UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, D. C. 20555

GT3500102

January 9, 2001

MEMORANDUM TO: G. Wallis, Chairman, Thermal-Hydraulic Phenomena Subcommittee

FROM: P. Boehnert, Senior Staff Engineer

SUBJECT: NRR/COMMONWEALTH EDISON COMPANY MEETING, UPDATE ON CORE POWER UPRATE PROGRAMS FOR DRESDEN AND QUAD CITIES PLANTS, NOVEMBER 16, 2000

The subject meeting was held for representatives of Commonwealth Edison to update the staff on the status of the power uprate program for the Dresden and Quad Cities units. Key points noted during the meeting included:

- Dresden (D) and Quad Cities (QC) will transition to use of GE 14 fuel. Licensing topical submittals have been made. Comm Ed is requesting approval for the fuel transition request by September 2001 and January 2002 for the Dresden and Quad Cities units, respectively.

- A number of plant modifications will be required to support the power uprate. These modifications include: "I & C" modifications to accommodate the running of all available feed and condensate/booster pumps (previously, one of each set of pumps was idled as a spare), flow-related modifications (new HP turbine rotor, staking of condenser tubes, additional cooling towers (Dresden only)), and support and piping modifications to accommodate increased temperatures in torus attached piping and increased flow in main steam and feedwater piping.

- Rated thermal power will increase 17% (D) & 17.7% (QC) to match the limit of the main generator (2957 MWt).

- Commonwealth Edison performed a limited risk analysis of the impact of power uprate. The analysis was performed using the guidelines of Regulatory Guide 1.174. The results showed a minimal increase (not specified), primarily due to

reduced operator action time.[1] The overall impact on CDF was characterized as falling into Region III of Regulatory Guide 1.174. During discussion of this matter, Comm. Ed representatives noted that the primary effect on operator action time is associated with additional manual actions for the feedwater pumps, given NPSH considerations. Operator training will be upgraded and procedures rewritten. The dominant accident sequences that are affected by operator action time are ATWS and fire. The results of the risk analysis will be provided to the NRC staff.[2]

- Commonwealth Edison was scheduled to submit the License Amendment Request by C.O.B. December 29, 2000.[3]

I will keep you posted on this matter as developments warrant.

cc: ACRS Members
R. Savio

cc w/o attach (via E-mail):
J. Larkins
J. Lyons
S. Duraiswamy
ACRS Technical Staff & Fellows

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[1]This is similar to the results provided to the Committee by the Monticello and Hatch plant licensees for the risk studies conducted at the behest of the ACRS during its review of these uprate requests in 1998.

[2]I will obtain a copy for the Committee's perusal .

[3] The submittal was actually made on December 27, 2000.