# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR REACTOR REGULATION

William M. Dean, Director

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In the Matter of

OMAHA PUBLIC POWER DISTRICT NEBRASKA PUBLIC POWER DISTRICT

Fort Calhoun Station, Unit 1 Cooper Nuclear Station Docket Nos. 50-285, 50-298

Renewed License Nos. DPR-40, DPR-46

# **PROPOSED DIRECTOR'S DECISION UNDER 10 CFR 2.206**

## I. Introduction

By letter dated June 26, 2011, Mr. Thomas Saporito (the petitioner) filed a petition under Title 10 of the *Code of Federal Regulations* (10 CFR) 2.206, "Requests for action under this subpart," related to Fort Calhoun Station, Unit 1 (FCS) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML11182B029). The petitioner also filed a separate petition concerning Cooper Nuclear Station (CNS) under 10 CFR 2.206 on July 3, 2011 (ADAMS Accession No. ML11192A285). The U.S. Nuclear Regulatory Commission (NRC) has consolidated the relevant portions of the June 26, 2011, petition with the July 3, 2011, petition. The petitioner requested that the NRC take escalated enforcement action against FCS and CNS concerning flooding protection.

### Action Requested for the June 26 and July 3, 2011, Petitions

In the June 26, 2011, petition, the petitioner requested that the NRC issue a confirmatory order against Omaha Public Power District (OPPD), the licensee for FCS, prohibiting the

licensee from restarting FCS until: (1) the floodwaters subside to an appreciably lower level or to sea level, (2) the licensee upgrades its flood protection plan, (3) the licensee repairs and enhances its current flood protection berms, and (4) the licensee upgrades its station blackout procedures to meet a challenging extended loss-of-offsite power because of floodwaters and other natural disasters or terrorist attacks.

Similarly, in the July 3, 2011, petition, the petitioner requested that the NRC issue a confirmatory order to Nebraska Public Power District (NPPD), the licensee for CNS, requiring the licensee to bring CNS to a cold-shutdown mode of operation until: (1) the floodwaters subside to an appreciably lower level or to sea level, (2) the licensee upgrades its flood protection plan, (3) the licensee repairs and enhances its current flood protection berms, and (4) the licensee upgrades its station blackout procedures to meet a challenging extended loss-of-offsite power because of floodwaters and other natural disasters or terrorist attacks.

By teleconference on August 29, 2011 (ADAMS Accession No. ML11256A036), the petitioner provided additional information in support of the petitions.

The NRC accepted the two petitions for review by letter dated January 13, 2012 (ADAMS Accession No. ML120030022). The NRC determined that no immediate safety concern existed that warranted an immediate enforcement action by the NRC. The NRC denied the request to prevent the restart of FCS or to bring CNS to cold shutdown. Therefore, the petitioner's request for immediate action was denied. Because of performance concerns at FCS, the NRC transitioned its normal oversight process at FCS from Inspection Manual Chapter (IMC) 0305, "Operator Reactor Assessment Program," to its enhanced oversight process contained in IMC 0350, "Oversight of Reactor Facilities in a Shutdown Condition due to Significant Performance and/or Operational Concerns," as documented in its letter dated December 13, 2011 (ADAMS Accession No. ML113470721). In accordance with the IMC 0350

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process, the NRC determined that FCS was safe to restart, as documented by letter dated December 17, 2013 (ADAMS Accession No. ML13351A423), and FCS returned to full power on December 26, 2013. Based on the NRC staff's evaluation of station performance, NRC returned FCS to the normal reactor oversight program on April 1, 2015 (ADAMS Accession No. ML15089A085). NRC inspections will continue to monitor the licensee's efforts to sustain improved plant performance and to comply with the commitments in the NRC's post-restart Confirmatory Action Letter (CAL) dated December 17, 2013 (ADAMS Accession No. ML13351A395). The NRC inspections will continue for the remaining open CAL items in coordination with their completion.

## II. Discussion

As part of the 10 CFR 2.206(b) petition review process, the director of the NRC office with responsibility for the subject matter either accepts a petition and begins a proceeding or advises the petitioner in writing that no proceeding will be instituted, in whole or in part, with respect to the request. The NRC staff will describe the reason for the decision. Accordingly, the decision of the Director of the Office of Nuclear Reactor Regulation is provided below.

