



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 18, 2016

Mr. Thomas A. Vehec
Vice President
NextEra Energy
Duane Arnold Energy Center
3277 DAEC Road
Palo, IA 52324-9785

SUBJECT: DUANE ARNOLD ENERGY CENTER - ISSUANCE OF AMENDMENT TO
REVISE THE VALUE OF REACTOR STEAM DOME PRESSURE
(CAC NO. MF6618)

Dear Mr. Vehec:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 295 to Renewed Facility Operating License No. DPR-49 for the Duane Arnold Energy Center (DAEC). The amendment consists of changes to the technical specifications (TS) in response to your application dated August 6, 2015, as supplemented by letter dated April 12, 2016.

The amendment revises the value of reactor steam dome pressure specified within Reactor Core Safety Limits TS 2.1.1, in the Duane Arnold Energy Center (DAEC) TS. This resolves a 10 *Code of Federal Regulations* (CFR) Part 21 condition concerning a potential to momentarily violate Reactor Core Safety Limit TSs 2.1.1.1 and 2.1.1.2 during a pressure regulator failure maximum demand (Open) transient.

A copy of the Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink, appearing to read "Mahesh L. Chawla".

Mahesh L. Chawla, Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-331

Enclosures:

1. Amendment No. 295 to
License No. DPR-49
2. Safety Evaluation

cc w/encls: Distribution via ListServ



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

NEXTERA ENERGY DUANE ARNOLD, LLC

DOCKET NO. 50-331

DUANE ARNOLD ENERGY CENTER

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 295
License No. DPR-49

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by NextEra Energy Duane Arnold, LLC dated August 6, 2015, as supplemented by letter dated April 12, 2016, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-49 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 295, are hereby incorporated in the license. NextEra Energy Duane Arnold, LLC, shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A large, stylized handwritten signature in black ink, appearing to read 'D. Wrona', is written over the typed name and title.

David J. Wrona, Chief
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Renewed Facility Operating
License No. DPR-49 and
Technical Specifications

Date of Issuance: August 18, 2016

ATTACHMENT TO LICENSE AMENDMENT NO. 295

DUANE ARNOLD ENERGY CENTER

RENEWED FACILITY OPERATING LICENSE NO. DPR-49

DOCKET NO. 50-331

Replace the following page of Renewed Facility Operating License DPR-49 with the attached revised page. The revised page is identified by amendment number and contains a marginal line indicating the area of change.

REMOVE

3

INSERT

3

Replace the following pages of Appendix A, Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

2.0-1

INSERT

2.0-1

C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I; Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

NextEra Energy Duane Arnold, LLC is authorized to operate the Duane Arnold Energy Center at steady state reactor core power levels not in excess of 1912 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 295, are hereby incorporated in the license. NextEra Energy Duane Arnold, LLC shall operate the facility in accordance with the Technical Specifications.

(a) For Surveillance Requirements (SRs) whose acceptance criteria are modified, either directly or indirectly, by the increase in authorized maximum power level in 2.C.(1) above, in accordance with Amendment No. 243 to Facility Operating License DPR-49, those SRs are not required to be performed until their next scheduled performance, which is due at the end of the first surveillance interval that begins on the date the Surveillance was last performed prior to implementation of Amendment No. 243.

(b) Deleted.

(3) Fire Protection Program

NextEra Energy Duane Arnold, LLC shall implement and maintain in effect all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c), as specified in the licensee amendment request dated August 5, 2011 (and supplements dated October 14, 2011, April 23, 2012, May 23, 2012, July 9, 2012, October 15, 2012, January 11, 2013, February 12, 2013, March 6, 2013, May 1, 2013, May 29, 2013, two supplements dated July 2, 2013, and supplements dated August 5, 2013 and August 28, 2013) and as approved in the safety evaluation report dated September 10, 2013. Except where NRC approval for changes or deviations is required by 10 CFR 50.48(c), and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval, the licensee may make changes to the fire protection program without prior approval of the Commission if those changes satisfy the provisions set forth in 10 CFR 50.48(a) and 10 CFR 50.48(c), the change does not require a change to a technical specification or a license condition, and the criteria listed below are satisfied.

