

FPL ENERGY DUANE ARNOLD, LLC
CENTRAL IOWA POWER COOPERATIVE
CORN BELT POWER COOPERATIVE
DOCKET 50-331
DUANE ARNOLD ENERGY CENTER
FACILITY OPERATING LICENSE

License No. DPR-49

1. The Atomic Energy Commission (the Commission) having found that:
 - A. The application for license filed by FPL Energy Duane Arnold, LLC, Central Iowa Power Cooperative and Corn Belt Power Cooperative (the licensees) 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 and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Duane Arnold Energy Center (facility) has been substantially completed in conformity with Construction Permit No. DPPR-70; the application, as amended; the provisions of the Act; and the rules and regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended; the provisions of the Act; and the rules and regulations of the Commission;
 - D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public; and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission;
 - E. FPL Energy Duane Arnold, LLC is technically qualified and FPL Energy Duane Arnold, LLC, Central Iowa Power Cooperative and Corn Belt Power Cooperative are financially qualified to engage in the activities authorized by this operating license in accordance with the rules and regulations of the Commission;
 - F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;

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- G. The issuance of this operating license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental costs and considering available alternatives, the issuance of Facility Operating License No. DPR-49 is in accordance with 10 CFR Part 50, Appendix D, of the Commission's regulations and all applicable requirements of said Appendix D have been satisfied;
 - I. The receipt, possession, and use of source, by-product and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Part 30 and 70, including 10 CFR Section 30.33, 70.23 and 70.31.
2. Facility Operating License No. DPR-49 is hereby issued to FPL Energy Duane Arnold, LLC, Central Iowa Power Cooperative (CIPCO) and Corn Belt Power Cooperative (Corn Belt) to read as follows:
- A. This license applies to the Duane Arnold Energy Center, a boiling water reactor and associated equipment (the facility), owned by FPL Energy Duane Arnold, LLC, Central Iowa Power Cooperative and Corn Belt Power Cooperative and operated by FPL Energy Duane Arnold, LLC. The facility is located on FPL Energy Duane Arnold, LLC's, Central Iowa Power Cooperative's and Corn Belt Power Cooperative's site near Palo in Linn County, Iowa. This site consists of approximately 500 acres adjacent to the Cedar River and is described in the "Final Safety Analysis Report" as supplemented and amended (Amendments 1 through 14) and the Environmental Report as supplemented and amended (Supplements 1 through 5).
 - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
 - (1) FPL Energy Duane Arnold, LLC, pursuant to Section 104b of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to possess, use and operate the facility; and CIPCO and Corn Belt to possess the facility at the designated location in Linn County, Iowa, in accordance with the procedures and limitations set forth in this license;

- 2.B.(2) FPL Energy Duane Arnold, LLC, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Final Safety Analysis Report, as supplemented and amended as of June 1992 and as supplemented by letters dated March 26, 1993, and November 17, 2000.
- 2.B.(3) FPL Energy Duane Arnold, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- 2.B.(4) FPL Energy Duane Arnold, LLC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated radioactive apparatus components;
- 2.B.(5) FPL Energy Duane Arnold, LLC, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not to separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This 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:

Maximum Power Level

2.C.(1) FPL 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. ____, are hereby incorporated in the license. FPL 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) The licensee will perform the generator load reject transients test required by the General Electric Licensing Topical Report for Extended Power Uprate (NEDC-32424P-A) - ELTR-1, including the allowances described in Section L.2.4 (2) of ELTR-1 regarding credit for unplanned plant transient events, using the thermal power level (1658 MWt) to establish the ELTR-1 power level limit. The testing shall be performed at an initiating power level greater than the steady-state operation power level exceeding the ELTR-1 power level limit for the generator load reject transient.

(3) Fire Protection

FPL Energy Duane Arnold, LLC shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the Duane Arnold Energy Center and as approved in the SER dated June 1, 1978, and Supplement dated February 10, 1981, subject to the following provision:

FPL Energy Duane Arnold, LLC may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- (4) The licensee is authorized to operate the Duane Arnold Energy Center following installation of modified safe-ends on the eight primary recirculation system inlet lines which are described in the licensee letter dated July 31, 1978, and supplemented by letter dated December 8, 1978.

(5) Physical Protection

FPL Energy Duane Arnold, LLC shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Nuclear Management Company Duane Arnold Energy Center Physical Security Plan, Revision 0" submitted by letter dated October 18, as supplemented by letter dated October 21, 2004.

2.C.(6) Deleted

2.C.(7) Additional Conditions

The Additional Conditions contained in Appendix B, as revised through Amendment No. _____, are hereby incorporated into this license. FPL Energy Duane Arnold, LLC shall operate the facility in accordance with the Additional Conditions.

2.C.(8) The License is authorized to revise the Updated Final Safety Analysis Report by deleting the footnote for Section 9.1.4.4.5 which states: "The NRC has not endorsed the reactor building crane as single-failure proof (Reference 9)," and by deleting Reference 9 of the references for Section 9.1.

D. This license is effective as of the date of issuance and shall expire at midnight February 21, 2014.

FOR THE ATOMIC ENERGY COMMISSION

Original signed by Roger Boyd for

A. Giambuso, Deputy Director
for Reactor Projects
Directorate of Licensing

Enclosures:

Appendix A Technical Specifications

Appendix B Additional Conditions

Date of Issuance: February 22, 1974

Amendment No.