

NUCLEAR REGULATORY COMMISSION
ENTERGY OPERATIONS, INC.
DOCKET NOS. 50-313 AND 50-368
ARKANSAS NUCLEAR ONE, UNITS 1 AND 2
ENVIRONMENTAL ASSESSMENT AND
FINDING OF NO SIGNIFICANT IMPACT
[NRC-2010-0111]

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an exemption, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 73.5, "Specific exemptions," from the implementation date for certain new requirements of 10 CFR Part 73, "Physical protection of plants and materials," for Facility Operating License Nos. DPR-51 and NPF-6, issued to Entergy Operations, Inc. (Entergy, the licensee), for operation of the Arkansas Nuclear One, Units 1 and 2 (ANO-1 and 2), located in Pope County, Arkansas. Therefore, as required by 10 CFR 51.21, the NRC prepared an environmental assessment. Based on the results of the environmental assessment, the NRC is issuing a finding of no significant impact.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed action would exempt Entergy from the required implementation date of March 31, 2010, for three new requirements of 10 CFR Part 73 for ANO-1 and 2. Specifically, Entergy would be granted an exemption from being in full compliance with certain new requirements contained in 10 CFR 73.55 by the March 31, 2010, deadline. Entergy has proposed an alternate compliance date to October 31, 2010 for two requirements, and August

31, 2011 for the third requirement. The proposed action, an extension of the schedule for completion of certain actions required by the revised 10 CFR Part 73, does not involve any physical changes to the reactor, fuel, plant structures, support structures, water, or land at the ANO-1 and 2 site.

The proposed action is in accordance with the licensee's application dated January 14, 2010, as supplemented by letter dated January 28, 2010. Portions of the letters dated January 14 and 28, 2010, contain security-related information and, accordingly, are withheld from public disclosure. Redacted versions of the letters dated January 14 and 28, 2010, are available to the public in the Agencywide Documents Access and Management System (ADAMS) in ADAMS Accession Nos. ML100190140 and ML100710021, respectively.

The Need for the Proposed Action:

The proposed action is needed to provide the licensee with additional time based on the delayed delivery of critical security equipment caused by limited vendor resources and subsequent installation and testing time requirements.

Environmental Impacts of the Proposed Action:

The NRC has completed its environmental assessment of the proposed exemption. The staff has concluded that the proposed action to extend the implementation deadline would not significantly affect plant safety and would not have a significant adverse effect on the probability of an accident occurring.

The proposed action would not result in an increased radiological hazard beyond those previously analyzed in the environmental assessment and finding of no significant impact made by the Commission in promulgating its revisions to 10 CFR Part 73 as discussed in a *Federal Register* notice dated March 27, 2009 (74 FR 13926). There will be no change to radioactive effluents that affect radiation exposures to plant workers and members of the public. Therefore,

no changes or different types of radiological impacts are expected as a result of the proposed exemption.

The proposed action does not result in changes to land use or water use, or result in changes to the quality or quantity of non-radiological effluents. No changes to the National Pollution Discharge Elimination System permit are needed. No effects on the aquatic or terrestrial habitat in the vicinity of the plant, or to threatened, endangered, or protected species under the Endangered Species Act, or impacts to essential fish habitat covered by the Magnuson-Steven's Act are expected. There would be no impact to the air or ambient air quality.

There are no impacts to historical and cultural resources. There would be no impact to socioeconomic resources. Therefore, no changes to or different types of non-radiological environmental impacts are expected as a result of the proposed exemption.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action. In addition, in promulgating its revisions to 10 CFR Part 73, the Commission prepared an environmental assessment and published a finding of no significant impact [Part 73, Power Reactor Security Requirements, 74 FR 13926 (March 27, 2009)].

The NRC staff's safety evaluation will be provided in the exemption that will be issued as part of the letter to the licensee approving the exemption to the regulation, if granted.

Environmental Impacts of the Alternatives to the Proposed Action:

As an alternative to the proposed actions, the NRC staff considered denial of the proposed action (i.e., the "no-action" alternative). Denial of the exemption request would result in no change in current environmental impacts. If the proposed action was denied, the licensee

would have to comply with the March 31, 2010, implementation deadline. The environmental impacts of the proposed exemption and the “no-action” alternative are similar.

Alternative Use of Resources:

The action does not involve the use of any different resources than those considered in the Final Environmental Statement for the ANO-1, U.S. Atomic Energy Commission (AEC), 1973, “Final Environmental Statement Related to Arkansas Nuclear One, Unit 1,” as supplemented through the “Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Arkansas Nuclear One, Unit 1 – Final Report” (NUREG-1437, Supplement 3), dated April 2001, and for the ANO-2, U.S. Nuclear Regulatory Commission (NRC), 1977, “Final Environmental Statement Related to Operation of Arkansas Nuclear One, Unit 2,” as supplemented through the “Generic Environmental Impact Statement for License Renewal of Nuclear Plants: Arkansas Nuclear One, Unit 2 – Final Report” (NUREG-1437, Supplement 19), dated April 2005.

Agencies and Persons Consulted:

In accordance with its stated policy, on January 26, 2010, the NRC staff consulted with the Arkansas State official, Mr. Bernard Beville, of the Arkansas Department of Health, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

On the basis of the environmental assessment, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated January 14, 2010, as supplemented by letter dated January 28, 2010. Portions of the letters dated January 14 and 28, 2010, contain security-related information and, accordingly, are not available to the public. Other parts of these documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, Public File Area O-1F21, 11555 Rockville Pike (first floor), Rockville, Maryland 20852. Publicly available records will be accessible electronically from the ADAMS Public Electronic Reading Room on the Internet at the NRC Web site: <http://www.nrc.gov/reading-rm/adams.html> . Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC PDR Reference staff by telephone at 1-800-397-4209 or 301-415-4737, or send an e-mail to pdresource@nrc.gov.

Dated at Rockville, Maryland, this 12th day of March 2010.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Balwant K. Singal, Senior Project Manager
Plant Licensing Branch LPL4
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation