

Regulatory Docket File

Mr. L. Manning Muntzing
Director of Regulation
Office of Regulation
U.S. Atomic Energy Commission
Washington, D.C. 20545





Subject:

Dresden Station Units 2 and 3, Quad-Cities Units 1 and 2 - Request for Extension of Period for Completing Emergency Core Cooling System (ECCS) Evaluation in Accordance with 10 CFR 50.46, AEC Dkts 50-237, 50-249, 50-254 and 50-265

Dear Mr. Muntzing:

In accordance with 10 CFR Part 50, Section 50.46.(a). (2).(iii), Commonwealth Edison Company requests a two-month extension of the period for completing the Dresden Units 2 and 3 and Quad-Cities Units 1 and 2 ECCS evaluation. The purposes of this two-month extension are to provide an adequate review period by Commonwealth Edison Company between completion of the basic analyses by General Electric and implementation of any revised operating limits which may be necessary. The analyses are presently scheduled to be completed by July 15, 1974. The two-month extension requested will allow approximately one month to review the results of the analyses, develop appropriate Technical Specification changes, and, if necessary, in accordance with 10 CFR Part 50, Section 50.46.(a).(2).(vi), prepare an exemption request 45 days in advance of the extended submission date.

This extension is requested because definitive information will not be available until July 15, 1974, at the earliest, concerning the impact of the new ECCS criteria on the two (2) Dresden and two (2)Quad-Cities units and no valid judgement of the impact can be made until the analyses have been completed and evaluated. Since the analyses cannot be completed 45 days in advance of August 4, 1974, a request for an exemption to be effective on August 4, 1974 could not now be justified. If the analyses received July 15, 1974 indicate the need for an exemption to prevent deratings, an exemption could not be obtained for a minimum of 45 days according to 10 CFR 50.46; therefore the units would run derated a minimum of 25 days during the most critical period of the year. We believe it is prudent to allow



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this extension to avoid arbitrarily restricting the operation of Dresden Units 2 and 3 and Quad-Cities Units 1 and 2 during the maximum load period.

Attached is a copy of an affidavit from General Electric Company certifying the schedule for completing the analytical portion of the ECCS evaluation. The maximum practical effort has been made to prepare and obtain AEC approval of the models required to perform the analyses. This effort has involved extensive and timely pre-review and approval of these models. The earliest possible date for completing the analyses is July 15, 1974.

Since Dresden Units 2 and 3 and Quad-Cities Units:1 and 2 conform with the requirements of the "AEC Interim Acceptance Criteria for Emergency Core Cooling Systems for Light-Water Power Reactors," an extension of two months is consistent with protection of public health and safety.

I am the Nuclear Licensing Administrator, Boiling Water Reactors of Commonwealth Edison Company and in that capacity, have knowledge of the facts recited herein. I swear that the information contained in this request for extension is correct to the best of my knowledge.

Very truly yours,

J. S. Abel

Nuclear Licensing Administrator Boiling Water Reactors

SUBSCRIBED and SWORN to before me this day

Notary Public

AFFIDAVIT OF AARON J. LEVINE

- I, Aaron J. Levine, being duly sworn, depose and state as follows:
- 1. My name is Aaron J. Levine. I am the manager of Project Licensing Unit-I for General Electric Company's Nuclear Energy Products Division. In this position, I have been involved in the AEC review of the General Electric energency core cooling system (ECCS) evaluation models, on development of the schedules for completing calculation and in coordination with the operators of plants subject to new ECCS evaluation.
- 2. General Electric has been requested by the operators of the following plants to provide emergency core cooling system (ECCS) calculations for filing on August 5, 1974, pursuant to 10 CFR § 50.46:

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Vermont Yankee		50-271
Millstone		50-245
Quad Cities-1	£ -2	50-254 & 50-265
Monticello		50-263
	and the second of the second o	
TVA-1, -2 & -3		50-259, 50-260 & 50-296
	£ -3	
and the second s		
Duane Armold		50-331
Pitzpatrick .		50-333
Hatch-1		50-321

3. In order to perform such calculations, it has been necessary for General Electric to develop a new evaluation model to conform to the requirements of Commission regulations and to secure Atomic Energy Commission (AEC) Staff concurrence in use of the new model. The calculations utilize new evaluation models in conjunction with the specific parameters for each of the 20 plants and are performed for a number of loss-of-coolant accidents for each plant of different sizes, locations and other properties sufficient to provide assurance that the entire spectrum of

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Affidavit of Aaron J. Levine, Continued

postulated loss-of-coolant accidents (IOCA) is covered.

- 4. General Electric's new evaluation model consists of the following parts:
 - a. Short-Term Thermal-Sydraulic Model;
 - b. Transient Critical Power Model;
 - c. Long-Term Thermal-Rydraulic Model;
 - d. Core Heat-up Model.
- 5. The AEC Staff review of the individual models commenced in January 1974. These models have been under intensive review by the Staff since that time and have been discussed with the Advisory Committee on Reactor Safeguards. Upon concurrence from the Staff with the first two parts of the model in April, specific plant calculations were commenced. The calculations for the last parts of the model will commence promptly at the time at which the necessary outputs from the first parts of the model are available.
- 6. The current schedule for completion of calculations for these 20 plants is July 15, 1974. The results of the calculations will be promptly compiled and distributed for use by the plant operators in their filings.

 Because of the sequential procedure of the calculational operation, the results of all 20-plant calculations will become available essentially simultaneously.
- 7. Each plant was furnished with preliminary estimates of the maximum average planar linear heat generation rate expected for it as a result of the application of the Appendix K criteria. These remain the best estimates of the calculated results at this time. It is General Electric's opinion that for most plants these estimates are accurate to about 10%.

 Because of the volume of calculational work and the sequential nature

Affidavit of Aaron J. Lavine, Continued

of the calculational operation, no better estimates will be available prior to the completion of the calculations.

Aaron J, Levine

Subscribed and sworn to before me this /7 thay of June, 1974.

Notary Public

OFFICIAL SEAL SUSAN H. DOSELLE NOTARY DESIGNATION OF SANTA CLERA COUNTY IN COMMENCATIONS APPLIESS.

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