Alternate View from a Staff Member on the Proposed Rule on Reporting Requirements for Nonemergency Events at Nuclear Power Plants

Purpose

This enclosure contains an alternate view by a staff member associated with several nonemergency requirements presented in this paper that are proposed for elimination. These are the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.72(b)(2)(iv)(A), on emergency core cooling system discharge notifications; 10 CFR 50.72(b)(3)(iv)(A), on notifications of events or conditions resulting in valid actuation; 10 CFR 50.72(b)(3)(v), on notifications of events or conditions preventing fulfillment of safety conditions; and 10 CFR 50.72(b)(3)(xiii), on notifications of events that result in a major loss of communications or emergency assessment capability.

Summary

The options provided by the alternative view would reduce the burden of 10 CFR 50.72(b)(2)(iv)(A), 10 CFR 50.72(b)(3)(iv)(A), and 10 CFR 50.72(b)(3)(v), while retaining the requirements of 10 CFR 50.72(b)(3)(xiii). The alternate view provides the following recommendations:

- Retain the reporting requirements in 10 CFR 50.72(b)(2)(iv)(A), 10 CFR 50.72(b)(3)(iv)(A), and 10 CFR 50.72(b)(3)(v), but consider extending the 8-hour reporting time requirement to mitigate licensee burden while maintaining NRC operational awareness of plant events and degraded conditions.

- Retain the reporting requirements in 10 CFR 50.72(b)(3)(xiii) as is, or conduct additional outreach with States to better understand how the proposed rule might adversely affect their ability to implement offsite response actions to protect the public.

Discussion

Reporting requirements in 10 CFR 50.72(b)(2)(iv)(A), 10 CFR 50.72(b)(3)(iv)(A), and 10 CFR 50.72(b)(3)(v)

The alternate view asserts that elimination of the reporting requirements in 10 CFR 50.72(b)(2)(iv)(A), 10 CFR 50.72(b)(3)(iv)(A), and 10 CFR 50.72(b)(3)(v) could degrade the NRC's operational awareness of risk -important events by removing a defense--in--depth layer that exists under the current system, which includes both licensee reporting and NRC inspection follow-up. A more balanced approach that would better preserve the NRC's oversight and awareness of degraded plant conditions while reducing unnecessary licensee burden, would be to maintain the reporting requirements in 10 CFR 50.72(b)(2)(iv)(A), 10 CFR 50.72(b)(3)(iv)(A), and 10 CFR 50.72(b)(3)(v), but to extend the time limit for completing the notification, which is currently 8 hours.

Based on discussions with senior staff, and review of the staff position as described in this paper and proposed federal register notice, the staff position seems to consider a number of points including: (1) notification of any event covered by the above requirements would likely occur through the issuance of a written report under 10 CFR 50.73, "Licensee event report system," within 60 days of the event, (2) NRC inspectors are on site and able to identify and report the types of events covered by 10 CFR 50.72, "Immediate notification requirements for

operating nuclear power reactors," and (3) historically, few prompt NRC actions (as defined by the dispatch of a special inspection team (SIT)) have been initiated in response to a 10 CFR 50.72 report.

The staff member presenting the alternate view considered these points but does not believe that they fully mitigate the concern that the proposed rule could degrade NRC operational awareness of the risk -important conditions that licensees currently report under 10 CFR 50.72. Specifically, resident inspectors are on site for only limited periods of time and are tasked to perform audit and sampling inspections in selected areas. They are not resourced to provide a continuous onsite presence and cannot be expected to be aware of every plant condition or anomaly that may develop. While resident inspectors attend many meetings and review plant documents to gain information on plant events, they may reasonably fail to detect some plant events. There are numerous past cases in which the NRC did not immediately learn of a plant anomaly or event, which adversely affected its ability to provide a timely and comprehensive assessment of degraded conditions and licensee performance. Some of these examples included: (1) an event where an improper maintenance activity on a valve attached to the reactor coolant system resulted in significant damage to the valve, (2) a configuration control error while in a cold shutdown condition led to heat-up of the reactor and resulted in an unplanned mode change without having established the necessary safety requirements in place to support the mode change, and (3) an event where reactor operators did not properly control reactivity during a reactor shutdown which resulted in the reactor becoming critical twice before the operators were able to complete the reactor shutdown. In each of the above examples the NRC did not learn of the events until after a period of time which adversely impacted the ability to complete a prompt inspection to assess the event and ensure the adequacy of licensee corrective actions.

While neither NRC inspectors nor licensee personnel can be expected to be perfect in identifying plant events or conditions that meet the reporting criteria, removing the redundancy in licensee reporting requirements makes it less likely that the NRC will learn of these events or conditions than if the requirements were to remain in place. There are many reasons the NRC may not learn of plant problems promptly, including, but not limited to, the fact that inspections are conducted through audits and sampling, variations in the consistency and clarity of the documents that inspectors routinely review, and resident inspector staffing challenges. It is not acceptable for the NRC to rely on the 10 CFR 50.73 report as a backstop for learning of a plant anomaly, because this report may be issued as late as 60 days after the event, which delays and inhibits the NRC's ability to perform timely and complete followup inspections to assess licensee performance and independently confirm that licensee corrective actions are prompt and complete.

