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

April 28, 1982

Posted
Amdt. 76
to DPR-29
see Correction
dated 5-20-82

Docket Nos. 50-237
50-249
50-254
50-265

Mr. L. DelGeorge
Director of Nuclear Licensing
Commonwealth Edison Company
P. O. Box 767
Chicago, Illinois 60690

Dear Mr. DelGeorge:

The Commission has issued the enclosed Amendment No. 70 to Provisional Operating License No. DPR-19 for Dresden Nuclear Power Station, Unit 2 and Amendment Nos. 62, 76 and 70 to Facility Operating License Nos. DPR-25, DPR-29 and DPR-30 for Dresden Nuclear Power Station Unit 3 and Quad Cities Nuclear Power Station, Units 1 and 2, respectively. These amendments consist of changes to the Technical Specifications in response to your application dated April 16, 1981, as supplemented by letters dated September 29 and October 21, 1981, and as a result of discussions with Mr. Rausch of your staff.

These changes modify the technical specifications to provide additional surveillance requirements for safety-related hydraulic and mechanical snubbers. They incorporate all the necessary and applicable model NRC technical specifications as requested in our November 20, 1981 letter, and thus completes our review of these items for Dresden Units 2 and 3 and Quad Cities Units 1 and 2.

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

Sincerely,

Joseph D. Hegner

Joseph D. Hegner, Project Manager
Operating Reactors Branch #2
Division of Licensing

Enclosures:
1. Amendment No. 70 to DPR-19
2. Amendment No. 62 to DPR-25
3. Amendment No. 76 to DPR-29
4. Amendment No. 70 to DPR-30
5. Safety Evaluation
6. Notice

cc w/encls:
See next page

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Mr. L. DelGeorge

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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 STATION UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 76
License No. DPR-29

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

   A. The application for amendment by the Commonwealth Edison Company (the licensee) dated April 16, 1981 as supplemented by letters dated September 29 and October 21, 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 3.B of Facility License No. DPR-29 is hereby amended to read as follows:

   B. Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No.76 , 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

Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 28, 1982

ATTACHMENT TO LICENSE AMENDMENT NO. 76

FACILITY OPERATING LICENSE NO. DPR-29

DOCKET NO. 50-254

Revise the Appendix "A" Technical Specifications as follows:

Remove	Replace
3.6/4.6-5a	3.6/4.6-5a
3.6/4.6-6	3.6/4.6-6
3.6/4.6-7	3.6/4.6-7
3.6/4.6-13a	--
3.6/4.6-14	3.6/4.6-14
--	3.6/4.6-14a
3.6/4.6-15	3.6/4.6-15
3.6/4.6-15a	3.6/4.6-15a
3.6/4.6-15b	3.6/4.6-15b
--	3.6/4.6-15c
--	3.6/4.6-15d
--	3.6/4.6-15e
--	3.6/4.6-15f
3.6/4.6-15c	3.6/4.6-15g

within 24 hours unless the loop is sooner returned to service.

1. Shock Suppressors (Snubbers)

   1. During all modes of operation except Shutdown and Refuel, all snubbers listed in Table 3.6-1 shall be operable except as noted in 3.6.1.2 following.

   2. From and after the time that a snubber is determined to be inoperable, continued reactor operation is permissible during the succeeding 72 hours only if the snubber is sooner made operable.

   3. If the requirements of 3.6.1.1 and 3.6.1.2 cannot be met, an orderly shutdown shall be initiated and the reactor shall be in a cold shutdown condition within 36 hours.

   4. If a snubber is determined to be inoperable while the reactor is in the Shutdown or Refuel mode, the snubber shall be made operable prior to reactor start-up.

   5. Snubbers may be added to safety-related systems without prior license Amendment to Table 3.6-1 provided that a revision to Table 3.6-1 is included with the next license amendment request.

1. Shock Suppressors (Snubbers)

   The following surveillance requirements apply to all snubbers listed in Table 3.6-1.

   1. Visual inspections shall be performed in accordance with the following schedule utilizing the acceptance criteria given by Specification 4.6.1.2.

Number of Snubbers Found Inoperable During Inspection or During Inspection Interval	Next Required Inspection Interval
0	18 months ± 25%
1	12 months ± 25%
2	6 months ± 25%
3,4	124 days ± 25%
5,6,7	62 days ± 25%
≥ 8	31 days ± 25%

The required inspection interval shall not be lengthened more than one step at a time.

Snubbers may be categorized in two groups, 'accessible' or 'inaccessible' based on their accessibility for inspection during reactor operation. These two groups may be inspected independently according to the above schedule.

