



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

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

DOCKET NO. 50-254

QUAD CITIES NUCLEAR POWER STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 110  
License No. DPR-29

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Commonwealth Edison Company (the licensee) dated December 22, 1987, 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 3.B of Facility Operating License No. DPR-29 is hereby amended to read as follows:

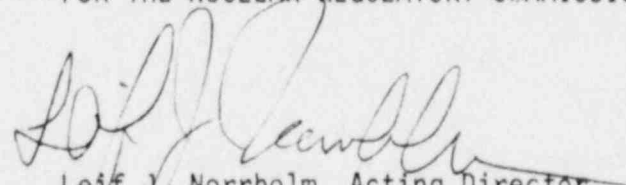
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B. Technical Specifications

The Technical Specifications contained in Appendix A and B, as revised through Amendment No. 110, 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



Leif J. Norrholm, Acting Director  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: June 30, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 110

FACILITY OPERATING LICENSE NO. DPR-29

DOCKET NO. 50-254

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

REMOVE

3.2/4.2-2

3.2/4.2-7

6.2.1

INSERT

3.2/4.2-2

3.2/4.2-7

6.2.1

QUAD-CITIES  
DPR-29

D. Refueling Floor Radiation Monitors

1. Except as specified in Specification 3.2.D.2, the two refueling floor radiation monitors shall be operable whenever irradiated fuel or components are present in the fuel storage pool and during refueling or fuel movement operations.
2. One of the two refueling floor radiation monitors may be inoperable for 24 hours. If the inoperable monitor is not restored to service in this time, the reactor building ventilation system shall be isolated and the standby gas treatment operated until repairs are complete.
3. The trip setting for the refueling floor radiation monitors shall be set at a value of  $\leq 100$  mR/hr.
4. Upon loss of both refueling floor radiation monitors while in use, the reactor building ventilation system shall be isolated and the standby gas treatment operated.

E. Postaccident Instrumentation

The limiting conditions for operation for the instrumentation which is read out in the control room, required for postaccident monitoring are given in Table 3.2-4.

D. Refueling Floor Radiation Monitors

The two refueling floor radiation monitors shall be functionally tested and calibrated as indicated in Table 4.2-1. Reactor building ventilation isolation and standby gas treatment system initiation shall be performed at least each operating cycle.

E. Postaccident Instrumentation

Postaccident instrumentation shall be functionally tested and calibrated as indicated in Table 4.2-2.

QUAD-CITIES  
DPR-29

The APRM rod block function is flow biased and prevents a significant reduction in MCPR, especially during operation at reduced flow. The APRM provides gross core protection, i.e., limits the gross withdrawal of control rods in the normal withdrawal sequence.

In the refuel and startup/hot standby modes, the APRM rod block function is set at 12% of rated power. This control rod block provides the same type of protection in the Refuel and Startup/Hot Standby modes as the APRM flow-biased rod block does in the Run mode, i.e., prevents control rod withdrawal before a scram is reached.

The RBM rod block function provides local protection of the core, i.e., the prevention of transition boiling in a local region of the core for a single rod withdrawal error from a limiting control rod pattern. The trip point is flow biased. The worst-case single control rod withdrawal error is analyzed for each reload to assure that, with the specific trip settings, rod withdrawal is blocked before the MCPR reaches the fuel cladding integrity safety limit.

Below 30% power, the worst-case withdrawal of a single control rod without rod block action will not violate the fuel cladding integrity safety limit. Thus the RBM rod block function is not required below this power level.

The IRM block function provides local as well as gross core protection. The scaling arrangement is such that the trip setting is less than a factor of 10 above the indicated level. Analysis of the worst-case accident results in rod block action before MCPR approaches the MCPR fuel cladding integrity safety limit.

A downscale indication on an APRM is an indication the instrument has failed or is not sensitive enough. In either case the instrument will not respond to changes in control rod motion, and the control rod motion is thus prevented. The downscale trips are set at 3/125 of full scale.

The SRM rod block with  $\leq 100$  CPS and the detector not full inserted assures that the SRM's are not withdrawn from the core prior to commencing rod withdrawal for startup. The scram discharge volume high water level block provide annunciation for operator action. The alarm setpoint has been selected to provide adequate time to allow determination of the cause of level increase and corrective action prior to automatic scram initiation.

