JUN 10 1971

Docket No. 50-249

Commonwealth Edison Company
ATTN: Mr. Byron Lee, Jr.
Assistant to the President
P. O. Box 767
Chicago, Illinois 60690

Change No. 2
License No. DPR-25

Gentlemen:

We have reviewed your Proposed Change No. 2, dated April 14, 1971, as supplemented by letter dated April 26, 1971, requesting changes to Table 4.6.1 to the Technical Specifications for Facility Operating License No. DPR-25, Dresden Nuclear Power Station Unit 3. These proposed changes would conform certain inservice inspection requirements for Dresden Unit 3 with those of Section XI of the ASME Boiler and Pressure Vessel Code. These changes would specifically alter the method of inspection for vessel closure studs and nuts, closure head cladding and support attachments for piping, valves, and pumps.

We have concluded that the proposed changes do not present significant hazards considerations not described or implicit in the safety analysis report and that there is reasonable assurance that the health and safety of the public will not be endangered. Accordingly, the enclosed pages 102, 103, 104 and 104A are replaced or added to the Technical Specifications.

Sincerely,

ORIGINAL SIGNED BY
Peter A. Morris

Peter A. Morris, Director
Division of Reactor Licensing

Enclosure:
Change 2 to the Tech.Spec.

cc: Arthur C. Gehr, Esquire
Isham, Lincoln & Beale
Counselors at Law

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DATE ▶	6/8/71	6/8/71	6/8/71	6/9/71	6/9/71	

Form AEC-318 (Rev. 9-53) AECM 0240

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Commonwealth Edison Company
(Chg 2 to Lic No. DPR-25)

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TABLE 4.6.1 (cont)

Category	Examination Area	Exam Method	Inspection Interval	Extent of Examinations
G 1)	Closure studs and nuts	*Volumetric and visual or surface	During 10 year interval	1) 100% of vessel studs & nuts will be inspected each year.
2)	Closure washers, bushings	Visual	During 10 year interval	2) Not applicable
3)	Pressure-retaining bolting	Visual & Volumetric on bolts ≥ 2" in diameter and visual only on bolts < 2" in diameter	During 10 year interval	3) Bolting will be examined when bolting is removed or when the bolted connection is broken or disassembled. For bolting which is not removed, or the bolted connection is not broken, the inspection will consist of a visual exam to detect signs of distress or evidence of leaking. Examination of threads in base material of flanges or bushings will be performed from the face of the flange (flange base material between threaded stud hold ligaments shall be included).
H	Integrally welded vessel supports	Volumetric	During 10 year interval	Cumulative 10% (approximately 8 ft.) of lineal ft. of vessel support skirt welding in 10th year.

6-10-71 (Change # 2*)

TABLE 4.6.1 (cont)

Category	Examination Area	Exam Method	Inspection Interval	Extent of Examinations
I 1)	Closure head cladding	*Visual and Surface or Volumetric	During 10 year interval	1) During the 10 year interval, at least 6 patches (each 36 sq. in.) evenly distributed in the vessel closure, & 6 patches (each 36 sq. in.) evenly distributed in the accessible sections of the vessel shell shall be examined.
2)	Vessel Cladding	Visual	During 10 year interval	2) Visual inspection shall cover approximately the upper 20 ft. of the vessel interior to provide a reasonably representative sampling of the cladding system.
J(2)	Circumferential & longitudinal pipe welds	Visual & Volumetric	Cumulative 25% of all weld joints (selectively distributed among the higher stress joints in entire system) every 10 years. Group I and Group II welds (see below for location) on main feed and main steam lines shall be inspected in 10 years during the first period. Group I welds shall be inspected during each 10 year period thereafter.	

System	Pipe Sizes	Total Welds
Shutdown Cooling	14"	
	16"	68
Isolation Con.	12"	
	14"	39
Reactor Water Cleanup	8"	
	10"	36
CRD Hyd. System	4"	12
L.P. Coolant Inj.	14"	
	16"	
	18"	43
Core Spray Piping	10"	74
H. P. Coolant Inj.	10"	22
Feed Piping	12"	
	18"	57
Recirculation	4"	
	12"	
	22"	
	28"	123
Main Steam	8"	
	20"	125
		103

(Change # 2*)

TABLE 4.6.1 (Cont)

Category	Examination Area	Exam Method	Inspection Interval	Extent of Examination
* K 1)	Integrally-welded external support attachments for piping, valves and pumps	Visual and Volumetric	100% cumulative in first 10 years. 25% cumulative in each following 10-year inspection interval.	Welds to the pressure containing boundary, the base metal beneath the weld zone and along the support attachment member for a distance of two base metal thicknesses.
* K 2)	Support members and structures for piping, valves and pumps whose structural integrity is relied upon to withstand design loads and seismic-induced displacements.	Visual	100% cumulative during each 10-year inspection interval.	Support settings of constant and variable spring type hangers, snubbers and shock absorbers shall be inspected to verify proper distribution of design loads among the associated support components.
L	Pump casing seam welds & valve body seam welds	Visual & Volumetric	During 10 year interval	Areas include weld metal & base metal for 1 wall thickness beyond weld. At least 1 such exam shall be performed on 1 pump (with welds) and 1 valve (with welds) in each category & type. The internal surface of 1 disassembled pump (with or without welds) & 1 disassembled valve (with or without welds & 3" over in normal size) in each

TABLE 4.6.1 (Cont)

Category	Examination Area	Exam Method	Inspection Interval	Extend of Examination
L (cont)				category & type shall be subject to visual examination. Individual examinations shall cuver 100% of the pressure boundary welds & may be performed at or near the end of the 10 year interval.

