

## **NRR-PMDAPEm Resource**

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**From:** Chawla, Mahesh  
**Sent:** Wednesday, March 08, 2017 4:17 PM  
**To:** Davis, J.Michael (J.Michael.Davis@nexteraenergy.com)  
**Cc:** Catron, Steve (Steve.Catron@fpl.com); laura.swenzinski@nexteraenergy.com  
**Subject:** Final - Request for Additional Information (RAI) - Duane Arnold Energy Center (DAEC) - Revision to Staff Augmentation Times in the Duane Arnold Energy Center (DAEC) Emergency Plan (EPlan) - MF8390

Dear Mr. Davis,

On February 22, 2017, the U.S. Nuclear Regulatory Commission (NRC) staff sent NextEra Energy Duane Arnold, LLC (DAEC) (the licensee), a request for additional information (RAI) provided below as a draft. This RAI relates to a license amendment request (LAR) to the DAEC Emergency Plan, which would revise the Emergency Response Organization (ERO) staffing and augmentation plan.

The licensee subsequently informed the NRC staff that a clarification call was needed to discuss the information requested. The clarification call was held on March 6, 2017, between the NRC staff and the licensee representatives, during which the subject draft RAI request was further discussed. The draft RAI did not change and is now being transmitted as the final RAI. The licensee understood the RAI and agreed to provide a response to this **final** RAI by April 6, 2017. The NRC staff also informed the licensee that a publicly available version of this final RAI would be placed in the NRC's Agencywide Documents Access and Management System.

### Final Request for Additional Information

By letter dated September 13, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16263A071), NextEra Energy Duane Arnold, LLC (the licensee), requested prior U.S. Nuclear Regulatory Commission (NRC) approval of an amendment to the Duane Arnold Energy Center (DAEC) Emergency Plan (EPlan). The proposed amendment to the DAEC Emergency Plan would revise the Emergency Response Organization (ERO) staffing and augmentation plan.

10 CFR 50.47(a)(1) states, in part: "...no initial operating license for a nuclear power reactor will be issued unless a finding is made by the NRC that there is reasonable assurance that adequate protective measures and can will be taken in the event of a radiological emergency." In conducting our review the staff must make a determination that the proposed changes continue to provide reasonable assurance that the licensee emergency plan, as revised, will provide adequate protective measures in the event of a radiological emergency.

The regulatory requirements of 10 CFR Part 50 are listed below upon which the staff based its review to ensure that these regulatory planning standards are maintained:

- 10 CFR 50.47(b)(1), states, in part: "... each principal response organization has staff to respond and to augment its initial response on a continuous basis."
- 10 CFR 50.47(b)(2) states, in part: "...licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available ..."
- 10 CFR Part 50, Appendix E, Section IV.A, states, in part: "The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization..."

The following guidance was used by the staff in reviewing the proposed ERO staffing changes:

- Evaluation criteria contained in Section II.B (Onsite Emergency Organization) of NUREG-0654/FEMA-REP-1, Revision 1, "Criteria for Preparedness and Evaluation of Radiological Emergency Response Plans and Nuclear Power Plants," dated November 30, 1980;
- NUREG-0696, "Functional Criteria for Emergency Response Facilities," dated February 1981;
- Regulatory Guide (RG) 1.219, "Guidance for Making Changes to Emergency Plans for Nuclear Power Reactors," dated July 2016; and
- Regulatory Issue Summary (RIS) 2016-10, "License Amendment Requests for Changes to Emergency Response Organization Staffing and Augmentation," dated August 5, 2016.

The RAI listed below is necessary to facilitate the technical review being conducted by the NRC staff. A timely and thorough response to this final RAI is requested in order to meet the proposed deadline requested by the licensee.

#### RAI-DAEC-1

At a Site Area Emergency (SAE) or General Emergency (GE) Emergency Classification Level (ECL), coordination with offsite response organizations (OROs) is extremely important as protection action strategies are being developed for the public, and significant involvement of site personnel is critical in order to properly put the event in context of public risk in order to make the best protection action decision possible.

