

50-237/249

DRESDEN, 2/3

CE

PROPOSED AMENDMENT TO REMOVE CYCLE-SPECIFIC CORE
LIMITS FROM TECH SPECS, per GENERIC LETTER 88-16

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-NOTICE-

REMOVAL OF CYCLE-SPECIFIC POWER
DISTRIBUTION LIMITS FROM
DRESDEN NUCLEAR POWER STATION UNITS 2 AND 3
TECHNICAL SPECIFICATIONS

TABLE OF CONTENTS

ENCLOSURES

TOPICS

- | | |
|------|---|
| A. | Description of Proposed Changes and Safety Evaluation |
| | 1. Background |
| | 2. Description of Actions Necessary to Implement Generic Letter 88-16 |
| | 3. Description of Technical Specification Changes |
| | 4. Summary |
|
 | |
| B. | Significant Hazards Evaluation |
|
 | |
| C. | Proposed License and Technical Specification Changes |
| | 1. Dresden Unit 2 (DPR-19) |
| | 2. Dresden Unit 3 (DPR-25) |
|
 | |
| D. | Example Core Operating Limits Report (COLR) |
| | 1. Dresden Unit 2 Cycle 12 COLR |
| | 2. Dresden Unit 3 Cycle 12 COLR |

ENCLOSURE A

DESCRIPTION OF PROPOSED CHANGES

AND SAFETY EVALUATION

The following evaluation describes the proposed changes to remove cycle specific power distribution limits from the Technical Specifications for both Dresden Units 2 and 3, as described in the NRC Generic Letter 88-16. The power distribution limits will be placed in a new controlled document called the Core Operating Limits Report (COLR). Incorporation of these Technical Specification changes will facilitate 10 CFR 50.59 reload licensing reviews for future Dresden cycles.

The evaluation is divided into sections as follows:

1. Background.
2. Description of Actions Necessary to Implement Generic Letter 88-16.
3. Description of Technical Specification Changes.
4. Summary.

1. BACKGROUND

Currently, the Dresden Units 2 and 3 Technical Specifications include cycle specific and fuel bundle type specific power distribution operating limits. Typically, changes to these power distribution limits are required each refueling to reflect upcoming cycle specific characteristics. Since these limits are developed using NRC-approved methodology, these frequent license amendments are an unnecessary burden on both NRC and Edison resources. To eliminate these amendments, the NRC has issued Generic Letter 88-16, "Removal of Cycle Specific Parameter Limits from Technical Specifications", to provide guidance in changing the Technical Specifications. Commonwealth Edison has prepared changes to the Dresden Technical Specifications which are consistent with Generic Letter 88-16 to allow an expedited review of the proposed amendment.

2. DESCRIPTION OF ACTIONS NECESSARY TO IMPLEMENT GENERIC LETTER 88-16

The proposed Technical Specification amendments remove the following cycle specific and fuel bundle type specific limits: Minimum Critical Power Ratio Operating Limit, Average Planar Linear Heat Generation Rate and multipliers for certain out-of-service conditions, Steady State Linear Heat Generation Rate, Transient Linear Heat Generation Rate, and Rod Block Monitor Upscale Setpoints. In place of these, a reference to the COLR

is made. The COLR is a unit specific document containing the power distribution limits that are applicable for a specific cycle. Edison will continue to meet its responsibility for ensuring NRC approved analytical methods are used for reload safety analyses and, per this amendment, as the basis for the results reported in the COLR. Examples of how the COLR would appear for Dresden Unit 2 Cycle 12 and Dresden Unit 3 Cycle 12 are provided in Enclosures D. The COLR for future operating cycles will be submitted to the NRC prior to startup from each refueling outage and upon issuance of any mid-cycle revisions or supplements thereto, as required by Generic Letter 88-16. The COLR for the Dresden units will be two separate attachments to a new Dresden Administrative Procedure. The procedure will also control the implementation and revision of the COLRs. In addition, the Definitions section of the Technical Specifications shall have an entry entitled "Core Operating Limits Report" and there will be a new administrative reporting requirement for the COLR added to the existing reporting requirements of the Technical Specifications.

The Technical Specification changes required for the implementation of Generic Letter 88-16 and the Edison COLR are described in Section 3 of this safety evaluation.

Issuance of this amendment is required to support the initial startup of Dresden Unit 3 Cycle 12, currently scheduled for February 1990. Edison intends to implement the changes for both units during the refueling outage for Dresden Unit 3 Cycle 12.

