

March 29, 2010

Chairman Gregory Jaczko
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0111
By email: secy@nrc.gov

Subject: Follow-up to our meeting on NRC fire protection regulation

Dear Chairman Jaczko,

Thank you again for meeting with us about our concerns regarding the NFPA 805 fire protection program, particularly as it relates to the pilot programs at the Shearon Harris and Oconee plants.

However, the recent multiple fires at Progress Energy's H.B. Robinson and Brunswick units and FirstEnergy's Perry unit underscore our mutual concern that the Nuclear Regulatory Commission must end its policy of enforcement discretion for fire protection violations and bring all U.S. reactors into enforced compliance with approved federal fire safety code to assure post-fire safe shutdown of the reactors.

This letter seeks clarification on several questions we discussed and formally requests documents discussed during the meeting.

In addition, we wish to reiterate our request that no license amendments regarding fire protection be granted to Harris, Oconee or any other plant until the issues in dispute are

resolved in accordance with NRC regulations [10 CFR 50.48 (b) and (c)] with public transparency involving your agency.

We remain concerned that: 1) the scientific underpinning for the NFPA 805 program is in question, especially regarding the protection of vital power, instrumentation and control cables, 2) that NRC Staff is allowing Harris and Oconee to use fire models that have either failed or have not been verified and validated as required by NRC regulations, 3) that recent concerns about those models, as issued by leading international fire science experts – both within and outside the agency – have been ignored and/or suppressed, and 4) that pressure on the NRC to finally bring U.S. nuclear power plants into compliance with the leading risk factor for meltdown may have compromised objectivity and set the stage for compromised public safety.

1. NRC's lead staffer on fire modeling for NFPA-805 project, Dr. Azarm Dey, was fired after he objected to NRC moving ahead with the flawed process we describe. With a doctorate in nuclear engineering and stellar credentials in the field of risk-informed, performance-based regulation, Dr. Dey filed a Differing Professional Opinion explaining that the NRC Staff is directing licensees to use fire models that fail. You declined to discuss his situation with us because you do not discuss "personnel" matters, even though our interest was not in the details of his employment but in the content of his complaint. Have the Dey DPO and the agency findings been made public? If not, why not? If so, can you please send us the accession number? Also, are you not concerned about his position regarding NFPA-805?
2. We agree with a characterization you made during the meeting that we were "talking past each other." We request clarification on one such point that regards your statement that NUREG-6850 has been verified and validated, or that parts of it might still be changing. Mr. Warren quoted from the authors of the report, on the very first page of Appendix R, Cable Fires, who used emphatic language to describe serious modeling uncertainties; that 6850 had not been verified and validated, and; that it was not ready for use beyond experimental set-ups. Our discussion on these points with you was inconclusive. Do we correctly understand your position to indicate that NUREG-6850 has been superceded? Would you please clarify the agency's position on the above stated fire protection issues raised by NUREG-6850? How have these issues been addressed or incorporated in compliance with NFPA-805?
3. Is it your position that NRC can grant a license amendment that uses fire models that have not been verified and validated? If so, how does that reconcile with NFPA-805, Sections 2.4.1.2.2, 2.4.1.2.3 and 2.7.3.2, each of which states that "... the fire models **shall be** verified and validated." (emphasis added)

