December 26, 2007

Mr. Richard L. Anderson Vice President Duane Arnold Energy Center 3277 DAEC Road Palo, IA 52324-9785

SUBJECT: DUANE ARNOLD ENERGY CENTER – ISSUANCE OF AMENDMENT REGARDING LICENSE AMENDMENT REQUEST TSCR-068 TO MODIFY TECHNICAL SPECIFICATION (TS) 3.7.5 TO ADD AN ACTION STATEMENT FOR TWO INOPERABLE CONTROL BUILDING CHILLER (CBC) SUBSYSTEMS (TAC NO. MD6292)

Dear Mr. Anderson:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 267 to Facility Operating License No. DPR-49 for the Duane Arnold Energy Center. The amendment consists of changes to the Technical Specifications (TS) in response to your application dated July 20, 2007, which requested revision to TS 3.7.5, Control Building Chiller (CBC) System, consistent with Technical Specification Task Force (TSTF) Change Traveler TSTF-477, Revision 3.

The amendment modifies the TS by adding an action statement for two inoperable CBC subsystems. The action statement allows 72 hours to restore one CBC subsystem to operable status and requires verification once every 4 hours that control building temperatures are maintained to be less than 90 degrees Fahrenheit. This TS improvement was made available by the NRC on March 26, 2007 (72 FR 14143), as part of the consolidated line item improvement process (CLIIP).

A copy of our safety evaluation is enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

### /RA Peter S. Tam for/

Karl D. Feintuch, Project Manager Plant Licensing Branch III-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-331

Enclosure: 1. Amendment No. 267 to License No. DPR-49 2. Safety Evaluation

cc w/encl: See next page

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Docket No. 50-331Enclosure:1. Amendment No. 267 to License No. DPR-492. Safety Evaluationcc w/encl: See next pageDISTRIBUTION:PUBLICLPL3-1 R/FRidsNrrLATHarrisRidsAcrsAcnwMailCenterRidsOgcRpRidsRgn3MailCenterRidsNrrPMKFeintuchT. Kobetz, ITSB

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Amendment Accession No.: ML073410574 Package Accession No.: ML073410525 TS Pages Accession No: ML073620020 License Page: ML080030130

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#### **Duane Arnold Energy Center**

CC:

Mr. J. A. Stall Senior Vice President, Nuclear and Chief Nuclear Officer Florida Power & Light Company P. O. Box 14000 Juno Beach, FL 33408-0420

Mr. M. S. Ross Managing Attorney Florida Power & Light Company P. O. Box 14000 Juno Beach, FL 33408-0420

Ms. Marjan Mashhadi Senior Attorney Florida Power & Light Company 801 Pennsylvania Avenue, NW Suite 220 Washington, DC 20004

Don E. Grissette Vice President, Nuclear Training and Performance Improvement Florida Power & Light Company P. O. Box 14000 Juno Beach, FL 33408

John Bjorseth Site Director Duane Arnold Energy Center 3277 DAEC Road Palo, IA 52324

Steven R. Catron Manager, Regulatory Affairs Duane Arnold Energy Center 3277 DAEC Road Palo, IA 52324 U. S. Nuclear Regulatory Commission Resident Inspector's Office Rural Route #1 Palo, IA 52324

Mr. Mano Nazar Senior Vice President and Nuclear Chief Operating Officer Florida Power & Light Company P. O. Box 14000 Juno Beach, FL 33408

Mr. D. A. Curtland Plant Manager Duane Arnold Energy Center 3277 DAEC Rd. Palo, IA 52324-9785

Mr. R. S. Kundalkar Vice President, Nuclear Technical Svcs. Florida Power & Light Company P. O. Box 14000 Juno Beach, FL 33408

Daniel K. McGhee Iowa Department of Public Health Bureau of Radiological Health 321 East 12th Street Lucas State Office Building, 5th Floor Des Moines, IA 50319-0075

Chairman, Linn County Board of Supervisors 930 1st Street SW Cedar Rapids, IA 52404