The NRC concluded no immediate safety concerns warranted an immediate enforcement action to prevent the restart of FCS or to bring CNS to cold shutdown. The NRC will not issue an enforcement order based on the petition because, as explained below, each of the petitioner's requests was fully addressed through other agency actions. FCS and CNS are undergoing flooding hazard reviews. The issues raised by the petitioner in issues No. 1, 2, and 3 above are addressed by the NRC's request for information per 10 CFR 50.54(f), dated March 12, 2012 (Fukushima 50.54(f) letter; ADAMS Accession No. ML12056A046). The letter states, in relevant part, that

The current regulatory approach, and the resultant plant capabilities, gave the NTTF [Near-Term Task Force] and the NRC the confidence to conclude that an accident with consequences similar to the Fukushima accident is unlikely to occur in the United States (U.S.). The NRC concluded that continued plant operation and the continuation of licensing activities did not pose an imminent risk to public health and safety.

The NRC staff is evaluating the licensee's flooding hazard reviews in accordance with the schedule provided in the Fukushima 50.54(f) letter. OPPD provided the results of its flooding walkdown report for FCS to the NRC on November 27, 2012 (ADAMS Accession No. ML12334A449), with supplements on March 29, 2013, August 15, 2013, December 13, 2013, and January 31, 2014 (ADAMS Accession Nos. ML13091A059, ML13228A098, ML13351A426, and ML14031A344, respectively). The NRC staff assessed the OPPD report on June 24, 2014 (ADAMS Accession No. ML14157A079) and concluded that

... the licensee's implementation of flooding walkdown methodology meets the intent of the walkdown guidance. The staff concludes that the licensee, through the implementation of the walkdown guidance activities and, in accordance with plant processes and procedures, verified the plant configuration with the current

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flooding licensing basis; addressed degraded, nonconforming, or unanalyzed flooding conditions; and verified the adequacy of monitoring and maintenance programs for protective features. Furthermore, the licensee's walkdown results, which were verified by the staff's inspection, identified no immediate safety concerns. The NRC staff reviewed the information provided and determined that sufficient information was provided to be responsive to Enclosure 4 of the 50.54(f) letter.

NPPD submitted the results of its flooding walkdown report for CNS to the NRC on November 27, 2012 (ADAMS Accession No. ML12333A319), with supplements on November 21, 2013, and January 31, 2014 (ADAMS Accession Nos. ML13330B276 and ML14035A220, respectively). The NRC staff assessed the NPPD report on June 24, 2014 (ADAMS Accession No. ML14149A146) and concluded that

... the licensee's implementation of flooding walkdown methodology meets the intent of the walkdown guidance. The staff concludes that the licensee, through the implementation of the walkdown guidance activities and, in accordance with plant processes and procedures, verified the plant configuration with the current flooding licensing basis; addressed degraded, nonconforming, or unanalyzed flooding conditions; and verified the adequacy of monitoring and maintenance programs for protective features... Furthermore, the staff notes that no immediate safety concerns were identified. The NRC staff reviewed the information provided and determined that sufficient information was provided to be responsive to Enclosure 4 of the 50.54(f) letter.

OPPD provided its flooding hazard reevaluation report (FHRR) for FCS to the NRC on February 4, 2015 (ADAMS Accession No. ML15042A127; contains security-related information, so a portion of the document is not publicly available in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding"). NPPD supplied its FHRR for CNS to the NRC on February 3, 2015 (ADAMS Accession No. ML15041A468; contains security-related information, so a portion of the document is not publicly available in accordance with 10 CFR 2.390). NRC staff is reviewing the FHRRs. Because the petitioner offered no information that shows an immediate threat to public health and safety, the staff continues its reviews of FCS's and CNS's FHRRs as scheduled. The NRC issued a letter to all power reactor licensees and holders of construction permits in active or deferred status dated March 1, 2013 (ADAMS Accession No. ML13044A561). Recommendation 2.1 of the Fukushima 50.54(f) letter is to "Order licensees to reevaluate the seismic and flooding hazards at their sites against current NRC requirements and guidance, and if necessary, update the design basis and SSCs [Structures, Systems, and Components] important to safety to protect against the updated hazards." The NRC's March 1, 2013, letter emphasized the staff's expectations regarding any new information found that may impact SSC operability and states, in relevant part, that

The staff considers the flood hazard reevaluations being performed pursuant to the 50.54(f) letter to be beyond the current design/licensing basis of operating plants. Consequently, the results of the analysis performed using present-day regulatory guidance, methodologies, and information would not generally be expected to call into question the operability or functionality of SSCs... However,

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as with any new information that may arise at a plant, licensees are responsible for evaluating and making determinations related to operability and any associated reportability on a case-by-case basis.