Snubber service life monitoring shall be followed by the snubber surveillance inspection records and maintenance history records. The above record retention method shall be used to prevent the snubbers from exceeding a service life.

2. Visual inspections shall verify:

   a. There are no visible indications of damange or impaired operability, and

   b. Attachments to the foundation or supporting structure are secure.

   c. For hydraulic snubbers, the hydraulic fluid reservoir and fluid connections shall be inspected for operability.

3. Once each refueling cycle a representative sample of 10% of the total of each type of snubber in use in the plant shall be functionally tested either in place or in a bench test. For each snubber that does not meet the functional test criteria, an additional 10% of that type of snubber shall be functionally tested.

4. The hydraulic snubbers shall be tested for:

   a. operability, including verification of proper piston movement, lockup, and bleed. When competitive marketable test fixtures are available, but no later than 12/31/83, the functional test shall include demonstrating snubber bleed, or release, rate is within the specified range in compression or tension.

   b. When competitive marketable test fixtures are available, but no later than 12/31/83, the functional test shall also demonstrate that activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.

5. The mechanical snubber functional tests shall verify:

   a. That the breakaway force that initiates free movement of the snubber rod

in either tension or compression is less than the specified maximum force.

b. That the activation (restraining action) is achieved within the specified range of acceleration in both tension and compression. This test cannot be performed until competitive marketable test fixtures are manufactured and on site. Until such test fixtures are available, but no later than 12/31/83, the functional test for mechanical snubbers will be limited to 4.6.1.5.a.

6. When a snubber is deemed inoperable, a review shall be conducted to determine the mode of failure and to decide if an engineering evaluation should be performed. If the engineering evaluation is deemed necessary, it will determine whether or not the snubber mode of failure has imparted a significant effect or degradation on the supported component or system.

7. If any snubber selected for functional testing either fails to lockup or fails to move, i.e., frozen in place, the cause will be evaluated and if determined to be generically deficient all snubbers of the same design, subject to the same defect shall be functionally tested.

8. In addition to the regular sample, snubbers which failed the previous functional test shall be retested during the next test period. If a spare snubber has been installed in place of a failed snubber, then both the failed snubber (if it is repaired and installed in another position) and the spare snubber shall be retested. Test results of these snubbers may not be included for the resampling

1. SNUBBERS

All snubbers are required OPERABLE to ensure that the structural integrity of the reactor coolant system and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads. Snubbers excluded from this inspection program are those installed on non-safety-related systems and then only if their failure or failure of the system on which they are installed, would have no adverse effect on any safety-related system.

The visual inspection frequency is based upon maintaining a constant level of snubber protection to systems. Therefore, the required inspection interval varies inversely with the observed snubber failures and is determined by the number of inoperable snubbers found during an inspection. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections performed before the original required time interval has elapsed (nominal time less 25%) may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule.

Snubber service life monitoring will be followed by the existing snubber surveillance inspection records and maintenance history records. The above record retention method should be used to prevent the hydraulic snubber from exceeding a service life of 10 years and the mechanical snubbers from exceeding a service life of 40 years.

When the cause of the rejection of a snubber is clearly established and remedied for that snubber and for any other snubbers that may be generically susceptible, and verified by inservice functional testing, that snubber may be exempted from being counted as inoperable. Generically susceptible snubbers are those which are of a specific make or model and have the same design features directly related to rejection of the snubber by visual inspection, or are similarly located or exposed to the same environmental conditions such as temperature, radiation, and vibration.

To provide assurance of snubber functional reliability, a representative sample of the installed snubbers will be functionally tested during plant shutdowns at refueling cycle intervals. Hydraulic snubber functional testing will include stroking of the snubbers to verify piston movement, lockup and bleed. Functional testing of the mechanical snubber will consist of verification that the force that initiates free movement of the snubber in either tension or compression is less than the maximum breakaway friction force. The remaining portions of the functional test consisting of verification that the activation (restraining action) is achieved within the specified range of acceleration in both tension and compression will not be done. This is due to the lack of competitive marketable test equipment available for Station use.

When a snubber is found inoperable, a review shall be performed to determine the snubber mode of failure. Results of the review shall be used to determine if an engineering evaluation of the safety-related system or component is necessary. The engineering evaluation shall determine whether or not the snubber mode of failure has imparted a significant effect or degradation on the support component or system.

Observed failures of these sample snubbers shall require functional testing of additional units.

