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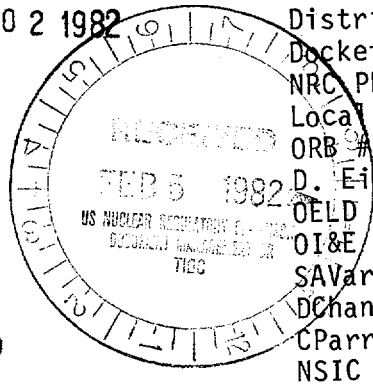
Docket No. 50-334



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Mr. J. J. Carey, Vice President
Nuclear Division
Duquesne Light Company
435 Sixth Avenue
Pittsburgh, Pennsylvania 15219

Dear Mr. Carey:

The Commission has issued the enclosed Amendment No. 47 to Facility Operating License No. DPR-66 for the Beaver Valley Power Station, Unit No. 1. The amendment consists of changes to the Technical Specifications in response to your application transmitted by letter dated March 20, 1981.

The amendment revises the Appendix A Technical Specifications to maintain the redundancy necessary to assure adequate AFW flow for normal transient and accident conditions. This satisfies the concerns of NUREG-0737 Item II.E.1.1 for your facility. As stated in our letter on this subject dated February 7, 1981, the staff concerns relative to equipment qualifications and NUREG-0737 Item II.E.1.2 will be the subject of separate correspondence.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

ORIGINAL SIGNED

Dennis A. Chaney, Project Manager
Operating Reactors Branch #1
Division of Licensing

Enclosures:
1. Amendment No. 47 to DPR-66
2. Safety Evaluation Supplement
3. Notice of Issuance

cc w/encls:
See next page

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cc to encls 2 & 3 only

OFFICE	DL:ORB#1	DL:ORB#1	DL:ORB#1	DL:OR	OELD	ORB#5:DL	
SURNAME	CParrish	DChaney:ms	SAVarga	TMNovak		PWagner	
DATE	1/22/82	1/22/82	1/25/82	1/26/82	1/28/82	1/22/82	

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY USGPO: 1981—335-9

Mr. J. J. Carey
Duquesne Light Company

cc: Mr. H. P. Williams
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Mr. J. J. Carey
Duquesne Light Company

cc: Regional Radiation Representatives
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Governor's Office of State Planning
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ATTN: Coordinator, Pennsylvania
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Mr. Joseph H. Mills, Acting Commissioner
State of West Virginia Department
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N. H. Dyer, M.D.
State Director of Health
State Department of Health
1800 Washington Street, East
Charleston, West Virginia 25305

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

DUQUESNE LIGHT COMPANY

OHIO EDISON COMPANY

PENNSYLVANIA POWER COMPANY

DOCKET NO. 50-334

BEAVER VALLEY POWER STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 47
License No. DPR-66

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Duquesne Light Company, Ohio Edison Company, and Pennsylvania Power Company (the licensees) dated March 20, 1981 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 Facility Operating License No. DPR-66 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 47 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: February 2, 1982

ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 47 TO FACILITY OPERATING LICENSE NO. DPR-66

DOCKET NO. 50-334

Revise Appendix A as follows:

Remove Pages	Insert Pages
3/4 7-5	3/4 7-5

AUXILIARY FEEDWATER SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.1.2 At least three steam generator auxiliary feedwater pumps and associated flow paths shall be OPERABLE with:

a. Two feedwater pumps, each capable of being powered from separate emergency busses, and

b. One feedwater pump capable of being powered from an OPERABLE steam supply system.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

a. With one auxiliary feedwater pump inoperable, restore at least three auxiliary feedwater pumps (two capable of being powered from separate emergency busses and one capable of being powered by an OPERABLE steam supply system) to OPERABLE status within 72 hours or be in HOT SHUTDOWN within the next 12 hours.

b. With the motor driven auxiliary feedwater pump supplying the redundant header inoperable, realign the two remaining auxiliary feedwater pumps to separate headers within 2 hours.

SURVEILLANCE REQUIREMENTS

4.7.1.2 Each auxiliary feedwater pump shall be demonstrated OPERABLE:

a. At least once per 31 days by:

1. Starting each pump from the control room.

2. Verifying that:

a. Each motor driven pump develops a discharge pressure of $\geq$ 1155 psig on recirculation flow, and

b. The steam turbine driven pump develops a discharge pressure of $\geq$ 1155 psig on recirculation flow when the secondary steam pressure is greater than 600 psig.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 47 TO FACILITY OPERATING LICENSE NO. DPR-66

DUQUESNE LIGHT COMPANY

OHIO EDISON COMPANY

PENNSYLVANIA POWER COMPANY

BEAVER VALLEY POWER STATION, UNIT NO. 1

DOCKET NO. 50-334

Introduction

Duquesne Light Company, by letter to the NRC dated March 20, 1981, requested a change to the Appendix A Technical Specifications for Beaver Valley Power Station, Unit No. 1. The request was in response to a requirement identified in a staff safety evaluation relative to an auxiliary feedwater system reliability evaluation that was forwarded to the licensee by letter dated February 7, 1981. The change to the Technical Specifications requires auxiliary feedwater system realignment to maintain adequate redundancy when the motor driven auxiliary feedwater pump aligned to the redundant header is declared inoperable. This safety evaluation also addresses the concerns relative to operator response time in the event of feedline rupture or main steam line break inside containment. The results of our review of the AFW pump endurance test forwarded by a letter dated May 22, 1981 is also included.

