



NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50-155; 72-43 and NRC-2013-0218]

Entergy Nuclear Operations, Inc.

Big Rock Point

Independent Spent Fuel Storage Installation

AGENCY: Nuclear Regulatory Commission.

ACTION: Exemption; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is issuing an exemption in response to a request submitted by Entergy Nuclear Operations, Inc. (ENO) on June 20, 2012, for the Big Rock Point (BRP) Independent Spent Fuel Storage Installation (ISFSI).

ADDRESSES: Please refer to Docket ID NRC-2013-0218 when contacting the NRC about the availability of information regarding this document. You may access publicly-available information related to this action by the following methods:

- **Federal Rulemaking Web site:** Go to <http://www.regulations.gov> and search for Docket ID NRC-2013-0218. Address question about NRC dockets to Carol Gallagher; telephone: 301-287-3422; e-mail: Carol.Gallagher@nrc.gov. For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTRACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**

You may access publicly available documents online in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "ADAMS Public Documents" and then select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that a document is referenced.

- **NRC's PDC:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Dr. Pamela Longmire, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-287-0829; e-mail: Pamela.Longmire@nrc.gov.

1.0 INTRODUCTION

On November 23, 2011 (76 FR 72560), the NRC issued a final rule (EP Final Rule) modifying or adding certain emergency planning (EP) requirements in §§ 50.47, 50.54, and appendix E of Title 10 of the *Code of Federal Regulations* (10 CFR). The EP Final Rule was effective on December 23, 2011, with specific implementation dates for each of the rule changes.

Entergy Nuclear Operations, Inc. (ENO) is the holder of Facility Operating License DPR-6 for the BRP facility. The license, issued pursuant to the Atomic Energy Act of 1954, as amended, and 10 CFR part 50, allows ENO to possess and store spent nuclear fuel at the permanently shutdown and decommissioned facility under the provision of 10 CFR part 72,

subpart K, "General License for Storage of Spent Fuel at Power Reactor Sites." In a letter dated June 26, 1997 (ADAMS Legacy Accession No. 9707030167), Consumers Energy Company (CEC) informed the NRC that the BRP facility had permanently ceased power operations. In a letter dated September 23, 1997 (ADAMS Legacy Accession No. 9709300363), CEC informed the NRC that it had permanently moved the fuel from the reactor to the spent fuel pool.

After ceasing operations at the reactor, CEC began transferring spent nuclear fuel from the spent fuel pool to the BRP ISFSI for long term dry storage. As discussed in letters dated September 8, 2005, and November 16, 2006 (ADAMS Accession Nos. ML052550366 and ML063260085, respectively), these activities were completed in 2003, and final decommissioning of the reactor site was completed in 2006. The BRP ISFSI is a stand-alone ISFSI located on approximately 30 acres in Charlevoix County, on the northern shore of Michigan's Lower Peninsula. In a letter dated July 30, 2007 (ADAMS Accession No. ML072220219), ENO applied for an order approving indirect transfer of control of licenses for BRP. By letter dated July 28, 2008 (ADAMS Accession No. ML080940528), the NRC consented to the proposal.

On June 20, 2012, ENO submitted a letter, "Request for Exemption from Emergency Planning and Preparedness Requirements" (ADAMS Accession No. ML12173A066), requesting exemption from specific emergency planning requirements of 10 CFR 50.47 and appendix E to 10 CFR part 50 for the BRP ISFSI.

ENO states that this exemption request and its impact on the corresponding emergency plan: (1) is authorized by law; (2) will not present an undue risk to the public health and safety; and (3) is consistent with the common defense and security in accordance with 10 CFR 50.12. ENO states that its intent in submitting this exemption request is to maintain the regulatory structure in place prior to the issuance of the EP Final Rule and, therefore, does not propose any changes to its emergency plan or implementing procedures other than simple regulatory reference changes that can be implemented under 10 CFR 50.54(q).

2.0 DISCUSSION

On September 19, 1997 (ADAMS Legacy Accession No. 9709240386), CEC requested an exemption from the provisions of 10 CFR 50.54(q) that required emergency plans to meet all of the standards of 10 CFR 50.47(b) and all of the requirements of appendix E to 10 CFR part 50 so that the licensee would have to meet only certain EP standards and requirements. Additionally, in a letter dated September 19, 1997 (ADAMS Legacy Accession No. 9709240383), CEC requested approval of a proposed BRP Defueled Emergency Plan (DEP) that proposed to meet those limited standards and requirements.