- a. Since the Emergency Operations Facility (EOF)/Joint Information Center (JIC) are currently staffed at the Alert ECL, it would imply that DAEC intends to activate the EOF/JIC as soon as possible, and as such, facility staff will most likely already be there ready to assume responsibility for coordination with (OROs) and other assigned EPlan functions. Please explain, in more detail, the basis and justification for increasing the response time for the EOF/JIC from the approved 60 minutes to 90 minutes from a SAE. *[Note the proposed change for the EOF, from 60 minutes to 90 minutes is carried over in other parts of the DAEC Emergency Plan, please ensure to be consistent with any changes made.]*

In addition, NUREG-0696 states, in part:

- The licensee shall use the EOF to coordinate its emergency response activities with those of local, State, and Federal agencies, including the NRC. Licensee personnel in the EOF will use the evaluations of offsite effects to make protective action recommendations for the public to State and local emergency response agencies.
- Upon EOF activation, designated personnel shall report directly to the EOF to achieve full functional operation within 1 hour {emphasis added}. A senior management person designated by the licensee shall be in charge of all licensee activities in the EOF. The EOF staff will include personnel to manage the licensee onsite and offsite radiological monitoring, to perform radiological evaluations, and to interface with offsite officials.

Specifically, please provide additional justification that supports all proposed EOF/JIC changes:

- b. How coordination with OROs will occur in an effective fashion during the additional 30-minutes after a SAE (or GE) has been declared. What efforts have been performed to validate that this approach ensures that "...that adequate protective measures and can will be taken in the event of a radiological emergency?"
- c. The generic ORO concurrence provided does not specifically state the level of understanding for the OROs related to EOF/JIC activation timing. Please provide documentation that the OROs are aware of, and concur, that, if approved, DAEC can take 90-minutes to activate the EOF/JIC after a SAE (or GE) declaration.

- d. What measures are being taken to compensate for this extension in augmentation timing for the EOF/JIC? How has this been validated?

RAI-DAEC-2

Enclosure 1, "Evaluation of the Proposed Changes," provides the following:

Per NUREG-0654 Revision 1, the Plant System Engineering, Repair and Corrective Actions functional area includes Technical Support and Repair and Corrective Actions Major Tasks. NUREG-0654 Table B-1 notes that Mechanical Maintenance/Radwaste Operator and Electrical Maintenance/Instrument and Control Technician expertise may be provided by shift personnel assigned other functions.

Please provide further discussion on which on-shift individual(s) performs this Major Task and a description of training provided for this Major Task. This information is needed to provide justification for the extension in augmentation time for the Major Task of Repair and Corrective Actions.

RAI-DAEC-3

Section A, 2.5, "Direction and Coordination," (2) states: "...the on-shift plant operations staff will staff the onsite facilities." This appears to be inconsistent with the staff's interpretation that DAEC on-shift plant operations staff will perform all required EP functions until relieved by the ERO and not that the on-shift plant operations staff will relocate to the Technical Support Center (TSC)/Operations Support Center (OSC), i.e., they will stay in the Main Control Room. Please revise accordingly, or provide an explanation as to the validity of the statement.

RAI-DAEC-4

Table B-1, "On-Shift Staffing & Staff Augmentation Assignments," is to list all the on-shift and augmented ERO functions/positions that are considered minimum staff. However, the proposed Table B-1 does not include all the required positions detailed in the text of the DAEC Emergency Plan and other applicable tables, and is inconsistent with positions considered as minimum staffing by reading the entire Section B from the DAEC Emergency Plan. Please revise Table B-1 accordingly to depict all minimum staffing positions, both on-shift and augmented, for the TSC, OSC, EOF and JIC.

*Please provide the supplemental information to address the subject RAI on docket by April 6, 2017. Thanks*

*Sincerely,*

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