

August 8, 2001

Mr. Sam Collins
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2738

Dear Mr. Collins:

I have read the NRC letter from Mr. David LaBarge to Mr. W. R. McCollum, Jr., Vice President, Oconee Site, Duke Energy Corporation, dated July 17, 2001, granting partial approval of the Oconee 10CFR50.12 exemption request from hydrogen control requirements. I believe that the NRC staff could have further enhanced safety by applying a broader spectrum of risk-insights to the Oconee petition and granting a more complete approval of the Oconee exemption request. In my opinion, the decisions made in response to the Oconee exemption request with respect to hydrogen monitoring are not optimum and are not consistent with the NRC staff position taken in SECY-00-0198 with respect to improving hydrogen control regulations.

Attachment 1 to this letter provides more detail to my concerns about the partial approval of the Oconee exemption request from hydrogen control requirements. I am willing to meet with you or your staff to discuss this matter before the NRC staff reaches any final position with regard to the Safety Evaluations for the 10CFR50.12 exemption requests from hydrogen control requirements from Three Mile Island Unit 1 and Turkey Point Units 3 and 4. I will call you to discuss an agreeable date for such a meeting.

Sincerely,



Bob Christie

cc: Ashok Thadani, RES
George Apostolakis, ACRS

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Attachment 1 - Letter from Bob Christie to Mr. Sam Collins, dated August 8, 2001

The purpose of changing 10CFR50 is to focus the attention of the licensee and the NRC staff on the most safety significant equipment and procedures (effective regulations) and do this in an efficient manner. This result is not achieved in the NRC letter from Mr. David LaBarge to Mr. W. R. McCollum, Jr., dated July 17, 2001, concerning the Oconee exemption request from hydrogen control requirements. Unless the decisions made in the Safety Evaluation for the Oconee exemption request are revised, it is likely commercial nuclear power generating units will continue to be required to use antiquated "safety-related" hydrogen monitors instead of new commercial-grade digital hydrogen monitors. These new commercial-grade digital hydrogen monitors are more accurate, easier to maintain, and more cost effective. The decision documented in the Oconee Safety Evaluation concerning hydrogen monitoring in the July 17, 2001, letter to Oconee is not the way to proceed.

In the NRC letter to Oconee, the statement is made, "However, the staff has determined that we cannot support your requested exemption from the functional requirements for hydrogen monitoring contained in the regulations listed above (10CFR50.44; 10CFR50, Appendix A, Criterion 41; and 10CFR50, Appendix E, Section VI)."

Later, in the Introduction to the Safety Evaluation, the statement is made,

"The staff does not support the licensee's request for an exemption from the functional requirement for hydrogen monitoring as promulgated in Part 50, Appendix E, Section VI, 'Emergency Response Data System (ERDS),' or any commitments made in regard to NUREG-0737, Item II.F.1, Attachment 6, 'Containment Hydrogen Monitor.' In the Statement of Considerations for Appendix E to Part 50, the Commission stated that the ERDS data (which includes the continuous hydrogen monitors) provides the data required by the NRC to perform its role during an emergency. This conclusion is still valid for not only the staff but licensees..."

The introduction then goes on to explain why the NRC staff believes it is necessary to continue to use hydrogen monitoring as an indicator for defining Emergency Action Levels as part of the emergency planning requirements for barriers.

Attachment 1 - Letter from Bob Christie to Mr. Sam Collins, 8/8/01, (continued)

Finally, the NRC staff states "Therefore, the staff does not support the licensee's request for exemption *from the functional requirements for hydrogen monitoring or its removal from the Oconee Nuclear Station Technical Specifications* (bold and italics are mine). Consequently, the licensee has withdrawn the proposed changes to the Oconee Nuclear Station Technical Specifications."

While the NRC staff have technical reservations about the removal of hydrogen monitoring requirements from the Appendix E requirements which may or may not be valid (such arguments would be the subject of another discussion if you so desire), the NRC staff have had no technical reservations about the elimination of hydrogen monitoring requirements from the design-basis-accident analysis. This was made clear in Attachment 3 to SECY-00-0198, which is a comparison of my petition for rulemaking with regard to 10CFR50.44 and 10CFR50, Appendix A, Criterion 41. To quote statement #2, "Mr. Christie requests elimination of the requirement to monitor hydrogen concentration; the staff also recommends elimination of this requirement."

The NRC staff is on record that the function of existing hydrogen control systems is not safety significant. This includes hydrogen monitoring, hydrogen thermal recombiners, and hydrogen purge valves. Yet the staff cannot take the requirements for hydrogen monitoring out of the Technical Specifications when they get a specific request by a licensee, following an approved process, with more than sufficient technical justification. This position is taken in spite of the fact that the NRC staff have approved exemption requests for hydrogen thermal recombiners and hydrogen purge valves. Without the hydrogen thermal recombiners and hydrogen purge valves, there are no technical reasons to keep design-basis-accident requirements and Technical Specifications for hydrogen monitors.

What the staff have done with respect to the Oconee exemption request is have the licensee withdraw the exemption request for hydrogen monitoring and then put words in the Oconee Safety Evaluation to justify keeping the "functional requirements for hydrogen monitoring or (prevent) its removal from the Oconee Nuclear Station Technical Specifications." If the NRC staff have technical reservations with respect to the elimination of hydrogen monitoring from 10CFR50, Appendix E, Section VI, the NRC staff should deny Oconee the exemption request for hydrogen monitoring contained in 10CFR50, Appendix E, Section VI, and justify the denial based on public health risk. The NRC staff should approve the exemption requests for hydrogen monitoring from 10CFR50.44 and 10CFR50, Appendix A, Criterion 41. The effort by the NRC staff in the Oconee Safety Evaluation to keep the design-basis-accident requirements and Technical Specifications for hydrogen monitoring is not technically justified and is not consistent with the NRC staff position with respect to improving the regulations concerning hydrogen control.