

September 20, 2001

LICENSEE: Duke Energy Corporation

FACILITY: Oconee Nuclear Station, Units 1, 2, and 3

SUBJECT: OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3 RE: MEETING SUMMARY ON THE DUKE ENERGY CORPORATION RESPONSE TO BULLETIN 2001-01, CIRCUMFERENTIAL CRACKING OF REACTOR PRESSURE VESSEL HEAD PENETRATION NOZZLES (TAC NOS. MB2643, MB2644, AND MB2645)

The recent discovery of cracked and leaking Alloy 600 reactor vessel head penetration nozzles at the Oconee Nuclear Station, Units 1, 2, and 3, and Arkansas Unit 1, and in particular the discovery of circumferential cracking at Oconee, has raised concerns about the potential safety implications and prevalence of cracking in these nozzles at pressurized water reactors (PWRs). Following public meetings with representatives of the Electric Power Research Institute Materials Reliability Program, the staff issued Bulletin 2001-01, *Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles* and requested that all PWR licensees supply certain information within 30-days. Duke's response to the Bulletin is dated August 28, 2001.

On September 7, 2001, the NRC staff met at the NRC headquarters in Rockville, Maryland, with representatives of the Duke Energy Corporation (Duke) staff and others to gain insights into Oconee's response to the Bulletin. Enclosed is a list of the individuals who attended the meeting. The handout material that was supplied by Duke can be found in the NRC's Agencywide Documents Access and Management System at Accession Number ML012570162.

The topics discussed by Duke included a history of the nozzle cracking concerns starting in 1991, an outline of the recent crack indications and repairs on the three Oconee Units, and future plans for inspections. Duke also discussed its root cause evaluation, corrective action plan, risk assessment, and the relationship of findings to regulatory compliance. In addition, Duke discussed the risk assessment methodology and event tree models that were used to generate the data and reach the conclusions that are contained in the submittal. Also

discussed was the effect on the safety margin and the defense in depth concept in the event a crack causes a loss of coolant accident. The Oconee submittal is still under review by the staff.

/RA/

David E. LaBarge, Senior Project Manager, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-269, 50-270, and 50-287

Enclosure: As stated

cc w/encl: See next page

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*See previous concurrence

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DATE	9/19/01	9/19/01	9/18/01	9/19/01

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LIST OF ATTENDEES

MEETING WITH DUKE ENERGY CORPORATION

HELD

SEPTEMBER 7, 2001

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John Hamilton	Entergy Nuclear
David Bryan Miller	Entergy Nuclear
Ken Canady	Duke Energy
Jim Terry	Progress Energy (Crystal River 3)
Duncan Brewer	Duke Energy
Melvin Arey	Duke Energy
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Andrea Lee	NRC/NRR/EMCB
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