Hydraulic snubbers and mechanical snubbers may each be treated as a different entity for the above surveillance programs.

Table 3.6-1

SAFETY RELATED SHOCK SUPPRESSORS (SNUBBERS)

Type*	Snubber Number	Location	Elevation (feet)	Snubber in High Radiation Area During Shutdown	Snubbers Especially Difficult to Remove	Snubbers Inaccessible During Normal Operation	Snubbers Accessible During Normal Operation
M	1-1	Drywell; core spray return line 1-1403-10"	644	X		X	
M	1-2	Drywell; core spray return line 1-1403-10"	644	X		X	
M	1-3	Drywell; core spray return line 1-1404-10"	642	X		X	
M	1-4	Drywell; core spray return line 1-1404-10"	642	X		X	
M	1-5	Drywell; RHR return line 1-1012A-16"	603	X		X	
M	1-6	Drywell; RHR return line 1-1012A-16"	599	X		X	
M	1-7	Drywell; RHR return line 1-1012B-16"	598	X		X	
M	1-8	Drywell; RHR return line 1-1012B-16"	603	X		X	
M	1-9	Drywell; RHR shutdown cooling supply line 1-1025-20"	601	X		X	

*M = Mechanical Snubber
H = Hydraulic Snubber

Table 3.6-1

SAFETY RELATED SHOCK SUPPRESSORS (SNUBBERS)

Type*	Snubber Number	Location	Elevation (feet)	Snubber in High Radiation Area During Shutdown	Snubbers Especially Difficult to Remove	Snubbers Inaccessible During Normal Operation	Snubbers Accessible During Normal Operation
M	1-10	Drywell; RHR shutdown cooling supply line 1-1025-20"	601	X		X	
M	1-11	Drywell; "A" recirculation pump to shield wall	586 at 135°	X	X	X	
M	1-12	Drywell; "B" recirculation pump to shield wall	586 at 315°	X	X	X	
M	1-13	Drywell; "A" recirculation pump to support	586 at 146.5°	X	X	X	
M	1-14	Drywell; "B" recirculation pump to support	586 at 304°	X	X	X	
M	1-15	Drywell; "B" recirculation pump to support	586 at 326.5°	X	X	X	
M	1-16	Drywell; recirculation ring header	610 at 90°	X	X	X	
M	1-17	Drywell; recirculation ring header	610 at 270°	X	X	X	
M	1-18	Drywell; "A" recirculation pump motor to support	612 at 135°	X	X	X	

*M = Mechanical Snubber
H = Hydraulic Snubber

Table 3.6-1

SAFETY RELATED SHOCK SUPPRESSORS (SNUBBERS)

Type*	Snubber Number	Location	Elevation (feet)	Snubber in High Radiation Area During Shutdown	Snubbers Especially Difficult to Remove	Snubbers Inaccessible During Normal Operation	Snubbers Accessible During Normal Operation
M	1-19	Drywell; "B" recirculation pump motor to support	612 at 315°	X	X	X	
M	1-20	Drywell; recirculation ring header to support	612 at 195°	X	X	X	
M	1-21	Drywell; "A" recirculation pump to support	588 at 124°	X	X	X	
M	1-22	Drywell; "A" recirculation pump motor to shield wall	602 at 122°	X		X	
M	1-23	Drywell; "A" recirculation pump motor to shield wall	602 at 148°	X		X	
M	1-24	Drywell; "B" recirculation pump motor to shield wall	602 at 302°	X		X	
M	1-25	Drywell; "B" recirculation pump motor to shield wall	602 at 328°	X		X	
M	1-26	Drywell; main stream relief valve 1-203-3A	619	X	X	X	
M	1-27	Drywell; main stream relief valve 1-203-3A	619	X	X	X	

*M = Mechanical Snubber
H = Hydraulic Snubber

Table 3.6-1

SAFETY RELATED SHOCK SUPPRESSORS (SNUBBERS)

Type*	Snubber Number	Location	Elevation (feet)	Snubber in High Radiation Area During Shutdown	Snubbers Especially Difficult to Remove	Snubbers Inaccessible During Normal Operation	Snubbers Accessible During Normal Operation
M	1-28	Drywell; main stream relief valve 1-203-3A	619	X		X	
M	1-29	Drywell; main stream relief valve 1-203-3A	619	X	X	X	
M	1-30	Drywell; northeast end of CRD cluster	605	X		X	
M	1-31	Drywell; northwest end of CRD cluster	605	X		X	
M	1-32	Drywell; southeast end of CRD cluster	605	X		X	
M	1-33	Drywell; southwest end of CRD cluster	605	X		X	