December 12, 2007

# FPL ENERGY DUANE ARNOLD, LLC

# DOCKET NO. 50-331

## DUANE ARNOLD ENERGY CENTER

### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 267 License No. DPR-49

- 1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by FPL Energy Duane Arnold, LLC dated July 20, 2007, 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.
  - 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 Facility Operating License No. DPR-49 is hereby amended to read as follows:

The Technical Specifications contained in Appendix A, as revised through Amendment No. 267, are hereby incorporated in the license. FPL 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

# /RA Peter S. Tam for/

Clifford Munson, Acting Chief Plant Licensing Branch III-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License and Technical Specifications

Date of Issuance: December 26, 2007

## ATTACHMENT TO LICENSE AMENDMENT NO.267

## FACILITY OPERATING LICENSE NO. DPR-49

## DOCKET NO. 50-331

Replace the following pages of the Facility Operating License No. DPR-49 and Appendix A Technical Specifications (TS) with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove License Page 3 TS Page 3.7-11 TS Page 3.7-12 TS Page 3.7-13 Insert License Page 3 TS Page 3.7-11 TS Page 3.7-12 TS Page 3.7-13

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

## RELATED TO AMENDMENT NO. 267 TO FACILITY OPERATING LICENCE NO. DPR-49

# FPL ENERGY DUANE ARNOLD, LLC

# DUANE ARNOLD ENERGY CENTER

## DOCKET NO. 50-331

## 1.0 INTRODUCTION

By letter dated July 20, 2007, (Agencywide Documents and Management System (ADAMS) No. ML072130046), FPL Energy Duane Arnold, LLC (FPL Energy Duane Arnold) (the licensee) proposed changes to the technical specifications (TS) for Duane Arnold Energy Center (DAEC). The requested changes are the adoption of Technical Specification Task Force (TSTF)-477, Revision 3, "Add Action for Two Inoperable Control Room AC Subsystems" which was proposed by the TSTF by letter on September 8, 2006. TSTF-477 revised Standard TS 3.7.4 "Control Room Air Conditioning (AC) System" by adding the following TS Action Requirements:

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. Two [control room AC] subsystems inoperable	B.1 Verify control room area Temperature, < 90 °F.	Once per 4 hours
	AND	
	B.2 Restore one [control room AC] subsystem to OPERABLE status	72 hours

The TSTF change traveler TSTF-477, Revision 3, was announced for availability in the *Federal Register* on March 26, 2007, as part of the consolidated line item improvement process (CLIIP). FPL Energy Duane Arnold proposes the following variations from the TS changes described in TSTF-477 and the Nuclear Regulatory Commission (NRC) staff's model safety evaluation dated December 18, 2006. At DAEC, TS 3.7.5 provides the requirements for the Control Building Chiller (CBC) System. The control room is served by the CBC System that also serves the rest of the control building, which includes the cable spreading room, battery rooms and essential switchgear rooms. Therefore, Required Action B.1 specifies actions to verify control building area temperatures versus control room area temperature is a more conservative interpretation of the "control room area," and is

#### therefore an acceptable difference. 2.0 REGULATORY EVALUATION

Section 182a of the Atomic Energy Act (the "Act") requires applicants for nuclear power plant operating licenses to include TS as part of the license. The TS ensure the operational capability of structures, systems and components that are required to protect the health and safety of the public. The Commission's regulatory requirements related to the content of the TS are contained in 10 CFR Section 50.36. That regulation requires that the TS include items in the following specific categories: (1) safety limits, limiting safety systems settings, and limiting control settings (50.36(d)(1)); (2) limiting conditions for operation (50.36(d)(2)); (3) surveillance requirements (50.36(d)(3)); (4) design features (50.36(d)(4)); and (5) administrative controls (50.36(d)(5)).

In general, there are two classes of changes to TS: (1) changes needed to reflect modifications to the design basis (TS are derived from the design basis), and (2) voluntary changes to take advantage of the evolution in policy and guidance as to the required content and preferred format of TS over time. This amendment addresses the second class of changes. In determining the acceptability of revising Control Room Air Conditioning AC Subsystem TS, the staff used the accumulation of generically-approved guidance in NUREG–1433, "Standard Technical Specifications, Revision 3 General Electric Plants, BWR/4" dated June, 2004 (BWR/4 STS).