2.0 SAFETY LIMITS (SLs)

2.1 SLs

2.1.1 Reactor Core SLs

2.1.1.1 Fuel Cladding Integrity – With the reactor steam dome pressure < 686 psig or core flow < 10% rated core flow:

THERMAL POWER shall be \leq 21.7% RTP.

2.1.1.2 MCPR – With the reactor steam dome pressure \geq 686 psig and core flow \geq 10% rated core flow:

MCPR shall be \geq 1.10 for two recirculation loop operation or \geq 1.12 for single recirculation loop operation.

2.1.1.3 Reactor Vessel Water Level – Reactor vessel water level shall be greater than 15 inches above the top of active irradiated fuel.

2.1.2 Reactor Coolant System Pressure SL

Reactor steam dome pressure shall be \leq 1335 psig.

2.2 SL Violations

With any SL violation, the following actions shall be completed within 2 hours:

2.2.1 Restore compliance with all SLs; and

2.2.2 Fully insert all insertable rods.



UNITED STATES
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WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 295 TO FACILITY OPERATING LICENSE NO. DPR-49

NEXTERA ENERGY DUANE ARNOLD, LLC

DUANE ARNOLD ENERGY CENTER

DOCKET NO. 50-331

1.0 INTRODUCTION

By letter dated August 6, 2015 (Reference 1), NextEra Energy Duane Arnold (NextEra), the licensee for Duane Arnold Energy Center (DAEC), has requested an amendment to revise the DAEC Technical Specifications (TS). The proposed change involves reduction of the reactor steam dome pressure specified within Reactor Core Safety Limits Specification 2.1.1, in the TS. This change resolves a Title 10 of the *Code of Federal Regulations* (10 CFR) Part 21 condition concerning a potential to momentarily violate Reactor Core Safety Limits 2.1.1.1 and 2.1.1.2 during a Pressure Regulator Failure Maximum Demand (Open) (PRFO) transient.

The application was supplemented by letter dated April 12, 2016 [Reference 2], to provide additional information requested by the U. S. Nuclear Regulatory Commission (NRC or Commission) staff. The supplement provided additional information that clarified the application, did not expand the scope of the application as originally notice, and did not change the staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on November 10, 2015 (80 FR 69713).

2.0 REGULATORY EVALUATION

2.1 Background

The DAEC TS 2.1.1.1 currently requires that when the steam dome pressure is less than 785 pounds per square inch gauge (psig), or core flow less than 10 percent of rated core flow, thermal power shall be less than or equal to 21.7 percent of the rated thermal power (RTP).

In 2005, General Electric (GE) submitted a 10 CFR Part 21, notification, SC05-03, "Potential to Exceed Low Pressure Technical Specification Safety Limit," to the NRC [Reference 3]. This Part 21 notification identified that applying newer computer analysis codes demonstrated that a PRFO transient could result in a condition where the reactor steam dome pressure could potentially, momentarily, decrease below 785 psig while RTP was above the plant-specific thermal power limit specified in the TS 2.1.1.1 (21.7 percent RTP for DAEC), thereby, violating Reactor Core Safety Limit 2.1.1.1.

Initially, the Boiling Water Reactor Owners' Group (BWROG) attempted to resolve the Part 21 issue. On July 18, 2006, the Technical Specifications Task Force (TSTF) and the BWROG submitted TSTF-495, Revision 0, "Bases Change to Address GE Part 21 SC05-03" [Reference 4], proposing a modification to the "Applicable Safety Analysis" portion of the Reactor Core Safety Limit TS Bases (B 2.1.1).