3. DESCRIPTION OF TECHNICAL SPECIFICATION CHANGES

Enclosure C contains the Technical Specification changes required for Dresden Units 2 and 3. The following sections outline all areas requiring revisions and identifies the associated sections of the Technical Specifications.

Unit 2 License Change

Section

Description of Changes

3.B

Amendment number of Technical Specifications updated.

Unit 2 Technical Specification Changes

<u>Section</u>	<u>Description of Changes</u>
List of Figures	References to Figures 3.5-1, 3.5-1A, 3.5-1B, and 3.5-2 are deleted.
1.0	Definitions A and B renumbered. Definition of Core Operating Limits Report added. Reference to XN-3 NRC-approved topical removed. Definition FF changed since FDLRX is applied to all fuel types.
B 1.1.1	References to XN-3 correlation, XN-3 NRC-approved topical, and MCPR Safety Limit increase during single loop operation replaced with references to the COLR and to Specification 6.6.A.4, which will list all appropriate ANF NRC-approved topical reports. Detailed explanation of maximum LHGR for GE fuel removed, since the GE fuel is being monitored by FDLRC.
B 2.1 and B 2.2	References to ANF NRC-approved topicals replaced with reference to Specification 6.6.A.4. Reference to Specification 3.5.K updated to Specification 3.5.L.
3.2.C	Trip Level Settings in Table 3.2.3 for Rod Block Monitor upscale replaced with reference to the COLR.
4.3.C.3	Added surveillance requirement to assure scram time assumptions used in transient analyses, and hence the MCPR Operating Limit, are still valid.
B 3.3.B	Reference to an ANF NRC-approved topical replaced with references to Specification 6.6.A.4. Also, an administrative correction ("sequences" changed to "segments") is included in B 3.3.B.3.
B 3.3.C	Discussion of MCPR Operating Limit scram time dependence added and reference to MCPR specification updated.
3.5.D.2	Reference to Figure 3.5-1 and MAPLHGR reduction factors for equipment out-of-service conditions replaced with reference to the COLR.
3.5.I and 4.5.I	References to Figure 3.5-1 and MAPLHGR reduction factors for equipment out-of-service conditions replaced with references to the COLR. Figure 3.5-1, which consisted of three sheets, deleted (MAPLHGR for 8x8, 9x9, and 8x8LTA).

Unit 2 Technical Specification Changes
(Cont'd)

<u>Section</u>	<u>Description of Changes</u>
3.5.J and 4.5.J	References to Figure 3.5-1A replaced with references to the COLR. Figure 3.5-1A deleted (SLHGR). Deleted "for Exxon fuel" from FDLRX description since it applies to all fuel types. Surveillance requirement terminology also changed for consistency with LCO ("LHGR" changed to "FDLRX").
3.5.K	Reference to Figure 3.5-1B replaced with reference to the COLR. Figure 3.5-1B deleted (TLHGR).
3.5.L	References to rated core flow MCPR operating limit and Figure 3.5-2 replaced with references to the COLR. Figure 3.5-2, which consisted of two sheets, deleted (Reduced Flow MCPR for manual and automatic flow control).
B 3.5.I	Discussion of calculation procedure used to establish maximum average planar LHGR values replaced with general discussion referencing ANF NRC-approved methodology. References to ANF NRC-approved topicals replaced with reference to Specification 6.6.A.4. MAPLHGR reduction factor replaced with reference to the COLR.
B 3.5.L	References to ANF NRC-approved topical and related parameters replaced with references to Specification 6.6.A.4. References to Figure 3.5-2 replaced with references to the COLR. Discussion of MCPR dependence on scram time inserted.
B 4.5.J	Discussion of the local steady state LHGR daily check is clarified to be for the fuel design limiting ratio ("LHGR" is changed to "FDLRX").
3.6.H.3	References to adjustments to MCPR Operating Limit, and MAPLHGR replaced with references to the COLR. Specification 3.6.H.3.f.v modified to be consistent with 3.5.L.
B 3.6.H	Clarification added that the MCPR Single Loop adjustment (0.01) is applied to the base ("rated flow") MCPR Operating Limit. Adjustments to MAPLHGR during equipment out-of-service conditions replaced with references to the COLR.
6.6.A.4	The COLR is added to the routine reporting requirements list.

Unit 3 License Change

<u>Section</u>	<u>Description of Changes</u>
3.B	Amendment number of Technical Specifications updated.

