

# **UNITED STATES NUCLEAR REGULATORY COMMISSION**

WASHINGTON, D.C. 20555-0001

March 8, 2010

Mr. Christopher R. Costanzo Vice President **Duane Arnold Energy Center** 3277 DAEC Road Palo, IA 52324-9785

SUBJECT:

DUANE ARNOLD ENERGY CENTER - ENVIRONMENTAL ASSESSMENT

AND FINDING OF NO SIGNIFICANT IMPACT (TAC NO. ME0789)

Dear Mr. Costanzo:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for exemption dated March 4, 2009. The proposed action would exempt the measured leakage rate for the main steamline isolation valves, and associated inboard drain line, from inclusion in both the overall measured leakage rate for Type A integrated tests and from the sum of the local leakage rates for Type B and Type C tests as required by Title 10 of the Code of Federal Regulations (10 CFR) Part 50, Appendix J. Option B. Paragraphs III.A and III.B, respectively.

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

Karl Feintuch, Project Manager

Plant Licensing Branch III-1

Karl Fointer

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-331

Enclosure:

**Environmental Assessment** 

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# UNITED STATES NUCLEAR REGULATORY COMMISSION NEXTERA ENERGY DUANE ARNOLD, LLC DOCKET NO. 50-331

# DUANE ARNOLD ENERGY CENTER

# **ENVIRONMENTAL ASSESSMENT AND FINDING OF**

# NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an exemption, pursuant to 10 CFR 50.12, from 10 CFR Part 50, Appendix J, Option B and associated changes to the Technical Specifications (TSs) for main steamline isolation valve local leakage rate testing for Facility Operating License No. DPR-49, issued to NextEra Energy Duane Arnold, LLC (the licensee), for operation of the Duane Arnold Energy Center, located in Palo, lowa. In accordance with 10 CFR 51.21, the NRC prepared an environmental assessment documenting its finding. The NRC concluded that the proposed actions will have no significant environmental impact.

## **ENVIRONMENTAL ASSESSMENT**

#### Identification of the Proposed Action:

The proposed action would exempt the licensee from certain portions of 10 CFR Part 50, Appendix J, Option B. Specifically, the licensee requests to be exempted from the measured leakage rate for the main steamline isolation valves (MSIV), and associated inboard drainline, from inclusion in both the overall measured leakage rate for Type A integrated tests and from the sum of the local leakage rates for Type B and Type C tests as required by Appendix J, Option B, Paragraphs III.A and III.B, respectively.

In conjunction with the exemption request, the licensee also requests approval, pursuant to the requirements of 10 CFR 50.90, of associated changes to the Duane Arnold Energy Center TS, Section 5.5.12 (Primary Containment Leakage Rate Testing Program) that reflects the exemption to Appendix J requested above. Also, there is an additional proposed TS change to TS Section 3.6.1.3 (Primary Containment Isolation Valves) associated with MSIV leakage testing requirements, which does not require a corresponding exemption from 10 CFR Part 50, Appendix J. The change to TS Section 3.6.1.3, is included in the amendment request to remove the repair criterion for MSIVs that fail their as-found leakage rate acceptance criterion found in the licensee's Surveillance Requirement 3.6.1.3.9.

# The Need for the Proposed Action:

The proposed action is needed to reconcile the requirements of 10 CFR Part 50,

Appendix J, Option B and their TS with the plant-specific testing methodology used to determine the MSIV local leakage rate.

## Environmental Impacts of the Proposed Action:

The NRC has completed its environmental assessment of the proposed exemption and TS changes. The staff has concluded that the changes 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. There will be no change to radioactive effluents that affect radiation exposures to plant workers and members of the public. The proposed action will be performed inside existing plant buildings. No changes will be made to plant buildings or the site property. 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 or 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 are no impacts 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 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.

The details of the NRC staff's reasoning will be provided in the safety evaluation supporting the amendment.

## Environmental Impacts of the Alternatives to the Purposed Action:

As an alternative to the proposed actions, the staff considered denial of the proposed actions (i.e., the "no-action" alternative). Denial of the exemption and TS change request would result in no change in current environmental impacts. The environmental impacts of the proposed exemption and TS change 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 Duane Arnold Energy Center, Docket No. 50-331, issued in March 1973.

## Agencies and Persons Consulted:

In accordance with its stated policy, on January 29, 2010, the staff consulted with the Iowa State official, Melanie Rasmusson, Chief of the Bureau of Radiological Health in the Iowa Department of Public Health, who is the State Liaison Officer, 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 March 4, 2009 (ML090680040). Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room (PDR), located at One White Flint North, 1555 Rockville Pike, Rockville, Maryland 20852. Publicly available records will be accessible electronically from the Agencywide Document Access and Management System (ADAMS) Public Electronic Reading Room on the Internet at the NRC Website: 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 pdr@nrc.gov.

Dated at Rockville, Maryland, this 8th day of March 2010.

FOR THE NUCLEAR REGULATORY COMMISSION

Karl D. Feintuch, Project Manager

Karl D Feirtuch

Plant Licensing Branch III-1

Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

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Sincerely,

/RA/

Karl Feintuch, Project Manager Plant Licensing Branch III-1

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