The letter stated, in part, that TSTF-495 only affects the TS Bases and would be able to be adopted by plants without requesting a license amendment from the NRC. Specifically, the proposed change would modify the "Applicable Safety Analysis" portion of the TS Bases for TS 2.1.1, "Reactor Core SLs [Safety Limits]" This change proposed to clarify that the safety limit was considered not to apply to momentary depressurization transients. In a letter to the TSTF dated August 27, 2007 (Reference 5), the NRC staff stated that TSTF-495, Revision 0, could not be approved. The NRC staff's safety evaluation (SE) enclosed with the letter stated, in part:

The [NRC] staff agrees with the applicant's position that the PRFO transient does not threaten fuel cladding integrity, since the margin to SLMCPR [safety limit for minimum critical power] increases with decreasing reactor pressure. However, the staff is concerned that in some depressurization events which occur at or near full power, there may be enough bundle stored energy to cause some fuel damage. If a reactor scram does not occur automatically, the operator may have insufficient time to recognize the condition and to take the appropriate actions to bring the reactor to a safe configuration.

Based on the above considerations, the NRC staff's SE concluded that TSTF-495, Revision 0, was unacceptable. Consequently, the BWROG discontinued the effort to resolve the issue generically. Several approaches to resolve this issue were considered at periodic BWROG meetings but not adopted because a generic approach applicable to all BWROG members and fuel vendors could not be identified.

Subsequently, affected boiling-water reactor licensees have proposed resolution of the Part 21 issue on a plant-specific basis by submittal of license amendment requests (LARs) that lower the reactor steam dome pressure safety limit value in the TSs. This approach takes advantage of the fact that some advanced fuel designs have an NRC-approved critical power correlation with a lower-bound pressure significantly below the reactor steam dome pressure specified in TS 2.1.1.

As such, the licensee has submitted the August 6, 2015 LAR to lower the lower-bound pressure for DAEC. The value currently in DAEC TS 2.1.1 of 785 psig is consistent with the lower end of the pressure range over which the critical power correlation was originally tested for the fuel designs residing in the cores. Some advanced fuel designs have an NRC-approved critical power correlation with a lower-bound pressure significantly below the 785 psig reactor steam dome pressure specified in TS Reactor Core Safety Limits 2.1.1.1 and 2.1.1.2. The licensee proposes to reduce the reactor steam dome pressure to 686 psig consistent with the NRC approved lower-bound pressure for the critical power correlation for the fuel design which currently comprises DAEC cores. Revising the reactor steam dome pressure specified in Reactor Core SLs 2.1.1.1 and 2.1.1.2 to 686 psig resolves this 10 CFR, Part 21, condition concerning the potential to violate a SL during a PRFO transient.

2.2 Proposed TS Changes

The proposed changes would reduce the reactor steam dome pressure from 785 psig to 686 psig, specified in TS SLs 2.1.1.1 and 2.1.1.2. As a result of this change, the TS SLs 2.1.1.1 and 2.1.1.2, would read:

- 2.1.1.1 Fuel Cladding Integrity - With the reactor steam dome pressure < 686 psig or core flow < 10 percent rated core flow:

THERMAL POWER shall be < 21.7 percent RTP.

- 2.1.1.2 MCPR [minimum critical power rate] - With the reactor steam dome pressure > 686 psig and core flow > 10% rated core flow:

MCPR shall be > 1.10 for two recirculation loop operation or > 1.12 for single recirculation loop operation.

The licensee's application also provided revised TS Bases pages to be implemented with the associated TS changes. These pages were provided for information only. Changes to the TS Bases would be made in accordance with the TS Bases Control Program.

2.3 Regulatory Requirements and Guidance

The NRC staff considered the following regulatory requirements and guidance documents in its review of the proposed amendment.

10 CFR 50.36, "Technical specifications," provides the regulatory requirements for the content required in the TSs. As stated in 10 CFR 50.36(c)(1)(i)(A),

Safety limits for nuclear reactors are limits upon important process variables that are found to be necessary to reasonably protect the integrity of certain of the physical barriers that guard against the uncontrolled release of radioactivity. If any safety limit is exceeded, the reactor must be shut down. The licensee shall notify the Commission, review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. Operation must not be resumed until authorized by the Commission."

