

## **NRR-DRMAPEm Resource**

---

**From:** Chawla, Mahesh  
**Sent:** Friday, October 4, 2019 2:36 PM  
**To:** Davis, J.Michael (J.Michael.Davis@nexteraenergy.com)  
**Cc:** Catron, Steve (Steve.Catron@fpl.com); Mack, Jarrett; Weaver, Tracy; Norton, Chuck; Ospino, Ty; Dickson, Billy; norris, michael; Robinson, Edward; Kinard, Richard; Anderson, Joseph  
**Subject:** FINAL - Request For Additional Information Related to License Amendment Request (TSCR-182) for Proposed Changes to the Emergency Plan for Permanently Defueled Conditions at Duane Arnold Energy Center (DAEC) - L-2019-LLA-0075

Dear Mr. Davis,

By application dated April 9, 2019, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19101A280), NextEra Energy Duane Arnold, LLC, submitted changes to the Duane Arnold Energy Center (DAEC) Emergency Plan for Commission review and prior approval pursuant to Section 50.90 of Title 10 of the *Code of Federal Regulations* (10 CFR). The proposed changes would revise the existing DAEC Emergency Plan for the permanently defueled condition (pre-exemption). The Nuclear Regulatory Commission (NRC) staff has reviewed the licensee's submittal and determined that additional information is required to enable the staff to make an independent assessment regarding its technical review.

### **RAI-DAEC-1**

Section 3.2.1.3, "*Major Functional Area: Notification/Communications*," of Attachment 1 (page 9 of 28), "Description and Evaluation of the Proposed Changes," states in part: "[t]he resource commitment to support the communication and notification function is not full time so there is time to support performance of collateral duties during the first 60 minutes until staff augmentation can occur." However, it further states, "[f]or purposes of the analysis of proposed post-shutdown on-shift staffing, NRC notifications were treated as a continuous action in accordance with 10 CFR 50.72(c)(3), meaning that once the initial NRC communications are established, it was assumed that the NRC will request an open line to be continuously maintained with the NRC Operations Center."

*Please clarify what other collateral duties are assigned to the Non-Certified Operator (NCO) designated to perform notification/communications and what are the potential impacts, if any, to the performance of notification/communications to the appropriate State of Iowa or local agencies, and NRC, within 15 minutes and 1 hour respectively following the declaration of an emergency classification.*

### **RAI-DAEC-2**

Section 3.2.1.4.4, "*Major Task: Chemistry/Radiochemistry*," of Attachment 1 (page 11 of 28) states in part: "no chemistry/radio-chemistry job tasks are required within the first 60 minutes of any analyzed events."

*Please clarify when site procedures require gaseous sampling during fuel handling activities with required radiation monitors out of service, and if so, will qualified personnel be available on-shift to perform any gaseous samples to support event classification for the radiation monitor(s) listed for gaseous effluent EALs.*

### **RAI-DAEC-3**

Section 3.2.1.6.1, "*Major Tasks: Radiation Protection: Access Control, HP [Health Physics] Coverage, Habitability, and Dosimetry*," of Attachment 1 (page 15 of 28) states in part: "[d]uring a declared emergency, Radiation Work Permits (RWPs) and dose set points will change depending on the emergency and plant conditions."

*Please clarify if these “emergency” RWPs are readily available for use or would they have to be developed for use at the time of the event. If so, has it been evaluated whether the on-shift HP Technician can perform this task and what is the impact on other Emergency Plan responsibilities.*

#### **RAI-DAEC-4**

Section 3.2.1.6.1 of Attachment 1 (page 15 of 28) states: “[r]adiation protection coverage will only be performed if the radiological status of a room is unknown and there is a definitive need for emergency workers to enter the room to perform a task. The decision to provide radiation protection coverage may be based on plant radiological conditions as indicated by installed ARMs [area radiation monitors].”

*Please clarify if there are sufficient installed ARMs in areas where access would be required to restore spent fuel pool (SFP) cooling or level, either by normal means or by implementing SFP inventory makeup strategies required by 10 CFR 50.54(hh)(2), to evaluate the radiological status to determine if radiation protection coverage will be required.*

#### **RAI-DAEC-5**

Section 3.2.2, “ERO [emergency response organization] Staffing,” of Attachment 1 (page 18 of 28) states: “[t]he proposed changes to the DAEC Emergency Plan have been discussed with the representatives from each Offsite Response Organization (ORO). Potential impacts on the ability of State of Iowa and local response organizations to effectively implement their FEMA-approved Radiological Emergency Plans do not exist because no tasks that require interfacing with State of Iowa and local response organizations are proposed for elimination.”

