

# Action For a Clean Environment

Adele Kushner, Executive Director

Joanne Steele, Director, Oconee Nuclear Project

Steven Bloom  
U. S Nuclear Regulatory Commission  
OWFN 8G9  
Washington, D C 20555-0001

March 4, 2003

Dear Mr. Bloom,  
I listened in on the meeting February 24 related to the Order Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors. In checking files I found the Duke Energy Corp Oconee Nuclear Stations units 1,2,&3 30 Day Response to the NRC bulletin for Reactor Pressure Vessel Head and Vessel Head Penetration Nozzle Inspection Programs, dated Sept 6, 2002.

Quoting the letter:

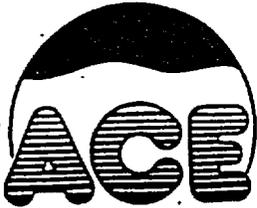
- "Duke has scheduled replacement of Reactor Pressure Vessel Heads (RPVHs) for Oconee Units 1 and 3 following current operating cycles. No RPVH inspections are planned for these units prior to RPVH replacement "
- "Unit 2...is schedule to begin last refueling outage prior to head replacement in October 2002. The established inspection plan for this outage follows the graded approach developed at Oconee over the last several years. This graded approach has been previously described to NRC Staff in response to previous bulletins. Duke also plans to do 100% volumetric blade probe inspection of the previously un-repaired nozzles
- To summarize, the ONS-3 RPVH inspection plan
- 100% visual inspection of all CRDM nozzles
- Blade probe volumetric inspection of all remaining unprepared nozzles to locate both ID and OD initiated axial and circumferential cracks and potential leak pathways.
- Dye penetrant inspection of indeterminate blade probe UT (ultra sound technology) inspection path results
- Duke's confidence in this graded approach is based upon technical justification and previous efforts and experience... further strengthen by additional Oconee Unit 2 specific analysis that determine core damage frequency associate with this situation is well below regulatory Guide 1.174 threshold valves and no fuel rod failures would occur given unlikely occurrence of a rod ejection accident.

It is our opinion at Action for a Clean Environment that safety would dictate shutting down the Oconee reactors until the vessel heads are replaced. It appears the old vessel heads have never had a complete 100% inspection as your recent order recommends and that under your order they would wait until refueling to do so. That is two more months for Unit 3, 8 months for Unit 1, and next year for Unit 2. North Anna had greater deterioration of CRDMs than previously calculated, which could turn out to be the case at Oconee.

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## My questions

1. Why do you consider it ethical to "jump the gun" in your words, and post a document that rates the 3 worst reactor heads in the country as low susceptibility to deterioration, especially unit 3 of Oconee that is still in operation, BEFORE replacements are done? I've seen no posting of a correction. This gives a false sense of security of the present situation.

2. What if simultaneous rod ejections occur, and there is tearing of insulation during that accident, and clogging of the sump from debris?

3. How will the reactor be shut down if there is damage and leaking at a fast rate?

4. Has Davis-Besse's head been replaced yet?

5. Is the North Anna reactor that had 49 serious cracks remaining off line until vessel head replacement can be done?

6. In the meeting there was mention of unidentified leaks of up to one gallon per minute from the primary systems that may drip onto the vessel head or seams. This could add up to 1,440 gallons a day or 43,000 gallons in a 30 day month. Is this common? You said it may be important to identify these leaks. I would think so!

7. How are the CRDMs monitored when the reactors are in operation?

8. How is the vessel itself tested for strength and integrity? These reactors are so old, and the metal is bound to deteriorate all around. We believe total inspection of the entire vessel should be done, top to bottom, inside and out. Is that possible?

Oconee reactors were relicensed before all the concerns of aging reactors were fully taken into consideration. We recommend that these and other reactors being considered for relicensing be held to their original licensed operation. Problems will continue to arise with the vessels. Nuclear accidents would be catastrophic and impossible to clean up. Financial resources don't exist to meet emergency response to serious accident, nor can emergency plans prevent the resulting high death and cancer rates a radioactive released from a damaged reactor.

Thank you for prompt reply to these questions

Sincerely

Joanne Steele  
Action for a Clean Environment  
Oconee Project Director

Cc:

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