

Separate Views of Commissioner Burns

The version of the final rule supported by the majority of the Commission will, in my view, significantly weaken what will be the agency's most enduring action as a result of lessons learned from the Fukushima Daiichi accident. In doing so, the Commission will have systematically and inexplicably unraveled a framework for addressing beyond-design-basis external events carefully crafted as a collaborative effort between the NRC staff and our external stakeholders in the years since the accident occurred in March 2011.

I am chiefly concerned with the position the Commission majority has taken with respect to the reevaluated hazard analyses performed by licensees. This position is particularly disconcerting given that the accident at Fukushima was a direct result of the operator and regulator failing to take action to account for new scientific knowledge related to natural hazards, especially flooding hazards. In this regard, I believe that the majority has undermined the Commission's past position on these issues. In their edits to the statements of consideration for the final rule as well as to the supporting backfitting assessment, the majority has mischaracterized the Commission decision on COMSECY-14-0037. In its March 2015 Staff Requirements Memorandum on COMSECY-14-0037, the Commission approved the staff's recommendation "that licensees for operating nuclear power plants need to address the reevaluated flooding hazards within their mitigation strategies for beyond-design-basis external events." The staff was explicit in COMSECY-14-0037 about what it was asking of the Commission:

The NRC staff is asking the Commission to support the planned approach by affirming that the MBDBE rulemaking needs to require mitigating strategies that are able to address the reevaluated flooding hazards developed in response to the § 50.54(f) letters *in order to ensure reasonable assurance of adequate protection of the public health and safety.* (emphasis added)

The staff followed the Commission's unequivocal direction when it presented the proposed rulemaking on the Mitigation of Beyond-Design Basis Events to the Commission in April 2015. In the draft proposed rule, the staff clearly stated that the proposed rulemaking would apply to power reactor applicants and licensees and include proposed "requirements for the reasonable protection of mitigation equipment for beyond-design-basis external events that reflect the reevaluated hazards determined through regulatory efforts stemming from the 10 CFR 50.54(f) request issued on March 12, 2012." In the Commission paper transmitting the proposed rule (SECY-15-0065), the staff highlighted the fact that the proposed rule would "resolve and clarify the necessary actions a licensee must take to continue to show adequate protection of public health and safety, in light of the reevaluated hazards, as directed in SRM-COMSECY-14-0037." The Commission unanimously approved publication of the draft proposed rule and noted only two exceptions it was taking to the staff's proposals, neither of which involved the need for mitigation strategies to reflect the reevaluated hazards.

We should recall that, in the SRM for SECY-11-0124, "Recommended Actions to be Taken Without Delay from the Near-Term Task Force Report," the Commission approved the staff's intent to issue a request for information to all operating reactor licensees to address, among other things, reevaluations of seismic and flooding hazards in accordance with Near-Term Task Force (NTTF) Recommendation 2.1. The request for information, issued under the provisions of 10 CFR 50.54(f) on March 12, 2012, (§ 50.54(f) letter) stated that the hazard evaluation developed consistent with Recommendation 2.1 would be implemented in two phases. The first phase involved the reevaluation of the seismic and flooding hazards at all sites. In the second phase, the NRC staff was to determine, based upon the results of Phase 1, whether additional regulatory actions were necessary (e.g., updating the design basis and SSCs important to safety) to provide additional protection against the updated hazards.

As former Commissioner Apostolakis pointed out in his 2011 vote on the NTTF Report, "there is growing evidence that the historical record of tsunamis had not been used properly to determine the design basis at Fukushima Daiichi and, consequently, the protection of the plants was not sufficient." In the United States, there exists incontrovertible evidence that the current design bases for some plants do not address a flood hazard identified by the licensees' own analyses. Had the final rule been approved as proposed by the staff, the Commission's carefully crafted strategy would have dealt with this situation appropriately and effectively by requiring that the mitigation strategies for all sites be able to address the reevaluated hazards developed in response to the § 50.54(f) letters as a matter of adequate protection of the public health and safety. For plants with the most extreme exceedances from their current design basis, additional actions may have been necessary, but those decisions would only be made once their final flooding and/or seismic evaluations (e.g., integrated assessments or seismic PRAs) were completed. Absent a requirement in the MBDBE final rule to protect the mitigation strategies from the reevaluated hazard, the process for closing out NTTF Recommendation 2.1 and the § 50.54(f) letter for all plants will be made much more burdensome for both licensees and the NRC staff and the outcome with respect to protecting plants from beyond-design-basis external events much more uncertain.