*M = Mechanical Snubber
H = Hydraulic Snubber

Table 3.6-1

SAFETY RELATED SHOCK SUPPRESSORS (SNUBBERS)

Type*	Snubber Number	Location	Elevation (feet)	Snubber in High Radiation Area During Shutdown	Snubbers Especially Difficult to Remove	Snubbers Inaccessible During Normal Operation	Snubbers Accessible During Normal Operation
H	1-36	Reactor bldg; RHR shutdown cooling supply line 1-1025-20"	590				X
H	1-37	Reactor bldg; RHR shutdown cooling supply line 1-1024A-20"	573		X		X
H	1-38	Reactor bldg; RHR shutdown cooling supply line 1-1024A-20"	573		X		X
H	1-39	Reactor bldg; RHR shutdown cooling supply line 1-1024A-20"	573		X		X
H	1-40	Reactor bldg; RHR shutdown cooling supply line 1-1024A-20"	573		X		X
H	1-41	Reactor bldg; RHR pump supply line 1-1015A-24"	562	X			X
H	1-42	Reactor bldg; RHR pump supply line 1-1015-24"	562	X			X
M	1-43	Drywell; Recirc line 1-201-22"	610	X	X	X	

*M = Mechanical Snubber
H = Hydraulic Snubber

Table 3.6-1

SAFETY RELATED SHOCK SUPPRESSORS (SNUBBERS)

Type*	Snubber Number	Location	Elevation (feet)	Snubber in High Radiation Area During Shutdown	Snubbers Especially Difficult to Remove	Snubbers Inaccessible During Normal Operation	Snubbers Accessible During Normal Operation
M	1-44	Drywell; Recirc line 1-201C-12"	614	X	X	X	
M	1-45	Drywell; Recirc line 1-201M-12"	614	X	X	X	
M	1-46	Drywell; Recirc line 1-201B-28"	613	X	X	X	
M	1-47	Drywell; Recirc line 1-201C-12"	613	X	X	X	
M	1-48	Drywell; Recirc line 1-202A-28"	594	X	X	X	
M	1-49	Drywell; RHRS line 1-1011-4"	627	X	X	X	
M	1-50	MSIV Rm; Main Steam line 1-3001A-24"	615	X	X		X
M	1-51	MSIV Rm; Main Steam line 1-3001A-24"	615	X	X		X

*M = Mechanical Snubber
H = Hydraulic Snubber

Table 3.6-1

SAFETY RELATED SHOCK SUPPRESSORS (SNUBBERS)

Type*	Snubber Number	Location	Elevation (feet)	Snubber in High Radiation Area During Shutdown	Snubbers Especially Difficult to Remove	Snubbers Inaccessible During Normal Operation	Snubbers Accessible During Normal Operation
M	1-52	MSIV Rm; Main Steam line 1-3001B-24"	615	X	X		X
M	1-53	MSIV Rm; Main Steam line 1-3001B-24"	615	X	X		X
M	1-54	MSIV Rm; Main Steam line 1-3001C-24"	615	X	X		X
M	1-55	MSIV Rm; Main Steam line 1-3001C-24"	615	X	X		X
M	1-56	MSIV Rm; Main Steam line 1-3001D-24"	615	X	X		X
M	1-57	MSIV Rm; Main Steam line 1-3001D-24"	615	X	X		X