Compliance with the fuel licensing criteria of 10 CFR 50, Appendix A, General Design Criterion (GDC) 10, "Reactor design," is achieved by preventing the violation of fuel design limits. GDC 10 states:

The reactor core and associated coolant, control, and protection systems shall be designed with appropriate margin to assure that specified acceptable fuel design limits [SAFDLs] are not exceeded during any condition of normal operation, including the effects of anticipated operational occurrences.

NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," provides guidance on the acceptability of the reactivity control systems, the

reactor core and fuel system design. Specifically, Section 4.2, "Fuel System Design," specifies all fuel damage criteria for evaluation of whether fuel designs meet the SAFDLs. Section 4.4, "Thermal and Hydraulic Design," provides guidance on the review of thermal-hydraulic design in meeting the requirement of GDC 10 and the fuel design criteria established in Section 4.2. It states that the critical power ratio (CPR) is to be established such that at least 99.9 percent of fuel rods in the core would not be expected to experience departure from nucleate boiling or onset of transition boiling (OTB) during normal operation or anticipated operational occurrences (AOOs).

3.0 TECHNICAL EVALUATION

Each fuel vendor has developed correlations valid over specified pressure and flow ranges (mass flow rates) that are approved by the NRC. These critical power correlations have become increasingly fuel design dependent as advanced fuel designs evolved. This has resulted in an extension of the NRC-approved pressure range to lower pressures as additional test data became available to demonstrate the validity of revised or new correlation(s) for performance of critical power calculations. The critical power correlations for some advanced fuel designs have received NRC approval down to a lower pressure than those approved previously. The lower-bound of the extended pressure ranges for these advanced fuel designs can be used to establish a lower reactor steam dome pressure than the 785 psig value currently specified in Reactor Core Safety Limits 2.1.1.1 and 2.1.1.2. As a result, a wider pressure range is available for transients to demonstrate compliance with MCPR limits. Thus, the proposed change offers a greater pressure margin for a PRFO transient than what is currently available.

In its 10 CFR Part 21 report [Reference 3], GE concluded that since during the PRFO, the CPR increases during depressurization, so that the initial CPR is the limiting CPR condition during the entire transient, and that the conditions that exceed the low pressure TS safety limit exist for only a few seconds, therefore fuel cladding integrity is not threatened. Nevertheless, GE considered the PRFO to be a known AOO that could contribute to the exceeding of a SL. While this condition had been determined to not involve an actual safety hazard, the potential for violation of a Reactor Core SL had been identified, and restoration to comply with the SL is required for the PRFO event. As a result, the licensee is revising the reactor steam dome pressure TS SL to be consistent with the NRC-approved pressure range of critical power correlations for the current DAEC fuel design. Lowering the reactor steam dome pressure specification in this fashion provides margin to ensure Reactor Core Safety Limit 2.1.1.1 is not violated and resolves this 10 CFR Part 21 issue involving a potential to violate the low pressure TS SL during a PRFO transient.

In its August 6, 2015, submittal [Reference 1], the licensee stated that the GE 14 fuel design was introduced during DAEC Operating Cycle 18. The GNF2 fuel design was introduced during DAEC Operating Cycle 24. DAEC is currently in operating Cycle 25. Only fuel that has an NRC-approved CPR correlation with a lower-bound pressure less than or equal to the reactor steam dome pressure specified in the SL may be loaded into the core. GE utilizes the GEXL correlation to perform CPR calculations for all the fuel types in use at DAEC. The licensee's application initially proposed to reduce the reactor steam dome pressure specified in DAEC TS 2.1.1.1 and TS 2.1.1.2 to 685 psig, which is approximately 699.7 psia (per square inch absolute). Since 699.7 psia is slightly outside the pressure range in which the GEXL17 and GEXL14 correlations are valid for GNF2 and GE14 fuel, the NRC staff requested that the

licensee provide further justification for this value. In its letter dated April 12, 2016 [Reference 2], the licensee revised its application and proposed a reactor steam dome pressure limit of 686 psig instead of 685 psig.

