



UNITED STATES
NUCLEAR REGULATORY COMMISSION
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July 2, 2012

Mr. M. J. Ajluni
Nuclear Licensing Director
Southern Nuclear Operating Company, Inc.
40 Inverness Center Parkway
Post Office Box 1295, Bin - 038
Birmingham, AL 35201-1295

SUBJECT: EDWIN I. HATCH, UNITS 1 AND 2, CLOSEOUT OF BULLETIN 2011-01,
"MITIGATING STRATEGIES" (TAC NOS. ME6438 AND ME6439)

Dear Mr. Ajluni:

On May 11, 2011, the U.S. Nuclear Regulatory Commission (NRC) issued Bulletin 2011-01, "Mitigating Strategies" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111250360), to all holders of operating licenses for nuclear power reactors, except those that have permanently ceased operation and have certified that fuel has been removed from the reactor vessel. The purpose of the bulletin was to obtain a comprehensive verification that licensees' mitigating strategies to maintain or restore core cooling, spent fuel cooling, and containment following a large explosion or fire were compliant with Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.54(hh)(2).

The bulletin required two sets of responses pursuant to the provisions of 10 CFR 50.54(f). Edwin I. Hatch Nuclear Plant, Units 1 and 2, provided its responses to the bulletin by letters dated June 10 and July 7, 2011 (ADAMS Accession Nos. ML111610583 and ML111890493 respectively). By letter dated November 15, 2011 (ADAMS Accession No. ML11313A220), the NRC sent the licensee a request for additional information (RAI) on its July 7, 2011, response. The licensee responded to the RAI by letter dated December 29, 2011 (ADAMS Accession No. ML12003A208).

M. Ajluni

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The NRC staff has reviewed the information submitted by the licensee, and concludes that its response to the bulletin is acceptable. As summarized in the enclosure, the staff verified that the licensee provided the information requested in the bulletin. We find that no further information or actions under the bulletin are requested.

Sincerely,

A handwritten signature in black ink that reads "Patrick G. Boyle" with a long horizontal flourish extending to the right.

Patrick G. Boyle, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-321 and 50-366

Enclosure: Summary of Bulletin

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SUMMARY OF NRC BULLETIN 2011-01,
"MITIGATING STRATEGIES" RESPONSE REVIEW
EDWIN I. HATCH NUCLEAR PLANT, UNITS 1 AND 2
DOCKET NOS. 50-321 AND 50-366

On May 11, 2011, the U.S. Nuclear Regulatory Commission (NRC) issued Bulletin 2011-01, "Mitigating Strategies," (Agencywide Documents Access and Management System (ADAMS) Accession No. ML11250360) to all holders of operating licenses for nuclear power reactors, except those that have permanently ceased operation and have certified that fuel has been removed from the reactor vessel. The bulletin required two sets of responses pursuant to the provisions of Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.54(f). The first responses were due 30 days after issuance of the bulletin. By letter dated June 10, 2011 (ADAMS Accession No. ML111610583), Edwin I. Hatch Nuclear Plant (Hatch), Units 1 and 2, provided its response to this first set of questions (first response). The second responses were due 60 days after issuance of the bulletin. By letter dated July 7, 2011 (ADAMS Accession No. ML111890493), Hatch provided its response to this second set of questions (second response). By letter dated November 15, 2011 (ADAMS Accession No. ML11313A220), the NRC sent a request for additional information (RAI) on the second response. Hatch responded to the RAI by letter dated December 15, 2011 (ADAMS Accession No. ML12003A208). As summarized below, the NRC staff has verified that Hatch provided the information requested in the bulletin.

1.0 BACKGROUND

On February 25, 2002, the NRC issued EA-02-026, "Order for Interim Safeguards and Security Compensatory Measures" (ICM Order). Section B.5.b of the ICM Order required licensees to develop specific guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities using readily available resources (equipment and personnel) that can be effectively implemented under the circumstances associated with the loss of large areas of the plant due to explosions or fire.

By letter dated August 23, 2007 (ADAMS Accession No. ML072340006), the NRC staff issued its Safety Evaluation (SE) to document the final disposition of information submitted by Hatch regarding Section B.5.b of the ICM Order. Along with the SE, the staff issued a conforming license condition to incorporate the B.5.b mitigating strategies into the licensing basis.