*M = Mechanical Snubber
H = Hydraulic Snubber

Minimum Temperature R[illegible]rements per Appendix G of 10 CFR 50

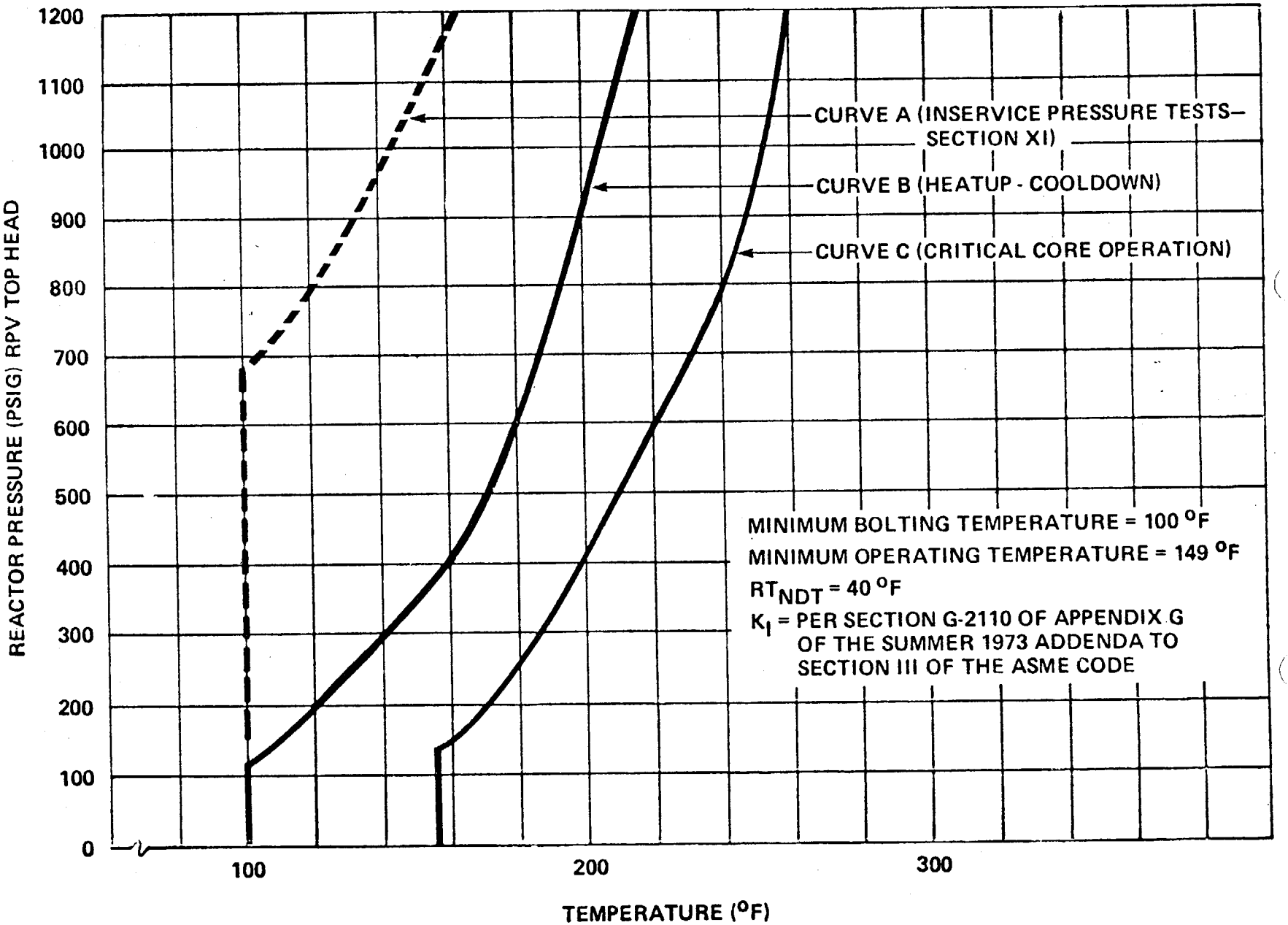
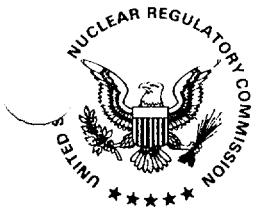


Fig. 3.6.1



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

COMMONWEALTH EDISON COMPANY
AND
IOWA-ILLINOIS GAS AND ELECTRIC COMPANY

DOCKET NO. 50-265

QUAD CITIES STATION UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.70
License No. DPR-30

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

   A. The application for amendment by the Commonwealth Edison Company (the licensee) dated April 16, 1981 as supplemented by letter dated September 29, 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 3.B of Facility License No. DPR-30 is hereby amended to read as follows:

   B. Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 70, 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

Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: April 28, 1982

ATTACHMENT TO LICENSE AMENDMENT NO. 70

FACILITY OPERATING LICENSE NO. DPR-30

DOCKET NO. 50-265

Revise the Appendix "A" Technical Specifications as follows:

Remove	Replace
3.6/4.6-5a	3.6/4.6-5a
3.6/4.6-6	3.6/4.6-6
3.6/4.6-7	3.6/4.6-7
3.6/4.6-13a	--
3.6/4.6-14	3.6/4.6-14
--	3.6/4.6-14a
3.6/4.6-15	3.6/4.6-15
3.6/4.6-15a	3.6/4.6-15a
3.6/4.6-15b	3.6/4.6-15b
--	3.6/4.6-15c
--	3.6/4.6-15d
3.6/4.6-15c	3.6/4.6-15e