The NRC approved the requested exemption and the BRP DEP on September 30, 1998 (ADAMS Legacy Accession No. 9810080019). The safety evaluation report (SER) established EP requirements for BRP as documented in the DEP. The NRC staff (staff) concluded that the licensee's emergency plan was acceptable in view of the greatly reduced offsite radiological consequences associated with the decommissioning plant status. The staff found that the postulated dose to the general public from any reasonably conceivable accident would not exceed the U.S. Environmental Protection Agency (EPA) Protective Action Guides (PAGs), and for the bounding accident, the length of time available to respond to a loss of spent fuel cooling or reduction in water level gave confidence that offsite measures for the public could be taken without preparation.

CEC completed moving spent nuclear fuel and Greater-Than-Class-C (GTCC) waste into dry storage at the BRP ISFSI in March of 2003. On September 9, 2004, CEC submitted a request for approval of the BPR Emergency Plan to reflect that only an ISFSI remained at the site (ADAMS Accession No. ML042530611). The NRC approved the BRP ISFSI Emergency Plan on October 13, 2005 (ADAMS Accession No. ML052690042). The NRC staff concluded that the BRP ISFSI Emergency Plan met the emergency planning requirements contained in 10 CFR part 72 for an ISFSI not located on the site of an operating nuclear power reactor, and

thus provided for an acceptable level of emergency preparedness. Since this approval, BRP has not requested nor received substantive exemptions from emergency planning requirements.

Revision 4 of the BRP ISFSI Emergency Plan, dated September 9, 2008 (Reference 13), reflects the current conditions, where only the ISFSI and its related support systems, structures, and components remain.

With the EP Final Rule, several requirements in 10 CFR part 50 were modified or added, including changes in §§ 50.47, 50.54, and appendix E. The EP Final Rule codified certain voluntary protective measures contained in NRC Bulletin 2005-02, "Emergency Preparedness and Response Actions for Security-Based Events," and generically applicable requirements similar to those previously imposed by NRC Order EA-02-026, "Order for Interim Safeguards and Security Compensatory Measures," dated February 25, 2002.

In addition, the EP Final Rule amended other licensee emergency plan requirements to: (1) enhance the ability of licensees in preparing for and in taking certain protective actions in the event of a radiological emergency; (2) address, in part, security issues identified after the terrorist events of September 11, 2001; (3) clarify regulations to effect consistent emergency plan implementation among licensees; and (4) modify certain EP requirements to be more effective and efficient. However, the EP Final Rule was only an enhancement to the NRC's regulations and was not necessary for adequate protection. On page 72563 of the *Federal Register* notice for the EP Final Rule, the Commission "determined that the existing regulatory structure ensures adequate protection of public health and safety and common defense and security."

3.0 REGULATORY EVALUATION

In the Final Rule for Storage of Spent Fuel in NRC-Approved Storage Casks at Power Reactor Sites (55 FR 29181; July 18, 1990), the NRC amended its regulations to provide for the storage of spent nuclear fuel under a general license on the site of any nuclear power reactor.

In its Statement of Considerations (SOC) for the Final Rule (55 FR 29185), the Commission responded to comments related to emergency preparedness for spent fuel dry storage, stating, “The new 10 CFR 72.32(c) ... states that, ‘For an ISFSI that is located on the site of a nuclear power reactor licensed for operation by the Commission, the emergency plan required by 10 CFR 50.47 shall be deemed to satisfy the requirements of this Section.’ One condition of the general license is that the reactor licensee must review the reactor emergency plan and modify it as necessary to cover dry cask storage and related activities. If the emergency plan is in compliance with 10 CFR 50.47, then it is in compliance with the Commission’s regulations with respect to dry cask storage.”

In the SOC for the Final Rule for EP requirements for ISFSIs and Monitored Retrievable Storage Installation (MRS) (60 FR 32430; June 22, 1995), the Commission stated, in part, that “current reactor emergency plans cover all at-or near reactor ISFSI’s. An ISFSI that is to be licensed for a stand-alone operation will need an emergency plan established in accordance with the requirements in this rulemaking” (60 FR 32431). The Commission responded to comments (60 FR 32435) concerning offsite emergency planning for ISFSIs or an MRS and concluded that “the offsite consequences of potential accidents at an ISFSI or a MRS would not warrant establishing Emergency Planning Zones.”

