

March 24, 2000

Ms. Gary Jones  
Associate Director, Energy,  
Resources, and Science Issues  
U.S. General Accounting Office  
Washington, DC 20548

Dear Ms. Jones:

I am responding to your letter of March 15, 2000, requesting the U.S. Nuclear Regulatory Commission (NRC) to review and comment on the draft report "Fire Protection: Barriers to Effective Implementation of NRC's Safety Oversight Process" (GAO/RCED-00-39). The NRC has completed its review of this report and our comments are enclosed for your consideration.

We appreciate the opportunity to comment on this report, as well as your incorporation of many of our prior comments in the previous version. The NRC staff is available to discuss the enclosed comments at your convenience. If you have any questions, please contact Edward A. Connell at 301-415-2838.

Sincerely,

*/RA/*

William D. Travers  
Executive Director  
for Operations

Enclosure: As stated

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**Per discussion  
With Gary Holahan  
EDO-002**

**ACCESSION NUMBER ML003693039**

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**U.S. Nuclear Regulatory Commission Review of U.S. General Accounting Office Draft Report, "Fire Protection: Barriers to Effective Implementation of NRC's Safety Oversight Process" (GAO/RCED-00-39)**

(1) Pages 2 and 6 of the report state that the NRC is working with industry to develop a standard to help ensure the quality, scope, and adequacy of the utilities' fire risk assessments but does not expect to have such a standard until about 1-1/2 years after the new oversight process is implemented. The report states that the oversight process begins in April 2000.

The staff is participating with industry in the development of National Fire Protection Association (NFPA) Standard 805, "Performance Based Standard for Fire Protection for Light Water Reactor Generating Plants," expected to be published in March 2001. Although this future NFPA standard will include guidance on acceptable methods for performing probabilistic fire safety assessments, the new NRC reactor oversight process procedure for fire protection inspection does not rely upon the future NFPA 805 standard. Rather, the fire protection baseline procedure uses existing risk information techniques.

(2) On page 2, the report implies that fire risk assessments simply assume small fires, and that the NRC takes that assumption at face value. Actually, both fire risk assessment analysts and reviewers do look at the fire scenarios postulated and see if they make sense for the room occupancy. Fire risk assessments also look at the possibility of growth beyond initial size; this is a major portion of the assessment. The NRC generally believes that the likelihood of fires which are severe enough to fail intact, rated barriers is very small - this is based on knowledge of typical room occupancies (which affect how fires behave), the increasing likelihood of fire suppression with time, and the historical record (which has very few severe fires). The NRC has research tasks aimed at improving our confidence in a number of areas relevant to multi-area fires (e.g., the reliability/availability of barriers, fire modeling).

(3) Page 3 states that the NRC did not have fire protection regulations before the Browns Ferry fire in 1975.

General Design Criterion (GDC) 3, "Fire protection," was issued as part of Appendix A to 10 CFR Part 50 in 1971. GDC 3 specifies that structures, systems, and components important to safety be designed and located to minimize, consistent with other safety requirements, the probability and effects of fires and explosions. The GDC also specifies that fire detection and firefighting systems of appropriate capacity and capability be provided to minimize the adverse effects of fires on structures, systems, and components important to safety.

(4) Page 7 states that the ACRS told the NRC that it did not have a plan to undertake research activities that would result in the type of tools the NRC needs to move forward with a risk-informed approach for fire protection.

The ACRS critique stated that the NRC doesn't have a plan for implementing the results of the fire risk assessment research.

(5) Page 9 states that none of the risk assessments addressed cable routing.

Almost all of the fire risk submittals stated that cable routing information was considered during the evaluation. This information generally did not have to be developed as part of the fire risk

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assessment because this information was already available to licensees as part of the work to demonstrate compliance with the NRC's fire protection requirements (e.g., Appendix R to

10 CFR Part 50).

(6) There is a factual misunderstanding that affects the report in a number of places (i.e., pages 2, 7, 8 & 10). The report states that the baseline inspection frequency is adjusted as a result of performance indicators. The report does not recognize that there is only one baseline inspection and that the baseline inspection is the minimum level of inspection performed at all commercial nuclear power plants regardless of licensee performance. The frequency of the baseline inspection is not adjusted based upon performance indicators or inspection findings. The report also does not recognize that performance indicators and baseline inspection together form the basis for assessing licensee performance and determining the need for additional inspection beyond the baseline.