On March 27, 2009, the NRC issued 10 CFR 50.54(hh)(2) as a new rule, in order to capture the B.5.b mitigating strategies and related license conditions as regulatory requirements for both current and future licensees. At that time, licensee compliance with the conforming license conditions was sufficient to demonstrate compliance with 10 CFR 50.54(hh)(2) (74 FR 13926) so no further actions were required on the part of current licensees.

Enclosure

2.0 30-DAY REQUEST

In order to confirm continued compliance with 10 CFR 50.54(hh)(2), the bulletin requested that licensees address the following two questions within 30 days of issuing the bulletin:

1. Is the equipment necessary to execute the mitigating strategies, as described in your submittals to the NRC, available and capable of performing its intended function?
2. Are the guidance and strategies implemented capable of being executed considering the current configuration of your facility and current staffing and skill levels of the staff?

The NRC staff reviewed Hatch's first response to determine if it had adequately addressed these questions.

2.1 Question 1: Availability and Capability of Equipment

In its first response, Hatch confirmed that equipment it needs to execute the 10 CFR 50.54(hh)(2) mitigating strategies is available and capable of performing its intended function. The NRC staff verified that this confirmation covered equipment needed for each of the three phases of B.5.b mitigation strategies. Therefore, the NRC staff finds that Hatch has adequately responded to Question 1.

2.2 Question 2: Guidance and Strategies Can Be Executed

In its first response, Hatch confirmed that the guidance and strategies it has implemented for 10 CFR 50.54(hh)(2) are capable of being executed considering the current facility configuration, staffing levels, and staff's skills. Since Hatch has considered its current facility configuration, staffing levels, and staff's skills, and confirmed that it can execute its implemented guidance and strategies, the NRC staff finds that Hatch has adequately responded to Question 2.

3.0 60-DAY REQUEST

The bulletin required a response to the following five questions within 60 days of issuing the bulletin:

1. Describe in detail the maintenance of equipment procured to support the strategies and guidance required by 10 CFR 50.54(hh)(2) in order to ensure that it is functional when needed.
2. Describe in detail the testing of equipment procured to support the strategies and guidance required by 10 CFR 50.54(hh)(2) in order to ensure that it will function when needed.
3. Describe in detail the controls for ensuring that the equipment is available when needed.

4. Describe in detail how configuration and guidance management is ensured so that strategies remain feasible.
5. Describe in detail how you ensure availability of offsite support.

The NRC staff reviewed Hatch's submittals to determine if it had adequately addressed these questions. This was accomplished by verifying that the submittals listed equipment, training, and offsite resources which were relied upon to make conclusions in the August 23, 2007, SE or are commonly needed to implement the mitigating strategies.

3.1 Questions 1 and 2: Maintenance and Testing of Equipment

Questions 1 and 2 of the 60-day request required licensees to describe in detail the maintenance and testing of equipment procured to support the strategies and guidance required by 10 CFR 50.54(hh)(2) in order to ensure that it is functional when needed. In its second response, Hatch listed the equipment used to support the 10 CFR 50.54(hh)(2) mitigating strategies which receives maintenance or testing. For each item, Hatch described the maintenance and testing performed, including the frequency and basis for the maintenance or testing activity.

The NRC staff verified that Hatch listed equipment that typically requires maintenance or testing which was relied upon to make conclusions in the SE or commonly needed to implement the mitigating strategies. In its second response, Hatch stated that the portable pump, portable power supply, hoses, and communications equipment receive maintenance or testing. In its RAI response, Hatch clarified that the annual inspection of portable hoses, hose monitors, and fire equipment would ensure this equipment would be functional when needed. The NRC staff noted that the fuel level for the portable pump is verified during maintenance. Hatch also identified other items that support the mitigating strategies that receive maintenance or testing.

The NRC staff verified that Hatch described the process used for corrective actions and listed the testing performed to ensure that the strategies were initially feasible. Hatch stated in its second response that its 10 CFR Part 50, Appendix B, corrective action program is used to document equipment failure, establish priorities, and perform trending.

Based upon the information above, the NRC staff finds that Hatch has provided the information requested by Questions 1 and 2.

