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SUBJECT: Submits util observations on review of preliminary analysis rept of event reported in LER 97-003.Licensee concludes that NRC's analysis of subject LER appears to have several differences from util analysis of same event.

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May 27, 1998

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

Subject: Oconee Nuclear Site
Docket Nos. 50-269, -270, -287
Review of Preliminary Accident Sequence Precursor Analysis of Operational Event at Oconee Nuclear Station - LER No. 287/97-003

This letter is in response to the preliminary analysis of the event reported in LER No. 287/97-003, as described in a staff letter dated April 24, 1998. Duke Energy Corporation (Duke) understands the NRC's desire to make the Accident Sequence Precursor (ASP) analysis as realistic as possible and appreciates the opportunity to provide comments concerning the analysis of this event.

Duke has reviewed the preliminary analysis report and has the following observations:

1. The estimated conditional core damage probability calculated by the NRC for this event (3.3E-5) is lower than but in the same range as the value calculated by Duke using the current model of the Oconee PRA (8.8E-5). There are some differences in the way these values were calculated, as addressed below.

   a) The fraction of time that was assumed for the HPI pumps to be vulnerable to failure as a result of low Let Down Storage Tank (LDST) level differs between the two analyses. The NRC assumed that 20% of the time between February 22 and May 3, the LDST level was low enough to cause failure of the HPI pumps had they been needed to mitigate a LOCA. This was determined from a simplified model of LDST level and pressure as a function of LDST reference leg level during BWST draw down. The Duke analysis simply assumed the HPI system to be vulnerable

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to failure for 50% of the time between February 22 and May 3.

a) The NRC analysis assumes two separate independent recoveries for small LOCAs,

- PCS-XHE_XM_CDOWN, which addresses the failure of the operators to depressurize the unit and initiate RHR prior to HPI failure,

- PCS-XHE-XM-FDEPR, which addresses failure to depressurize to LPI pressure following loss of HPI.

Duke assumed only one potential recovery.

b) Duke assumed that it would be possible to depressurize the primary system and initiate decay heat removal using the Low Pressure Injection system (LPI) for medium size LOCAs. This was applied as a "recovery" event for cutsets where both steam generator cooling and the LPI system were available. The NRC did not take credit for this potential recovery.

2. The sensitivity analysis which considers the combined effect of the Unit 3 LDST reference leg leak and the Unit 2 HPI injection nozzle weld leak (LER No. 270/97-001) is not appropriate and adds no value to the analysis of the Unit 3 event. As discussed in the Duke letter of February 24, 1998 in response to the Preliminary Accident Sequence Analysis of LER 279/97-001, the precursor treatment of the Oconee 2 HPI injection nozzle leak event is inappropriate. Superimposing this event on another unit's condition introduces additional extrapolations, and produces questionable conclusions. Duke suggests that this sensitivity discussion be deleted.

In conclusion, the NRC's analysis of the Oconee event reported in LER No. 287/97-003 appears to have several differences from the Duke analysis of the same event. However, these are understandable differences in assumptions and neither analysis appears to be in error. Even with these differences, both the NRC and Duke analyses concluded that the conditional core damage probability was in the

range of 3E-5 to 8E-5 and that the conditional core damage probability of the event is above the precursor threshold.

Very Truly Yours,

W. R. McCollum
Site Vice President, Oconee Nuclear Site

cc: Mr. L. A. Reyes, Regional Administrator
Region II

Mr. D. E. LaBarge, Project Manager
ONRR

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