For effective emergency core cooling for small pipe breaks the HPCI system must function since reactor pressure does not decrease rapidly enough to allow either core spray or LPCI to operate in time. The automatic pressure relief function is provided as a backup to the HPCI in the event the HPCI does not operate. The arrangement of the tripping contacts is such as to provide this function when necessary and minimize spurious operation. The trip settings given in the specification are adequate to assure the above criteria are met (reference SAR Section 6.2.6.3). The specification preserves the effectiveness of the system during periods of maintenance, testing or calibration and also minimizes the risk of inadvertent operation, i.e., only one instrument channel out of service.

Two radiation monitors are provided on the refueling floor which initiate isolation of the reactor building and operation of the standby gas treatment systems. The trip logic is one out of two. Trip settings of  $\leq 100$  mR/hr for the monitors on the refueling floor are based upon initiating normal ventilation isolation and standby gas treatment system operation

QUAD-CITIES  
DPR-29

6.2 PLANT OPERATING PROCEDURES

- A. Detailed written procedures, including applicable checkoff lists covering items listed below shall be prepared, approved, and adhered to:
1. Normal startup, operation, and shutdown of the reactor, and other systems and components involving nuclear safety of the facility.
  2. Refueling operations.
  3. Actions to be taken to correct specific and foreseen potential malfunctions of systems or components, including responses to alarms, suspected primary system leaks, and abnormal radioactivity changes.
  4. Emergency conditions involving potential or actual release of radioactivity - "Generating Station Emergency Plan" and station emergency and abnormal procedures.
  5. Instrumentation operation which could have an effect on the safety of the facility.
  6. Preventive and corrective maintenance operations which could have an affect on the safety of the facility.
  7. Surveillance and testing requirements.
  8. Tests and experiments.
  9. Procedure to ensure safe shutdown of the plant.
  10. Station Security Plan and implementation procedures.
  11. Fire Protection Program implementation.
  12. ODCM implementation.
  13. PCP implementation.
  14. Working hours of the Shift Engineer, Station Control Room Engineer, Shift Foreman and the Nuclear Station Operator job classifications such that the heavy use of overtime is not routinely required.
- B. Radiation control procedures shall be maintained, made available to all station personnel, and adhered to. The procedures shall show permissible radiation exposure and shall be consistent with the requirements of 10 CFR 20. This radiation protection program shall be organized to meet the requirements of 10 CFR 20.
- C.
1. Procedures for items identified in Specification 6.2.A and 6.2.B and any changes to such procedures shall be reviewed and approved by the Technical Staff Supervisor, the Assistant Superintendent, and department head responsible for the activity performed. At least one person approving each of the above procedures shall hold a valid senior operator's license. In addition, these procedures and changes thereto must have authorization by a Station Superintendent before being implemented.
  2. Work and instruction type procedures which implement approved maintenance or modification procedures shall be approved and authorized by the Asst. Supt. Maintenance where the written authority has been provided by a Station Superintendent. The "Maintenance Modification Procedure" utilized for safety related work shall be so approved only if procedures referenced in the "Maintenance Modification Procedure" have been approved as required by 6.2.A. Procedures which do not fall within the requirement of 6.2.A or 6.2.B may be approved by the Department Heads.
- D. Temporary changes to procedures 6.2.A and 6.2.B above may be made provided:
1. The intent of the original procedure is not altered.
  2. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator's license on the unit affected.



UNITED STATES  
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COMMONWEALTH EDISON COMPANY

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DOCKET NO. 50-265

QUAD CITIES NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 106  
License No. DPR-30

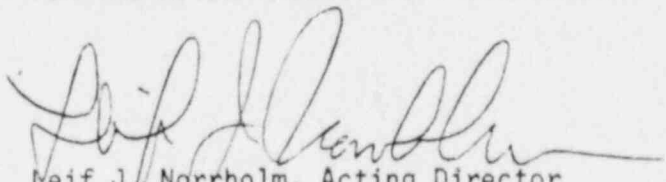
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  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Facility Operating License No. DPR-30 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A and B, as revised through Amendment No. 106, are hereby incorporated in this 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



Leif J. Norrholm, Acting Director  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: June 30, 1988



ATTACHMENT TO LICENSE AMENDMENT NO. 106

FACILITY OPERATING LICENSE NO. DPR-30

DOCKET NO. 50-265

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

REMOVE

3.2/4.2-2

3.2/4.2-7

6.2.1

INSERT

3.2/4.2-2

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QUAD-CITIES  
DPR-30

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QUAD-CITIES  
DPR-30

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