JUN 1 0 1971

50-249

Memo to Files
THRU: R. L. Tedesco, Chief, Boiling Water Reactor Branch #2, DRL

SAFETY EVALUATION FOR TECHNICAL SPECIFICATION CHANGE NO. 2 FOR DRESDEN UNIT 3

The licensee requested that changes be made to the inservice inspection program for Dresden Unit 3 to conform those sections to those of Section XI of the ASME Boiler and Pressure Vessel Code. The Division of Reactor Standards reviewed these changes and concluded in a memo from E. G. Case to Peter A. Morris, dated May 21, 1971, that these changes were acceptable for Unit 3. On this basis, we conclude that this Technical Specification can be changed without undue risk to the health and safety of the public.

Mark J. Wetterhahn
Boiling Water Reactor Branch # 2
Division of Reactor Licensing

References:
1. Memo, E. G. Case to P. A. Morris, dtd 5-21-71
2. Technical Asst Request BWR 2-10, dtd 4-29-71
3. Ltr, CECo to P. A. Morris, dtd 4-26-71
4. Ltr, CECo to P. A. Morris, dtd 4-14-71
5. Note, R. Maccary to R. Tedesco, dtd 11-4-70

JUN 9 1971

Docket Nos. 50-237
and 50-24

Files
THRU: R. L. Tedesco, Chief, BWR Projects Branch #2, DRL

EVALUATION OF TECHNICAL SPECIFICATION CHANGE NO. 12 FOR DRESDEN 2 AND CHANGE NO. 4 FOR DRESDEN 3.

References

(1) Commonwealth Edison letter, dated May 21, 1971, proposing Technical Specification Change No. 12 for Dresden Unit 2.

(2) Commonwealth Edison letter, dated May 24, 1971, proposing Technical Specification Change No. 4 for Dresden Unit 3.

Commonwealth Edison Company, in the above references, proposed changes to the Technical Specifications for Dresden Units 2 and 3 that would (a) assure that the core cooling systems' pump discharge lines are maintained full of water, (b) assure the availability of the core spray system for long-term core cooling capability, (c) limit excessive vibration of the jet pump riser for Unit 2, and (d) include the drywell pneumatic supply system containment isolation valves. We have reviewed the licensee's proposed changes and have determined that the changes do not present significant hazards considerations not described or implicit in the Safety Analysis report and that there is reasonable assurance that the health and safety of the public will not be endangered. The nature of the proposed changes suggest an applicability to current GE-BWR plants. We plan to follow these aspects on other plants currently under review for appropriate actions.

(a) Discharge Lines for Emergency Core Cooling Systems

By incident report dated April 3, 1971, we were informed that one core spray system had experienced a water hammer which had damaged certain seismic hangers and the core spray admission valves. Further details and corrective measures were submitted in Special Report No. 13 and supplement thereto. The cause of the water hammer was determined to be an empty discharge line that resulted from a combination of operator

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errors and leaking check valves. An original system used to prevent this was not effective because it took water from the condensate storage tank which eventually leaked into the torus and had to be processed through the radwaste system and the delivery pressure of the fill water activated the low pressure core cooling system interlock pressure switches thereby defeating its purpose. The new system proposed by the applicant is a closed system taking torus water to fill the discharge lines and the pressure is regulated so the low pressure core cooling interlock is not defeated. The Technical Specifications contain operability and surveillance requirements for the newly added system.

(b) Availability of the ECCS for Long-Term Core Cooling

Based on discussions with GE, we believe that the core spray systems or a core spray system in combination with the LPCI pumps may be necessary to adequately complete the emergency core cooling function over the long term. A question has arisen concerning the ability of the LPCI pumps, working alone to maintain adequate core cooling in the long-term and recovery stages. We expect GE to provide the results of an analysis on this matter in the future. The change in the Technical Specifications assures that a core spray system will be available during operation of the unit.

(c) Limiting of Excess Vibration of the Jet Pump Riser

The vibration test program for Dresden Unit 2 revealed that the jet pump riser experienced excessive vibration during certain transient conditions. To correct this, the licensee has placed procedural limitations on certain modes of operation and is presently in the process of designing a system of interlocks to prevent operating in these regimes. On Dresden Unit 3, the licensee has strengthened the jet pump riser brace to eliminate the excess vibration, but has opted to install the same interlock as on Dresden Unit 3. Thus the Dresden 3 Technical Specification change would not have the same procedural limitations as Dresden Unit 2.

In addition, we have preliminary information from the Dresden startup test program that for certain break locations and sizes, if the recirculation pumps speeds differ by a certain amount, the break detection and LPCI loop selection logic will not operate properly. The Technical Specification change for Dresden Unit 2 will cover this situation and we are reviewing the need for a similar restriction for Dresden 3.

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JUN 9 1971

(d) Drywell Pneumatic Supply System Containment Isolation Valves

To minimize the need for containment venting and to supply oil free air to the main steam line isolation valves and other pneumatic equipment inside primary containment, the licensee is installing a new instrument air system to take air from inside the containment, filter and dry it for use by this pneumatic equipment. We have concluded that this modification is acceptable; for completness the table of isolation valves in the Technical Specifications is changed to reflect the new system.

/s/

G. C. Lainas
Division of Reactor Licensing

/s/

M. Wetterhahn
Division of Reactor Licensing

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