4. Can NRC please verify that all fire models being used in both the Harris and Oconee license amendment applications have been verified and validated? If not, please explain your position.
5. Is it the NRC position that a license amendment can be granted for NFPA 805 using unvalidated and unverified fire models that are anticipated to be completed and approved at a later date? This regards our discussion of the NRC Staff's admission that retesting of failed fire models will continue for another two years, even though NRC appears to be poised to grant license amendments to both Harris and Oconee.
6. Would you please send or direct us to communications which indicate that the concerns of international fire experts on the ICFMP and PIRT panels regarding fire modeling, particularly regarding cable ignition and flame spread (as detailed in our February 19th letter and March 16th supplemental information) were responded to and/or considered by NRC Staff? During the meeting, you seemed dismissive of those expert panels but did not address our question about why their input was first solicited by NRC, then seemingly dismissed and/or suppressed after their feedback was problematic.
7. During the meeting, your primary emphasis to us was that there are recognized and acceptable limitations with fire modeling, and that significant uncertainty will be addressed by a return to compliance on qualified passive, physical fire protection features as now required under current regulations [10 CFR 50 Appendix R III.G.2]. We remain concerned that most, if not all, U.S. reactors are currently operating in noncompliance and under extended enforcement discretion from the regulatory requirements. Would you please clarify?
8. Regarding the previous question, your explanation about modeling limitations seems straightforward as we understand you. Therefore, we remain confused as to why neither the NRC Staff nor your office used that argument over the past year during multiple communications with both a national reporter and Mr. Warren, respectively. As noted in our earlier letter and to you in person, both the reporter and Jim instead received a variety of other, sometimes contradictory, explanations regarding various aspects of the modeling problems, expert panels and related issues. Why did neither NRC Staff nor your office address our concerns as you did at our meeting?
9. Would you please direct us to public documentation showing that the NRC and the pilot licensees have addressed and resolved the various modeling limitations, particularly as relating to identified failed models or models that have not been verified and validated?

10. According to our understanding of your explanation, any modeling uncertainties under NFPA-805 would result in the use of physical separation, fire barriers or other passive physical protection of cables or exemption requests. While this seems plausible, the emerging modeling problems we earlier identified would seem to have led the pilot licensees to nearly resort to such physical protections as required by current regulations in Appendix R, instead of continuing to pursue compliance under NFPA 805; not only has NFPA 805 become increasingly problematic, it had earlier been chosen by licensees due to cost pressures associated with gaining compliance under Appendix R. Please explain your understanding of that issue.

11. We believe that NRC regulations require – as does common logic – that all models be verified and validated *prior* to commencement of a licensee transition to NFPA-805. If NRC Staff statements are correct, they directed the pilot licensees to use unverified and unvalidated models, and it is up to the licensees to ensure that, prior to a license amendment being granted, the models are all verified and validated. Similarly, we understand that the NRC’s Advisory Committee on Reactor Safeguards has responded to the modeling dilemma by indicating that the NRC is working on fire models that will work “eventually.” Are we correct to understand that NRC staff can approve the Harris and Oconee License Amendment based on incomplete testing of fire models or fire models that continue to fail fire tests? If not, please explain.

12. We understand that new reactor designs and construction will be provided with the option to comply with either an Appendix R standard or NFPA 805. Is that correct?

Finally, you obviously took offense during the meeting at what you perceived as our criticism of NRC Staff. As we noted and you seemed to concur, there is a long, troubling and well-founded history of mistrust of the NRC by public interest organizations and others across the United States. While we recognize that there are many fine and devoted public servants at the NRC, we and many others have for many years seen the agency as a captive of the nuclear power industry and its pervasive pressure on various levels of the agency. We sincerely believe you seek to do the right thing in this very difficult situation, and we urge you in the strongest possible terms to use this opportunity – regarding this leading safety issue – to help build a trusting relationship with the public.

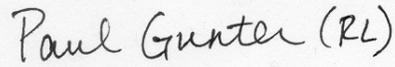
Especially due to the timing of the pilot programs, please send the requested information within 10 days so that we can apprise other interested parties in a timely manner as to the status of this issue.

Thank you again for your attention to this matter.

Sincerely,



Jim Warren
Executive Director
NC WARN



Paul Gunter, Director
Reactor Oversight Project
Beyond Nuclear

cc: U.S. Rep. David Price
U.S. Rep. David Markey
NC Sen. Ellie Kinnaird
US General Accounting Office
NRC Office of Inspector General
Alderman Dan Coleman
Mayor Mark Kleinschmidt
Commissioner Mike Nelson
Mayor Randy Voller
Commissioner Tom Vanderbeck