

March 12, 2012

EA-12-051

All Power Reactor Licensees and  
Holders of Construction Permits in  
Active or Deferred Status

SUBJECT: ISSUANCE OF ORDER TO MODIFY LICENSES WITH REGARD TO RELIABLE  
SPENT FUEL POOL INSTRUMENTATION

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Order that modifies the current license for your facility. The Order requires provisions for reliable spent fuel pool indications and applies to all addressees listed in Attachment 1 to the enclosed Order.

Following the earthquake and tsunami at the Fukushima Dai-ichi nuclear power plant in March 2011, the NRC established a senior-level task force referred to as the Near-Term Task Force (NTTF). The NTTF conducted a systematic and methodical review of the NRC regulations and processes to determine if the agency should make safety improvements in light of the events in Japan. As a result of this review, the NTTF issued SECY-11-0093, "Near-Term Report and Recommendations for Agency Actions Following the Events in Japan" (Agencywide Document Access and Management System (ADAMS) Accession No. ML11186A950). SECY 11-0124, "Recommended Actions to be Taken Without Delay from the Near-Term Task Force Report," (ADAMS Accession No. ML112911571) and SECY-11-0137, "Prioritization of Recommended Actions to be Taken in Response to Fukushima Lessons Learned," (ADAMS Accession No. ML11272A111) were issued to establish the NRC staff's prioritization of the recommendations. Recommendation 7.1, concerning reliable spent fuel pool instrumentation, was determined to be a high-priority action. This Order is based upon the NTTF recommendation.

During the events in Fukushima, responders were without reliable instrumentation to determine water level in the spent fuel pool. This caused concerns that the pool may have boiled dry, resulting in fuel damage. Numerous attempts were made to refill the spent fuel pools, which diverted resources and attention from other efforts. The events at Fukushima demonstrated the confusion and misapplication of resources that can result from beyond-design-basis external events when adequate instrumentation is not available.

The NRC staff has determined that the current fleet of nuclear power plants is safe to continue operation. Additionally, the Commission has determined that the enhanced spent fuel pool instrumentation required by this Order represents a substantial increase in protection to public health and safety. The requirements of this Order are immediately effective and are expected to remain in place until superseded by Order or rule.

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-2-

Pursuant to Section 223 of the Atomic Energy Act of 1954, as amended, any person who willfully violates, attempts to violate, or conspires to violate, any provision of this Order shall be subject to criminal prosecution as set forth in that section. Violation of this Order may also subject the person to civil monetary penalty.

The enclosed Order requires responses and actions within specified timeframes. Please contact your Licensing Project Manager or Mrs. Lisa Regner, Spent Fuel Pool Instrumentation Order Project Manager (301-415-1906), regarding any issues related to compliance with the requirements in the enclosed Order, or if you have other questions.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. The NRC also includes significant enforcement actions on its Web site at (<http://www.nrc.gov/reading-rm/doc-collections/enforcement/actions/>). The enclosed Order has been forwarded to the Office of the *Federal Register* for publication.

Sincerely,

*/ra/*

Eric J. Leeds, Director  
Office of Nuclear Reactor Regulation

*/ra/*

Michael R. Johnson, Director  
Office of New Reactors

Enclosure:  
Order (EA-12-051)

cc: Listserv

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Distribution: See next page

**ADAMS Accession No.:** ML12054A682 (package)

\*e-mail concurrence

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