In addition, the majority's approach calls into question the degree to which the NRC will be able to give credit for the existence of the mitigation strategies in a number of risk-informed regulatory initiatives like adaptation of alternative treatment requirements for SSCs under 10 CFR 50.69, "Risk-informed categorization and treatment of structures, systems and components for nuclear power reactors," and risk-informed technical specifications. Licensees are also seeking credit for mitigation strategies in the Reactor Oversight Process and have expressed interest in pursuing credit for use of the strategies in the physical security program. The assessment of the degree to which credit for the mitigation strategies is possible will be much more complex now that the mitigation strategies will not be required to address the reevaluated hazards.

Moreover, the decision to strip out the draft final rule requirements for an integrated response capability, as well as requirements for sufficient staffing levels, means of communication, and drills, also ignores primary lessons from the Fukushima Daiichi accident.

These requirements were approved by the Commission in the proposed rule, and nothing has occurred in the interceding years to change the need for these requirements to ensure a holistic approach to the response to beyond-design basis accidents.

The decision of the Commission majority to reverse course now, when the lion's share of the actions that would be required under the rule have already been completed by industry, is baffling. It is difficult to understand how the arguments put forth of regulatory over-reach are defensible with anyone who was at the agency when the accident occurred and has followed the activities of the agency, including the decisions made by the Commission, in the intervening years. It is equally baffling that some in the majority should lay the blame on the shoulders of the NRC staff for the perceived misapplication of the backfit rule when the staff was merely following Commission direction in producing the draft final rule.

I would also point out that the changes reflected in the final rule are troubling in two other respects. First, the changes seem to be based in part on a presumption that the orders developed by staff and approved by the Commission in 2012 were a fully informed and complete regulatory solution to the Fukushima Daiichi accident. I do not mean to suggest that the Commission and the staff didn't implement thoughtful and effective solutions given what was known at the time. However, the orders were approved by the Commission just one year after the accident, and significant gaps still remained in the NRC's and industry's knowledge. To now suggest, as the majority has done, that the NRC could not improve upon the requirements of the orders or address these gaps in knowledge through this rulemaking makes little sense. I am also troubled that the final rule eliminates a substantial number of requirements that were included in the proposed rule for which no adverse public comments were received.

Finally, although I have long supported the NRC's pursuit of a rigorous application of its backfitting regulations and adherence to its Principles of Good Regulation, this pursuit must be rational. In defense of this rulemaking proposal, the staff produced appropriate backfitting and regulatory analyses, which were consistent with previous Commission direction. The majority has decided to reverse these previous Commission decisions and takes issue with the staff's supporting analysis based on little more than conclusory statements in Commission votes that some of the requirements in the draft final rule are not "necessary" or would not result in a "substantial increase in the overall protection of the public health and safety." Such an approach is entirely inconsistent with the principles of clarity, reliability, and openness that are supposed to drive this agency's work.

In the official report of the National Diet of Japan's Fukushima Nuclear Accident Independent Investigation Commission, Chairman Kiyoshi Kurokawa noted:

The earthquake and tsunami of March 11, 2011 were natural disasters of a magnitude that shocked the entire world. Although triggered by these cataclysmic events, the subsequent accident at the Fukushima Daiichi Nuclear Power Plant cannot be regarded as a natural disaster. It was a profoundly manmade disaster

– that could and should have been foreseen and prevented. And its effects could have been mitigated by a more effective human response.

The issuance of the NRC's final rule was meant to be the culmination of the agency's efforts to learn the lessons of the Fukushima Daiichi accident. Given the final form of the rule approved by the Commission majority, it will be difficult to convince others that the agency has learned those lessons well.