Furthermore, the staff position in the federal register notice associated with this paper seems to define "prompt action" by the NRC as being associated specifically with the dispatch of a SIT. However, the dispatch of a SIT is not the only possible prompt followup action that the NRC may take for a reported event. The range of possible prompt actions includes, but is not limited to, inspection using the Event Follow-up procedure, resident assistance or support from a region-based inspector, or a problem identification and resolution inspection sample. At least one of these followup activities typically occurs in response to every 10 CFR 50.72 report. Therefore, the staff's position that few NRC prompt actions have been triggered or initiated by 10 CFR 50.72 reports is not accurate.

In summary, the alternate view holds that the NRC should retain the specified reporting requirements of 10 CFR 50.72 while considering an extension to the 8-hour reporting time, so

as to strike the optimal balance between mitigating licensee burden and maintaining the NRC's operational awareness of plant events and degraded conditions. Because eliminating the 10 CFR 50.72 requirements would not relieve licensees of the need to expend resources to investigate plant problems and to develop and submit the associated 10 CFR 50.73 reports, the proposed alternate approach would have minimal additional impact on licensees. Also extending the reporting requirement as suggested in this alternate view would eliminate the burden on the on-shift operators as they would not need to complete or issue a report during their operating shift but could instead turn over evaluation and reporting of the issue to the licensee support staff who are not part of the operating crew.

Reporting requirement in 10 CFR 50.72(b)(3)(xiii)

The alternate view recommends retaining the reporting requirement in 10 CFR 50.72(b)(3)(xiii). The draft *Federal Register* notice (FRN) that was developed to gather public input on the proposed elimination of this requirement highlights the importance of reporting major losses of communications or emergency assessment capability. The FRN notes that at one point, these losses were even added to licensee emergency action level schemes to be reported as emergency conditions. The current guidance for emergency action level reporting appears in the Nuclear Energy Institute (NEI) document NEI 99-01, Revision 6, "Development of Emergency Action Levels for Non-passive Reactors," issued November 2012. The NEI guidance excludes the reporting of a loss of emergency assessment capability as an emergency event, on the basis that these conditions are to be assessed and reported in accordance with 10 CFR 50.72 as a non-emergency event. It is important to note that apart from the requirement under 10 CFR 50.72, there is no other current requirement to report major losses of emergency assessment capability.

The staff's basis for removing the 10 CFR 50.72 reporting requirement for major losses of emergency assessment capability considers the following points: (1) no events reported from 2011 to 2021 resulted in prompt agency action or enforcement, (2) the agency has other processes by which to learn of events to which this reporting requirement applies, and (3) there have been few reports under this requirement (about 35 per year since 2015). The staff member presenting this alternate view recognizes these points but thinks that the staff's analysis misses the larger point, namely that the historical information provided in the FRN does not reflect the impact to offsite response organizations or any additional actions or plans that past reports may have triggered.

The NRC's expertise is focused on onsite emergency preparedness; in the event of an emergency at an operating facility, the actual responsibility to take action to protect the public lies with State and local authorities, which have the operating and response procedures and the facilities and equipment to do so, as well as the necessary authority to direct first responders. Multiple State agencies were unanimously opposed to changing the 10 CFR 50.72 reporting requirements under consideration in this rulemaking. The NRC should put more weight on their input, or should explain more thoroughly why their arguments were not accepted. In addition, the staff's analysis relies in part on resident inspector awareness of any major loss of emergency assessment capability. However, there is no formal process in place to notify State officials of this type of loss so they can adjust their planning and response preparedness efforts. Since major losses of emergency assessment capability rarely occur (according to the historical data cited in the FRN), maintaining the requirement to report them would not be overly burdensome to licensees, and it would help offsite response agencies adjust their preparedness posture in response to losses of emergency assessment equipment. Therefore, before changing the 10 CFR 50.72(b)(3)(xiii) reporting requirement, the agency should engage further with offsite

response agencies to better understand their concerns and specific needs. In addition, given the reliance on resident inspectors described in the FRN, the agency should develop a formal process or procedure for promptly communicating any resident inspector awareness of degraded conditions in this area to State and local response officials. Finally, some States have noted that they may need to create their own reporting requirements for losses of emergency assessment capability, to fill the gap left by the elimination of the 10 CFR 50.72 requirement. Such requirements could lead to increased licensee burden and inconsistency in reporting, depending on how the States' regulations are developed.

In summary, the alternate view holds that either the 10 CFR 50.72 reporting requirement associated with major losses of emergency assessment capability should be retained, or the NRC should conduct more outreach with States to better understand how the proposed rule might adversely affect their ability to implement offsite response actions to protect the public.

Recommendations

The alternate view recommends the following options for the reporting requirements proposed for elimination:

- Retain the reporting requirements in 10 CFR 50.72(b)(2)(iv)(A), 10 CFR 50.72(b)(3)(iv)(A), and 10 CFR 50.72(b)(3)(v), but consider extending the 8 -hour reporting time requirement to mitigate licensee burden while maintaining NRC operational awareness of plant events and degraded conditions.

- Retain the reporting requirements in 10 CFR 50.72(b)(3)(xiii) as is, or conduct additional outreach with States to better understand how the proposed rule might adversely affect their ability to implement offsite response actions to protect the public.