



**Enclosure 2 Contains ~~Proprietary Information~~**

Withhold Enclosure 2 from Public Disclosure in Accordance with 10 CFR 2.390

March 21, 2019

NG-19-0024  
10 CFR 50.71(e)  
10 CFR 54.37(b)

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Duane Arnold Energy Center  
Docket 50-331  
Renewed Op. License No: DPR-49

Transmittal Of Revision 25 Of The DAEC Updated Final Safety Analysis Report And  
The Current DAEC Technical Specifications Bases

This letter transmits the latest revision (No. 25) of the Updated Final Safety Analysis Report (UFSAR) for the Duane Arnold Energy Center (DAEC) as required by 10 CFR Section 50.71(e) and reflects changes made to the UFSAR since the previous submittal in April, 2017. Enclosure 1 to this letter summarizes the changes included in this revision. Enclosure 2 includes 1 DVD-ROM containing the non-public version of the DAEC UFSAR in electronic format and is being submitted in its entirety, constituting a total replacement copy. Enclosure 2 contains security related information as defined by 10 CFR 2.390(d) and should be withheld from public disclosure.

Enclosure 3 to this letter includes 1 DVD-ROM containing the public version of the DAEC UFSAR.

The DAEC Technical Requirements Manual (TRM) is incorporated by reference into UFSAR Chapter 16. Therefore, Enclosure 4 contains the TRM changed pages and represents all changes made to the TRM since the previous submittal in April, 2017.

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The DAEC Technical Specifications Bases Control Program requires that changes to the Technical Specifications Bases (TSB) implemented without prior NRC approval be provided to the NRC on a frequency consistent with 10 CFR 50.71(e). Therefore, in accordance with Section 5.5.10.d of the DAEC Technical Specifications, Enclosure 5 contains the TSB changed pages and represents all changes made to the TSB since the previous submittal in April, 2017.

NextEra Energy Duane Arnold conducted a review of the DAEC plant changes for 10 CFR 54.37(b) applicability. No components were determined to meet the criteria for newly identified components as clarified by Regulatory Issue Summary (RIS) 2007-16, Revision 1, "Implementation of the Requirements of 10 CFR 54.34(b) for Holders of Renewed Licenses."

This letter contains no new commitments.

Please call Michael Davis at (319) 851-7032 with any questions regarding this submittal.

I declare under penalty of perjury that the foregoing is true and correct. Executed on March 21, 2019.



Dean Curtland  
Site Director  
NextEra Energy Duane Arnold, LLC

Enclosures (5)

cc Administrator Region III, USNRC  
Project Manager, DAEC, USNRC  
Resident Inspector, DAEC, USNRC

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**ENCLOSURE 1  
To NG-19-0024**

**SUMMARY OF CHANGES**

Revision 25 of the Duane Arnold Energy Center Updated Final Safety Analysis (UFSAR), excluding editorial changes, is summarized below.

| <u>Change<br/>Request<br/>Number</u> | <u>Description</u>  |
|--------------------------------------|---|
| 2016-010                             | Revise Discussion of Ground Monitoring and Extraction Wells in Accordance with EC285995 Revision 1  |
| 2016-013                             | Reflect ITC Midwest's Transmission System Upgrades Per EC280464   |
| 2016-016                             | Clarify discussion of HPCI and RCIC Transient Response  |
| 2017-004                             | Reflect ITC Midwest's Transmission System Upgrades Per EC288326   |
| 2017-005                             | Reflect Installation of the Open Phase Detection System Per EC283637  |
| 2017-006                             | Revise UFSAR to Reflect Revised Criticality Analysis Approved by Amendment 299  |
| 2017-007                             | Revise UFSAR to Reflect Adoption of Boiling Water Reactor Owners Group Emergency Management Guidance/Severe Accident Guidance Revision 3  |
| 2017-008                             | Add Reference and Resolution Discussion of General Electric-Hitachi Safety Communication SC 11-05   |
| 2017-009                             | Reflect Installation of New Technical Support Center Diesel Generator and Fuel Supply Tank Per EC285074 Revision 1  |
| 2017-010                             | Implement Revised Calculations of Loss Of Coolant Accident Dose Consequences Per EC287931   |
| 2017-011                             | Reflect ITC Midwest's Switchyard Protective Breakers and Relaying Upgrades Per EC281803   |
| 2017-012                             | Reflect ITC Midwest's Transmission System Upgrades Per EC280464   |
| 2017-013                             | Revise Discussion of the Reactor Building Radiation Monitoring System to be Consistent with UFSAR Updates Made Regarding Alternate Source Term Amendments 237 and 240                             |
| 2017-014                             | Revise Commitments in Accordance with the NRC Safety Evaluation for BWRVIP-234, "Thermal Aging and Neutron Embrittlement Evaluation of Cast Austenitic Stainless Steels (CASS) for BWR Internals" |
| 2017-015                             | Reflect Installation of New Transmission Feed to the Standby Transformer Per EC 288326  |
| 2017-016                             | Clarify Masonry Wall Discussion   |
| 2018-004                             | Add Calculations Regarding Management of the Cedar River (Ultimate Heat Sink) as UFSAR References   |
| 2018-005                             | Implement Change to Reactivity Anomalies Surveillance Per Amendment 304   |
| 2018-006                             | Reflect NextEra Energy and ITC Midwest's Transmission System Upgrades Per EC288619  |

|          |  |
|----------|--|
| 2018-008 | Remove In-Plant Auxiliary Boiler Propane Tank and Concrete Barriers Per EC285979                             |
| 2018-009 | Reflect ITC Midwest's Transmission System Upgrades Per EC290083  |
| 2018-010 | Revise Nitrogen Supply Requirements for the Automatic Depressurization System Accumulators Per Amendment 304 |
| 2018-011 | Reflect Operating Requirements for Replacement Reactor Core Isolation Cooling Room Cooler Fan Motor          |
| 2019-001 | Reflect Cycle 27 Core Modification Package Per EC289285  |
| 2019-002 | Revise Switchyard Schematic to Duplicate or Excessively Detailed Information                                 |
| 2019-003 | Reflect Organizational Changes   |

Per the guidance of NEI 98-03, Revision 1, the following changes constitute UFSAR deletions. A description of those UFSAR deletions and the basis for change is provided below.

Change  
Request  
Number

Description and Basis for Removal

|          |  |
|----------|--|
| 2018-006 | <p>Description: This change request removed a statement that DAEC Switchyard uses a combination of oil immersion and sulfur hexafluoride breakers.</p> <p>Basis: This information was determined to be excessive detail and falls outside the scope of 10 CFR 50.59. Additionally, many of the breakers in the DAEC switchyard fall under the design control of the transmission system owner. Therefore, removal of this information was appropriate.</p> |
| 2019-002 | <p>Description: This change request removed switchyard breaker and transformer manufacturer information. This change also removed the MVA rating information for T1 and T4 transformers.</p> <p>Basis: This information was determined to be excessive detail and falls outside the scope of 10 CFR 50.59.</p>   |

Additional UFSAR deletions resulted from plant or program modifications which were evaluated under 10 CFR 50.59, License Amendments, NRC Safety Evaluation Reports issued to DAEC, or constituted removal of redundant information which remains located elsewhere in the UFSAR.

**Enclosure 2  
to NG-19-0024**

**DVD-ROM of the DAEC UFSAR Revision 25  
NON-PUBLIC VERSION**

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