Licensees may revise the TS to adopt current improved STS (iSTS) format and content provided that plant-specific review supports a finding of continued adequate safety because: (1) the change is editorial, administrative or provides clarification (i.e., no requirements are materially altered), (2) the change is more restrictive than the licensee's current requirement, or (3) the change is less restrictive than the licensee's current requirement, but nonetheless still affords adequate assurance of safety when judged against current regulatory standards. The detailed application of this general framework, and additional specialized guidance, are discussed in Section 3.0 in the context of specific proposed changes.

## 3.0 TECHNICAL EVALUATION

The required content of the BWR/4 STS for the Control Room Air Conditioning AC System do not contain an Actions requirement for two inoperable subsystems. During the TS Conversion of the BWR/6 Plants, the BWR/6 Plants adopted Action Statements for the Ventilation and AC systems that contained Action Statements for 2 inoperable subsystems similar to the proposed Action Statements in TSTF–477. The STS for numerous safety related systems also contain Action Statements for 2 inoperable subsystems. The TSTF proposes to add an Action Condition for 2 inoperable Control Room AC subsystems to the BWR STS in order to be consistent with the BWR/6 current STS. Furthermore, the consistency of the BWR STS will be enhanced since most safety-related systems presently have Action Statements in the STS to address two inoperable subsystems.

## 3.1 Action Requirements For 2 Inoperable CBC Subsystems (New Condition B)

The proposed BWR Condition, Required Action, and Completion Time allows 72 hours to restore 1 subsystem to the operable status for the TS condition of 2 inoperable subsystems. During the 72 hour completion time, the CR Temperature is verified once every 4 hours to be maintained below 90 degrees Fahrenheit ("degree" means degrees Fahrenheit throughout this document). If one CBC cannot be restored to operable status or the control building area, temperature cannot be maintained below 90 degrees, then the unit must be placed in at least Mode 3 within 12 hours, and Mode 4 within 36 hours. Maintaining the control building area temperature below 90 degrees assures that the safety-related equipment in the control building will remain within the original licensed design operating temperature, because the maximum allowable control building temperature is unchanged by TSTF–477. The NRC staff finds that the proposed changes in TSTF–477 are acceptable for DAEC because TSTF-477 changes provide TS requirements that the control building temperature will be maintained within the original licensed design operature of the control building equipment or the plant will be placed in the cold shutdown mode (Mode 4, safe shutdown condition).

## 3.2 Current Condition B

Current Condition B, now renamed Condition C, which applies when the required Action and associated Completion Time of Condition A (one control room AC subsystem inoperable) is not met in Modes 1, 2, or 3, is revised to also be applicable when the Required Actions and associated Completion Times of new Condition B are not met. Renumbered Condition C requires being in Mode 3 in 12 hours and Mode 4 in 36 hours. This change is consistent with TSTF-477 and is therefore acceptable.

### 3.3 Current Condition C

Current Condition C and associated Required Actions C.1, C.2.1, C.2.2 and C.2.3 are renamed Condition D and Required Actions D.1, D.2.1, D.2.2 and D.2.3, respectively. The NRC staff consider these changes to be administrative and, therefore, acceptable.

### 3.4 Current Condition D

Current Condition D, which applied when two control room AC subsystems are inoperable in Mode 1, 2, or 3, and requires entry into LCO 3.0.3, is deleted. This change is consistent with TSTF-477 and is therefore acceptable.

### 3.5 Current Condition E

Current Condition E, which applies when two control room AC subsystems are inoperable during movement of irradiated fuel assemblies in the secondary containment, during core alterations, or during operations with a potential for draining the reactor vessel, is revised to be applicable when the Required Actions and associated Completion Times of new Condition B are not met. This change is consistent with TSTF-477 and is therefore acceptable.

The NRC staff does not have any objections to the proposed changes to the TS Bases.

## 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 CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. 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 published September 25, 2007 (72 FR 54472), as corrected on October 10, 2007 (72 FR 57606). The correction involved the misidentification of the licensee, not a technical issue. 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) 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.

Principle Contributors: A.J. Lising K. Feintuch

Date: December 26, 2007