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Notwithstanding the preceding discussion, and as noted in the 50.54(f) letter, based upon the results of the review of the responses and other available information, the staff may impose additional requirements to protect against the reevaluated flood hazard. As always, the safety of the operating plants is of paramount importance. The NRC staff will follow established regulatory processes, including the backfit rule, in determining whether additional requirements are warranted.

The station blackout issue raised by the petitioner in issue No. 4 was evaluated by the NRC in "Issuance of Order To Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" (EA-12-049), dated March 12, 2012 (ADAMS Accession No. ML12054A736). The Order requires licensees to develop strategies to mitigate a simultaneous loss of all alternating current power and loss of normal access to the ultimate heat sink.

On August 21, 2012, the Nuclear Energy Institute (NEI) submitted Revision 0 to NEI 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide" (ADAMS Accession No. ML12242A378). On August 29, 2012, the NRC staff issued the Japan Lessons-Learned Project Directorate Interim Staff Guidance JLD-ISG-2012-01, "Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" (ADAMS Accession No. ML12229A174). The Interim Staff Guidance was published in the *Federal Register* on September 7, 2012 (77 FR 55230). The Interim Staff Guidance endorses NEI 12-06, Revision 0, and finds the recommended strategies are an acceptable means of meeting the requirements of Order EA-12-049. JLD-ISG provides guidance and clarification to assist nuclear power reactor applicants and licensees with the identification of measures needed to comply with requirements to mitigate challenges to key safety functions. The Interim Staff Guidance and NEI 12-06, Revision 0, outline the process licensees use to define and deploy strategies to enhance their ability to cope with beyond-design-basis external events, including station blackout.

OPPD gave the NRC staff its overall integrated plan for FCS in response to Order EA-12-049 on February 28, 2013 (ADAMS Accession No. ML13116A208), and confirmed that it has a plan developed in accordance with the guidance of NEI 12-06, Revision 0 for defining and deploying strategies that will enhance the ability to cope with conditions resulting from beyond design basis external events. The NRC staff provided its interim staff evaluation and audit report of the licensee's overall integrated plan by letter dated February 27, 2014 (ADAMS Accession No. ML14007A693). The NRC found that the licensee's plan demonstrates reasonable assurance that the requirements of Order EA-12-049 at FCS will be met. The staff expects that the licensee will implement the plan as described, and will satisfactorily resolve the open and confirmatory items detailed in the interim staff evaluation and audit report.

NPPD gave the NRC staff its overall integrated plan for CNS in response to Order EA-12-049 on February 28, 2013 (ADAMS Accession No. ML13070A009). The NRC staff provided its interim staff evaluation and audit report of the licensee's overall integrated plan on February 11, 2014 (ADAMS Accession No. ML14007A647). The NRC found that the licensee's plan demonstrates reasonable assurance that the requirements of Order EA-12-049 at CNS will

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be met. The staff expects that the licensee will implement the plan as described, and will satisfactorily resolve the open and confirmatory items detailed in the interim staff evaluation and audit report.

The issues raised by the petitioner are the subject of NRC staff review and evaluation because of the NRC's response to the Fukushima Dai-ichi accident. The NRC is already making as much information as possible available to the public concerning its ongoing activities in response to the Fukushima Dai-ichi accident (e.g., see

http://www.nrc.gov/reactors/operating/ops-experience/japan-dashboard.html). In addition, the issues raised in the petition regarding flooding and station blackout are being addressed through rulemaking concerning mitigation of beyond-design-basis events (See <a href="http://www.regulations.gov">http://www.regulations.gov</a>, docket ID NRC-2011-0299). The rulemaking is developing generic requirements for implementing the mitigation strategies in Order EA-12-049. The rulemaking also addresses the lessons learned and feedback received following implementation of the Order.

#### III. Conclusion

The NRC has evaluated each of the petitioner's requests. For the reasons stated above, the NRC will not issue orders requiring the enforcement actions specified in the petitioner's requests.

As provided in 10 CFR 2.206(c), a copy of this director's decision will be filed with the Secretary of the Commission for the Commission to review. This decision will constitute the final action of the Commission 25 days after the date of the decision unless the Commission, on its own motion, institutes a review of the decision within that time.

Dated at Rockville, Maryland, this **xxxx** day of April, 2015.

For the U.S. Nuclear Regulatory Commission.

William M. Dean, Director Office of Nuclear Reactor Regulation