The proposed lower bound dome pressure limit of 686 psig (i.e., 700.7 psia) is consistent with the lower end of NRC approved GEXL17 correlation applicable to GNF2 fuel design [Reference 6]. In addition, the lower bound limit of 686 psig (i.e., 700.7 psia) is consistent with the lower end of NRC-approved GEXL14 correlation applicable to GE14 fuel design [Reference 7]. The staff, therefore, concluded that the use of 686 psig as lower bound limit for GNF2 and GE14 fuel is acceptable because it is within the approved pressure range of GEXL correlations. Revising the Reactor Core SLs 2.1.1.1 and 2.1.1.2 reactor steam dome pressure from 785 to 686 psig resolves the reported 10 CFR, Part 21, condition concerning the potential to violate Reactor Core Safety Limit 2.1.1.1 during a PRFO transient by offering a greater pressure margin for a PRFO transient than what is currently available. Lowering the value of reactor steam dome pressure in the TS has no physical effect on plant equipment and, therefore, no impact on the course of plant transients.

The NRC staff reviewed the licensee's submittal [Reference 1], related documentation (e.g., TS, Updated Final Safety Analysis Report (UFSAR), GE Part 21 report, TSTF-495), and related staff SEs. The staff concluded that reactor depressurization transients, such as PRFO, are non-limiting for fuel cladding integrity and that the proposed change in TS 2.1.1.2 will have no negative impact on the MCPR core operating limits. Although this condition does not involve an actual safety hazard, potential for violation of a TS Reactor Core SL was identified by the GE Part 21 report, and restoration to comply with the safety limit was required.

The NRC staff determined that revising the Reactor Core SLs 2.1.1.1 and 2.1.1.2 reactor steam dome pressure from 785 to 686 psig resolves the reported 10 CFR Part 21, condition concerning the potential to violate Reactor Core Safety Limit 2.1.1.1 during a PRFO transient. TS SLs are specified to ensure that acceptable fuel design limits (SAFDLS) are not exceeded during steady state operation, normal operational transients, and anticipated operational occurrences. The Reactor Core Safety Limits are set such that fuel cladding integrity is maintained and no significant fuel damage is calculated to occur due to OTB if the SLs are not exceeded.

The NRC staff concludes that the proposed changes to the Reactor Core SLs continues to ensure that a valid CPR calculation is performed for the AOOs described in the UFSAR, including the PRFO transient, and that with the value of 686 psig proposed for the reactor steam dome pressure would not result in a violation of Reactor Core SL 2.1.1.1 during a PRFO transient. Furthermore, the proposed change will continue to provide protection during startup conditions to insure that operation at less than 686 psig or less than 10 million lbm/hr core flow while greater than 21.7 percent RTP for DAEC would not occur.

Since this approach follows and is consistent with the way the reactor steam dome pressure has been established, and valid CPR calculations will continue to be performed, it is a safe and appropriate method to address the 10 CFR Part 21, condition and, therefore, the NRC staff finds it acceptable. If the licensee transitions to different fuel design(s) in the future where the lower bound of the fuel's CPR correlation has not been approved for use down to the reactor steam dome pressure specified in the TS reactor core SLs, NRC approval would be required prior to transitioning to that fuel design.

The NRC staff evaluated the proposed changes against the applicable regulatory requirements and acceptance criteria. The staff concludes that as long as the core pressure and flow are within the range of validity of the approved CPR correlation, the proposed reactor steam dome pressure change to Reactor Core SLs 2.1.1.1 and 2.1.1.2 will continue to ensure that 99.9 percent of the fuel rods in the core are not expected to experience OTB. This satisfies the regulatory requirements regarding acceptable fuel design limits and continues to assure that the underlying criteria of the safety limit is met consistent with GDC 10 and 10 CFR 50.36(c)(1)(i)(A).

