



# NRC NEWS

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**“Achieving Closure in Fire Protection”  
Prepared Remarks for  
The Honorable Gregory B. Jaczko  
Chairman  
U.S. Nuclear Regulatory Commission  
at the  
Nuclear Energy Institute Fire Protection Information Forum  
Savannah, Georgia  
September 21, 2009**

Thank you for inviting me once again to speak at the Nuclear Energy Institute Fire Protection Forum—this time as Chairman of the Nuclear Regulatory Commission. As you know, fire protection has been a longstanding interest of mine since I joined the Commission. I am committed to achieving closure on these issues during my term as Chairman, and it is one of my priorities. I would like to acknowledge your fine work and the advancements many of you in this room have contributed to, in the areas of risk-informed fire protection, fire protection, probabilistic risk protection (PRA), fire modeling, and researching fire-induced cable failures. The NRC is charged with ensuring the safety of nuclear power plants and nuclear materials, but you are responsible for managing the plants, and we cannot fulfill our mission without your dedication and expertise.

There are several key areas of concern that I want to address today: The transition to National Fire Protection Association Standard 805 (NFPA 805), fire-induced circuit failure issues, interim compensatory measures, operator manual actions, and fire science research.

I continue to believe **NFPA 805** is the clearest path forward to resolve the patchwork of our current regulations. I want to affirm the Commission’s support for this transition. While the plants are currently safe using existing fire protection regulations, adopting NFPA 805 will enhance safety even more. NFPA 805 is a good example of a beneficial performance-based regulation that can use risk insights to tangibly enhance safety. One benefit of the program is that NRC and licensees must undertake a more

comprehensive evaluation of a plant's entire fire protection program. Licensees have to fix any problems that are identified through that process.

The NFPA 805 pilot plant transitions have been complex, and have required a significant level of effort by the licensees, as well as the NRC staff. I would expect that, with any new endeavor like NFPA. Staff is currently in the final stages of the review for Shearon Harris, and that could be completed in the next few months; Oconee is expected to be finished next spring.

I encourage those plants intending to transition to NFPA 805 not to wait to submit their applications until near the end of the enforcement discretion. With the first license amendment nearing completion, I believe there will be more than sufficient information for other licensees to submit their license amendments. I hope you will all commit to doing this as soon as possible. I call on industry to submit high quality, detailed and timely submittals for those plants currently intending to transition to NFPA 805 so that the staff will be able to complete their reviews by 2013.

I know the fire protection PRA has been a challenge. So has the guidance for resolving the circuits issue. I know firsthand the staff is working hard to resolve these issues. EPRI and industry have also done much to advance the state of knowledge of fire PRA. It's never easy to be first to resolve some of the issues, such as PRA conservativisms. It's not easy to develop consensus on these standards, but I encourage all of you to stay focused, and stay committed.

If you look back at the transition to PRA, it required 20 years. And, the technology has continued to evolve. It's more sophisticated now than it was 20 years ago. For the better part of a decade, the NRC and industry have had some of their best minds working to refine the fire PRA methodologies. NFPA 805 takes advantage of the most modern technology we have in fire protection programs – it updates us by 30 years, and it focuses on the right issues. It also appropriately focuses on what's important concerning the risk significance for fire protection. For example, if future research regarding fire-induced DC circuit failures, or aging, identifies these as a significant risk issue, the NFPA 805 framework provides licensees the necessary tools to deal with those issues, as well as any advancement in understanding fire science. By contrast, non-NFPA 805 plants could face prescriptive requirements.

Last year the Commission approved a policy for more clarifying guidance to help licensees comply with Appendix R fire protection requirements for **fire-induced circuit failures**. Although the Commission approved an extension to the enforcement guidance to identify and resolve fire-induced circuit failure related noncompliance, this action only serves to prolong licensee noncompliance with fire protection regulation. The use of enforcement discretion and longstanding interim compensatory measures has gone on since 1998, which I think is a long time.

These fire protection issues are not new. The industry has had more than 10 years of enforcement discretion to identify and resolve potential noncompliances involving

fire-induced circuit failure vulnerabilities. At some point, the Commission may have to say “enough!” The regulatory requirements and supporting staff positions are clear. I expect that staff will complete the final guidance this year, and that licensees will work to resolve the fire-induced circuits issue. Next year, I expect staff to have determined how they will ensure licensee’s performance in this area, and that licensees will complete all actions to resolve this issue by 2013.

The path to resolution is simple. Under the Commission-approved NFPA 805 rule, licensees can transition to a performance-based standard for fire protection, and this would allow them to address their noncompliances.

Another important issue is post-fire **operator manual actions**. Fifty-one units are closing this issue through their transition to NFPA 805. Fifty-three units are not transitioning to NFPA 805 at this time – and of those, 12 units at eight sites have recently applied for exemptions or license amendments. Our staff is reviewing these requests and should complete their reviews by the end of 2010. The staff will verify that plants have adequately closed their operator manual actions through inspections and, if necessary, through regulatory actions and enforcement.

Another area where we need progress is eliminating dependence on **interim compensatory measures**. These measures were meant to be just that - a temporary measure. Many plants use interim compensatory measures, some of which have been in place for decades, or they have received exemptions to our regulations. Although the exemptions are allowable under current regulations, the large number of approved exemptions at many facilities is perceived by many stakeholders as a lack of decisiveness.

Last year, the Commission directed the staff to establish a baseline, such as the number and general type of all open fire protection deficiencies that were addressed through compensatory measures. The Commission tasked the staff with developing a plan to assess the effectiveness of the ongoing improvements to the fire protection regulatory framework. I understand NEI will be providing information this month to trend the use of these longstanding interim compensatory measures. Licensees can take this as an opportunity to baseline their performance and fix any longstanding deficiencies now, to be able to further reduce the use of compensatory measures as soon as possible as part of an effective corrective action program to resolve problems in a timely manner. I intend to work with the Commission to establish a metric such as licensees would have zero interim compensatory measures greater than one year old by 2012.

Finally, one area I think industry could be more proactive is in the area of **fire research**. While there has been some excellent work in this area, I believe industry can do even more. There is still much to be done to increase our understanding about fire-induced shorts with DC circuits. Our Office of Research has begun preliminary work on DC circuit failures. While industry has donated equipment for testing, I would like them to look closely at how much testing they are doing, and consider taking a strong leadership role. For example, I recently visited the NIST facilities to observe firsthand

the significant resources the agency has expended to enhance our knowledge of fire-induced AC circuit failures. Without this kind of critical research, it would be difficult for further refinements in fire PRA and modeling to enhance the technical underpinnings for understanding fires.

I've enjoyed having the opportunity to talk with you today and share my thoughts on the challenges we face and the progress we've made on resolving fire protection issues.

Thank you. I will now take comments or questions.