*Please provide documentation (letter, email, etc.) that reflects the ORO’s agreement with this assessment of no potential impacts to existing FEMA-approved emergency plans.*

#### **RAI-DAEC-6**

Section 3.2.2.1, “Technical Support,” of Attachment 1 (page 22 of 28) states: “[i]n the permanent shut down and defueled condition, the Technical and Engineering Supervisor would have the necessary qualifications, expertise, and capabilities to perform an engineering assessment of plant conditions and/or actions needed to mitigate damage to the plant in response to a fuel handling accident or an event resulting in damage to the SFP integrity or the loss of SFP cooling or inventory.” However, Section 3.2.2.1 further states, “[w]ith respect to responding to engineering requests from the Technical and Engineering Supervisor, this function will continue to be performed by augmenting qualified engineering resources.”

*Please clarify if the Technical and Engineering Supervisor is, or will be, qualified to “perform an engineering assessment of plant conditions and/or actions needed to mitigate damage to the plant in response to a fuel handling accident or an event resulting in damage to the SFP integrity or the loss of SFP cooling or inventory” or will augmented qualified engineering resources be required.*

#### **RAI-DAEC-7**

10 CFR 50.47(b)(14) states: “Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.”

*Please confirm if NextEra Energy proposes to conduct a drill to validate the proposed ERO changes to the DAEC Emergency Plan prior to implementation, and whether OROs will be offered the opportunity to participate and NRC/FEMA to observe. While not required by NRC regulations, this drill has provided valuable reassurance to OROs and FEMA that the ERO changes will not adversely impact existing FEMA-approved offsite emergency plans.*

The draft RAI was sent to NextEra on September 30, 2019 to ensure that the request is understandable and the regulatory basis for the request is clear. We held a clarification teleconference today (October 4, 2019) with your staff to discuss the draft RAI. Your staff expressed a clear understanding of the NRC staff's request, and therefore it did not result in any changes to the draft RAI. You have agreed to provide the response on the docket within 30 days of the receipt of this email. This email does not convey or represent an NRC staff position regarding DAEC's request. Thanking you,

Sincerely,

Mahesh Chawla  
Division of Operating Reactor Licensing  
Licensing Branch LPL-3  
(301) 415-8371

**Hearing Identifier:** NRR\_DRMA  
**Email Number:** 247

**Mail Envelope Properties** (MWHPR09MB15031EC929D6FD250E770362F19E0)

**Subject:** FINAL - Request For Additional Information Related to License Amendment Request (TSCR-182) for Proposed Changes to the Emergency Plan for Permanently Defueled Conditions at Duane Arnold Energy Center (DAEC) - L-2019-LLA-0075

**Sent Date:** 10/4/2019 2:35:57 PM

**Received Date:** 10/4/2019 2:35:00 PM

**From:** Chawla, Mahesh

**Created By:** Mahesh.Chawla@nrc.gov

**Recipients:**

"Catron, Steve (Steve.Catron@fpl.com)" <Steve.Catron@fpl.com>

Tracking Status: None

"Mack, Jarrett" <Jarrett.Mack@fpl.com>

Tracking Status: None

"Weaver, Tracy" <Tracy.Weaver@nexteraenergy.com>

Tracking Status: None

"Norton, Chuck" <Charles.Norton@nrc.gov>

Tracking Status: None

"Ospino, Ty" <Tyrone.Ospino@nrc.gov>

Tracking Status: None

"Dickson, Billy" <Billy.Dickson@nrc.gov>

Tracking Status: None

"norris, michael" <Michael.Norris@nrc.gov>

Tracking Status: None

"Robinson, Edward" <Edward.Robinson@nrc.gov>

Tracking Status: None

"Kinard, Richard" <Richard.Kinard@nrc.gov>

Tracking Status: None

"Anderson, Joseph" <Joseph.Anderson@nrc.gov>

Tracking Status: None

"Davis, J.Michael (J.Michael.Davis@nexteraenergy.com)" <J.Michael.Davis@nexteraenergy.com>

Tracking Status: None

**Post Office:** MWHPR09MB1503.namprd09.prod.outlook.com

Files	Size	Date & Time
MESSAGE	7249	10/4/2019 2:35:00 PM

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**