Discussion and Evaluation

Short Term Recommendation 7 - The locked block valves in each AFW pump discharge line are aligned so that the combined flow from one motor driven pump plus one turbine-driven pump is supplied to the steam generators via one AFW header while flow from the remaining motor-driven pump is supplied to the steam generators via the redundant AFW header. In the SER, the staff concluded that the alignment of the AFW system discharge block valves is acceptable for normal, transient, and accident conditions, subsequent to installation of check valves in the AFW steam generator supply lines. We further stated that the positions of the block valves continued to be of concern if the motor-driven auxiliary feedwater pump aligned to the redundant header were inoperable.

The licensee, in a letter to NRC dated March 20, 1981, forwarded a proposed revision to the BVPS Unit No. 1 Technical Specifications, which added the following:

> "With motor-driven auxiliary feedwater pump suppyling the redundant header inoperable, realign the two remaining auxiliary feedwater pumps to separate headers within 2 hours."

We conclude that Recommendation 7 is adequately met, and therefore, acceptable.

Additional Short Term Recommendation 1 - The licensee should provide redundant level indications and low level alarms in the control room for the AFW system primary water supply to allow the operator to anticipate the need to make up water or transfer to an alternate water supply and prevent a low pump suction pressure conditions from occurring. The low level alarm setpoint should allow at least 20 minutes for operator action, assuming that the largest capacity AFW pump is operating.

In the SER we stated that the licensee has met the short term requirements by provision of two channels for level indication and annunciation, with power supplied from a vital instrument bus backed up by battery power.

For the long term, we require the entire demineralized water storage tank level indication and alarm system to be designed to safety grade requirements including the use of Class 1E circuitry and power supplies. By letter dated July 21, 1981, followed up by subsequent telephone conversations, the licensee has demonstrated that the intent of this requirement will be satisfied with the installation of the low-low level alarm system during the 1982 refueling outage. We conclude that this recommendation is adequately met.

Recommendation "Basis for Auxiliary Feedwater System Flow Requirements - In the SER we stated that the licensee's responses of March 10, 1980, to our questions on this subject showed that sufficient AFW flow could be delivered by the AFW system to meet the minimum heat removal requirements following any design basis transient or accident and assuming the worst case single active failure. We stated that the licensee should confirm that the Beaver Valley AFW system can provide required flow for the feedline rupture and for the main steam line break inside containment without operator intervention for 10 minutes. A review of the licensees' response of March 10, 1980, indicates that for the main feedwater line break no AFW flow is assumed for the first 10 minutes. At this time it is assumed that the operator has isolated the break and the minimum AFW flow requirement of 350 GPM commences. This flow rate can be met by one motor driven AFW pump. As a result, peak reactor coolant system pressure will not exceed design pressure, and no consequential

fuel failures occur. The NRC review of the applicant's responses also indicates that an AFW flow rate of 350 GPM, starting 10 minutes after the accident, is sufficient to meet acceptance criteria for transients and accidents. Operator action to isolate the faulted steam generator 10 minutes after the accident has been accepted by NRC for other Westinghouse operating plants and operating license applicants. For the case of the main steam line break, the licensee's responses indicated that, because the steam line break results in plant cooldown, AFW flow is not needed for the short term. Again, isolation of the faulted steam generator is assumed 10 minutes after the break. The containment design pressure is not exceeded, even assuming operation of all AFW pumps.

Based on our review of the licensee's responses and our independent evaluation of this subject, we conclude that the Beaver Valley AFW system design will provide adequate AFW flow to meet design basis transients and accidents.

Additional Short Term Recommendation 2 - The licensee should perform a 72 hour endurance test on all AFW system pumps, if such a test or continous period of operation has not been accomplished to date. Following the 72 hour pump run, the pumps should be shut down and cooled down and then restarted and run for one hour. Test acceptance criteria should include demonstrating that the pumps remain within design limits with respect to bearing oil temperatures and vibration and that pump room ambient conditions (temperature, humidity) do not exceed environmental qualification limits for safety-related equipment in this room. (The pump endurance test requirement was reduced to 48 hours by NRC letter dated January 22, 1980).

In a letter dated May 22, 1981, the licensee provided the results of the AFW pump tests. The tests were conducted in accordance with the conditions specified in our recommendations. The test data included flow rate, bearing oil temperature, and room environmental conditions. The licensee stated, and we concur, that these parameters were within the design limits. The licensee also provided a statement that pump vibration did not exceed allowable limits. We have reviewed the licensee's response and conclude that the Beaver Valley Unit 1 Auxiliary Feedwater System meets the requirements of this recommendation, and is, therefore, acceptable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types to total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant decrease in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: February 2, 1982

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-334

DUQUESNE LIGHT COMPANY

OHIO EDISON COMPANY

PENNSYLVANIA POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 47 to Facility Operating License No. DPR-66 issued to Duquesne Light Company, Ohio Edison Company, and Pennsylvania Power Company (the licensees), which revised Technical Specifications for operation of the Beaver Valley Power Station, Unit No. 1 (the facility) located in Beaver County, Pennsylvania. The amendment is effective as of the date of issuance.

The amendment revises the Appendix A Technical Specifications to maintain the redundancy necessary to assure adequate AFW flow for normal transient and accident conditions.

The application for amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since this amendment does not involve a signficant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any signficant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated March 20, 1981, (2) Amendment No. 47 to License No. DPR-66 and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the B. F. Jones Memorial Library, 663 Franklin Avenue, Aliquippa, Pennsylvania 15001. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 2nd day of February, 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing