceptibility range (i.e., 250°F-400°F) for each modeled line. The largest increase in wear rates for both Dresden Nuclear Power Station and Quad Cities Nuclear Power Station is expected to occur in lines from the D feedwater heaters to the reactor vessel primarily due to increased flow.

The effects of the power uprate have been incorporated into the FAC program and have been used to determine inspection schedules. The scope for upcoming refueling outages includes components that were originally scheduled for inspection along with additional inspections due to the anticipated effects of the power uprate.