The NRC staff concludes that the applicable regulatory requirements will continue to be met, adequate defense-in-depth will be maintained, and sufficient safety margins will be maintained. The staff further concludes that there is reasonable assurance that the health and safety of the public, following approval of this TS change, will be protected. Based on the above conclusions, the staff concludes that the proposed license amendment is acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Iowa State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATIONS

The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding (80 FR 69713; dated November 10, 2015). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

7.0 REFERENCES

1. Letter from T. A. Vehec (NextEra) to USNRC, "License Amendment Request (TSCR-153) to Reduce the Reactor Steam Dome Pressure Specified in the Reactor Core Safety Limits," Duane Arnold Energy Center, August 6, 2015 (Agencywide documents Access and Management System (ADAMS) Accession No. ML15246A410).
2. Letter from T. A. Vehec (NextEra) to USNRC, "Response to Request for Additional Information, License Amendment Request (TSCR-153) to Reduce the Reactor Steam

Dome Pressure Specified in the Reactor Core Safety Limits,” April 12, 2016 (ADAMS Accession No. ML16105A388).

3. Letter from Jason Post (GE Energy Nuclear) to U.S. NRC, “10 CFR 21 Reportable Condition Notification: Potential to Exceed Low Pressure Technical Specification Safety Limit,” dated March 29, 2005 (ADAMS Accession No. ML050950428).
4. Technical Specifications Task Force letter (TSTF-06-20) transmitting TSTF-495, Revision 0, “Bases Change to Address GE Part 21 SC05-03,” dated July 18, 2006 (ADAMS Accession No. ML061990227).
5. Denial of TSTF-495, Revision 0, “Bases Change to Address GE Part 21 SC05-03,” Docket No: PROJ0753 (TAC MD2672), dated August 27, 2007 (ADAMS Accession No. ML072340113).
6. NEDE-24011P-A, Revision 17, “GESTAR”, dated September 22, 2010 (ADAMS Accession No. ML102660094).
7. NEDC-32851 P-A, Revision 5, “GEXL 14 Correlation for GE14 Fuel,” dated April 2011 (ADAMS Accession No. ML110550540).
8. NRC email dated March 14, 2016, Request for Additional Information – Duane Arnold Energy Center – LAR to reduce the Reactor Steam Dome Pressure Specified in the Tech Spec 2.1.1, “Reactor Core Safety Limits” – MF6618 (ADAMS Accession No. ML16075A003).

Principal Contributor: M. Razzaque

Date of issuance: August 18, 2016

August 18, 2016

Mr. Thomas A. Vehec
Vice President
NextEra Energy
Duane Arnold Energy Center
3277 DAEC Road
Palo, IA 52324-9785

SUBJECT: DUANE ARNOLD ENERGY CENTER - ISSUANCE OF AMENDMENT DUANE ARNOLD ENERGY CENTER - ISSUANCE OF AMENDMENT TO REVISE THE VALUE OF REACTOR STEAM DOME PRESSURE (CAC NO. MF6618)

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A copy of the Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

Mahesh L. Chawla, Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-331

Enclosures:

1. Amendment No. 295 to License No. DPR-49
2. Safety Evaluation

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ADAMS Accession No.: ML16153A091

OFFICE	NRR/LPL3-1/PM	NRR/LPL3-1/LA	SRXB/BC	STSB/BC
NAME	MChawla	SRohrer	EOesterle	AKlein
DATE	08/04/16	08/04/16	08/04/16	08/07/16
OFFICE	OGC /NLO	NRR/LPL3-1/BC	NRR/LPL3-1/PM	
NAME	BMizuno	DWrona (RKuntz for)	MChawla	
DATE	08/16/16	08/18/16	08/18/16	

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