As part of the review for ENO’s current exemption request, the staff also used the EP regulations in 10 CFR 72.32 and Spent Fuel Project Office Interim Staff Guidance (ISG) – 16, “Emergency Planning,” (ADAMS Accession No. ML003724570) as references to ensure consistency between specific-licensed and general-licensed ISFSIs.

4.0 TECHNICAL EVALUATION

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR part 50 when: (1) the exemptions are authorized by law, will not present an undue risk to public health

or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. The staff reviewed this request to determine whether the specific exemptions should be granted, and the staff evaluation (SE) is provided in its letter to ENO, dated September 26, 2013 (ADAMS Accession No. ML13268A501). After evaluating the exemption requests, the staff determined that the ENO should be granted the exemptions detailed in the SE.

The NRC has found that the ENO meets the criteria for an exemption in 10 CFR 50.12. The NRC has determined that granting the exemption will not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the exemption is authorized by law.

As noted in Section 2.0, "Discussion," above, the ENO's compliance with the EP requirements that were in effect before the effective date of the EP Final Rule demonstrated reasonable assurance of adequate protection of public health and safety and common defense and security. In its SE, the NRC staff explains that the ENO's implementation of its Emergency Plan, with the exemptions, will continue to provide this reasonable assurance of adequate protection. Thus, granting the exemptions will not present an undue risk to public health or safety and is not inconsistent with the common defense and security.

For the Commission to grant an exemption, special circumstances must exist. Under 10 CFR 50.12(a)(2)(ii), special circumstances are present when "[a]pplication of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule." These special circumstances exist here. The NRC has determined that the ENO's compliance with the regulations that the staff describes in its SE is not necessary for the licensee to demonstrate that, under its emergency plan, there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. Consequently, special circumstances are present

because requiring the ENO to comply with the regulations that the staff describes in its SE is not necessary to achieve the underlying purpose of the EP regulations.

5.0 ENVIRONMENTAL ASSESSMENT (EA)

The NRC staff also considered in the review of this exemption request whether there would be any significant environmental impacts associated with the exemption. For this proposed action, the NRC staff performed an environmental assessment pursuant to 10 CFR 51.30. The proposed action is the approval of a request to exempt the applicant from certain requirements of 10 CFR 50.47(b) and portions of 10 CFR part 50, appendix E.

The environmental assessment concluded that the proposed action would not significantly impact the quality of the human environment. The NRC staff concludes that the proposed action will not result in any changes in the types or amounts of any radiological effluents that may be released offsite, and there is no significant increase in occupational or public radiation exposure because of the proposed action. The Environmental Assessment and the Finding of No Significant Impact was published on September 24, 2013 (78 FR 58570).

6.0 CONCLUSION

The NRC concludes that the licensee's request for an exemption from certain requirements of 10 CFR 50.47(b) and 10 CFR part 50, appendix E, section IV as specified in this SE is acceptable in view of the greatly reduced offsite radiological consequences associated with the ISFSI.

The BRP ISFSI Emergency Plan has been reviewed against the acceptance criteria included in 10 CFR 50.47, appendix E to 10 CFR part 50, 10 CFR 72.32 and Interim Staff Guidance – 16. The review considered the ISFSI and the low likelihood of any credible accident resulting in radiological releases requiring offsite protective measures. These evaluations were supported by the previously documented licensee and staff accident analyses. The staff

concludes that: the BRP ISFSI Emergency Plan provides: (1) an adequate basis for an acceptable state of emergency preparedness; and (2) in conjunction with arrangements made with offsite response agencies, reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at the BRP facility.

The NRC has determined that pursuant to 10 CFR 50.12, the exemptions described in the SE are authorized by law, will not endanger life or property or the common defense and security, and are otherwise in the public interest, and special circumstances are present.

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 26th day of September, 2013.

FOR THE NUCLEAR REGULATORY COMMISSION

Anthony H. Hsia, Deputy Director
Division of Spent Fuel Storage and Transportation
Office of Nuclear Material Safety
and Safeguards