3.2 Question 3: Controls on Equipment

Question 3 of the 60-day request required licensees to describe in detail the controls on equipment, such as inventory requirements, to ensure that the equipment is available when needed. A list of inventory deficiencies and associated corrective actions to prevent loss was also requested.

The NRC staff verified that Hatch described its process for ensuring that B.5.b equipment will be available when needed. In its second response, Hatch identified equipment included in its inventory, the inventory frequency, storage requirements, and items verified. Items verified include proper quantity, location, and accessibility of equipment; compressed gas bottle pressures; calibrations; equipment shelf lives; and controls on storage locations. Hatch states that at the time of its second response there were no outstanding inventory deficiencies that would render the strategies not viable.

The NRC staff verified that Hatch inventoried equipment which was relied upon to make conclusions in the SE or commonly needed to implement the mitigating strategies. In its second response, Hatch stated that procured non-permanently installed B.5.b equipment is inventoried in accordance with station procedures. Although Hatch did not specify a minimum inventory frequency, all items listed were inventoried at least annually. The second response specifically states that the following items are included in the inventory: portable pump; portable power supply; hoses; communications equipment; spray nozzles; tools; assemblies; and fire equipment. In its RAI response, Hatch described how it ensures that a vehicle to move the portable pump and other B.5.b equipment will be available when needed.

Based upon the information above, the NRC staff finds that Hatch has provided the information requested by Question 3.

3.3 Question 4: Configuration and Guidance Management

Question 4 of the 60-day request required licensees to describe in detail how configuration and guidance management is assured so that the strategies remain feasible.

The NRC staff verified that Hatch described its measures to evaluate plant configuration changes for their effects on the mitigating strategies and to ensure its procedures are current. In its second response, Hatch stated that plant configuration changes are procedurally evaluated against the licensing basis, which includes the B.5.b mitigating strategies. Hatch states that configuration changes are reviewed to determine if they adversely affect the feasibility of the mitigating strategies.

The NRC staff verified that Hatch described measures it has taken to validate the procedures or guidelines developed to support the mitigating strategies. In its second response, Hatch identified testing in response to Question 2 that demonstrated the ability to execute some strategies. Hatch also states that procedure changes that result from the review of configuration changes are validated by walk downs, engineering evaluations and/or table top reviews. In 2011 Hatch revalidated the mitigating strategies by similar techniques.

The NRC staff verified that Hatch described the training program implemented in support of the mitigating strategies and how its effectiveness is evaluated. In its second response, Hatch identified the training provided to its operations personnel, emergency response organization key decision makers and evaluators, and fire brigade. Hatch also identified the frequency with which each type of training is provided and the methods for training evaluating.

Based upon the information above, the NRC staff finds that Hatch has provided the information requested by Question 4.

3.4 Question 5: Offsite Support

Question 5 of the 60-day request required licensees to describe in detail how offsite support availability is assured.

The NRC staff verified that Hatch listed the offsite organizations it relies upon for emergency response, including a description of agreements and related training. The NRC staff compared the list of offsite organizations that Hatch provided in its second response with the information relied upon to make conclusions in the SE. Hatch stated that it maintains letters of agreement or other types of agreements with these offsite organizations, which are reviewed periodically, and that these agreements were current at the time of its second response. Hatch also described the training and site familiarization it provides to these offsite organizations. Hatch stated that it reviewed its corrective action program back to 2008 and found no issues involving lapsed agreements related to offsite support for B.5.b events.

Based upon the information above, the NRC staff finds that Hatch has provided the information requested by Question 5.

4.0 CONCLUSION

As described above, the NRC staff has verified that Hatch has provided the information requested in Bulletin 2011-01. Specifically, Hatch responded to each of the questions in the bulletin as requested. The NRC staff concludes that Hatch has completed all of the requirements of the bulletin and no further information or actions under the bulletin are needed.

Principal Contributor: B. Purnell

M. Ajluni

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The NRC staff has reviewed the information submitted by the licensee, and concludes that its response to the bulletin is acceptable. As summarized in the enclosure, the staff verified that the licensee provided the information requested in the bulletin. We find that no further information or actions under the bulletin are requested.

Sincerely,

/RA/

Patrick G. Boyle, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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* By memo dated

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