Unit 3 Technical Specification Changes

<u>Section</u>	<u>Description of Changes</u>
List of Figures	References to Figures 3.5-1, 3.5-1A, 3.5-1B, and 3.5-2 are deleted.
1.0	Definitions A and B renumbered. Definition of Core Operating Limits Report added. Reference to XN-3 NRC-approved topical removed. Definition FF changed since FDLRX is applied to all fuel types.
B 1.1.1	References to XN-3 correlation, XN-3 NRC-approved topical, and MCPR Safety Limit increase during single loop operation replaced with references to the COLR and to Specification 6.6.A.4.
B 2.1 and B 2.2	Reference to an ANF NRC-approved topical replaced with reference to Specification 6.6.A.4.
3.2.C	Trip Level Settings in Table 3.2.3 for Rod Block Monitor upscale replaced with reference to the COLR.
4.3.C.3	Reference to MCPR Operating Limit Specification section updated.
B 3.3.B	Reference to an ANF NRC-approved topical replaced with references to Specification 6.6.A.4. Also, an administrative correction ("sequences" changed to "segments") is included in B 3.3.B.3.
B 3.3.C.3	Update bases to allow use of either nominal or Technical Specification scram times in the transient analyses. Reference to MCPR Operating Limit Specification section updated.
3.5.D.2	Reference to Figure 3.5-1 and MAPLHGR reduction factors for equipment out-of-service conditions replaced with reference to the COLR.

Unit 3 License Change
(Cont'd)

<u>Section</u>	<u>Description of Changes</u>
3.5.I and 4.5.I	References to Figure 3.5-1 and MAPLHGR reduction factors for equipment out-of-service conditions replaced with references to the COLR. Figure 3.5-1, which consisted of two sheets, deleted (MAPLHGR for 8x8 and 9x9).
3.5.J and 4.5.J	References to Figure 3.5-1A replaced with references to the COLR. Figure 3.5-1A deleted (SLHGR). Deleted "for Exxon Fuel" from FDLRX description since it applies to all fuel types.
3.5.K	Reference to Figure 3.5-1B replaced with reference to the COLR. Figure 3.5-1B deleted (TLHGR).
3.5.L	References to rated core flow MCPR operating limit and Figure 3.5-2 replaced with references to the COLR. Figure 3.5-2, which consisted of three sheets, deleted (Reduced Flow MCPR for manual, 8x8 and 9x9 automatic flow control).
B 3.5.I	Discussion of calculation procedure used to establish maximum average planar LHGR values replaced with general discussion referencing ANF NRC-approved methodology. References to ANF NRC-approved topicals replaced with reference to Specification 6.6.A.4. MAPLHGR reduction factor replaced with reference to the COLR.
B 3.5.L	References to ANF NRC-approved topical and related parameters replaced with references to Specification 6.6.A.4. References to Figure 3.5-2 replaced with references to the COLR.
B 4.5.J	Discussion of the local steady state LHGR daily check is clarified to be for the fuel design limiting ratio ("LHGR" is changed to "FDLRX").
3.6.H.3	References to adjustments to MCPR Operating Limit and MAPLHGR replaced with references to the COLR. Specification 3.6.H.3.f.v modified to be consistent with 3.5.L.
B 3.6.H	Clarification added that the MCPR Single Loop Adjustment (0.01) is applied to the base ("rated flow") MPCR Operating Limit. Adjustments to MAPLHGR during equipment out-of-service conditions replaced with references to the COLR.
6.6.A.4	The COLR is added to the routine reporting requirements list.

4. SAFETY EVALUATION SUMMARY

The preceding discussions have addressed the removal of cycle specific power distribution limits from the Technical Specifications of Dresden Units 2 and 3, and the referencing of a unit specific COLR per Generic Letter 88-16. Since Commonwealth Edison will continue to assure that NRC approved methodology and fuel types are utilized for each reload application and will submit the COLR for NRC information and trending, CECO concludes that the proposed changes do not represent an unreviewed safety question and are acceptable to facilitate 10 CFR 50.59 reload licensing reviews. This conclusion is valid provided the following items are completed:

- a. The attached Technical Specifications are NRC approved and Dresden procedures are modified to be consistent with the revised Technical Specifications.
- b. A Dresden Administrative Procedure is developed to contain and control implementation and revision of the unit specific COLR.

Based on the above discussion and the Significant Hazards Evaluation in Enclosure B; in accordance with 10 CFR 50.92(c), the proposed changes do not represent an unreviewed safety question or a significant hazards consideration.

ENCLOSURE B

SIGNIFICANT HAZARDS EVALUATION

Commonwealth Edison Company proposes to amend Facility Operating Licenses DPR-19 (Dresden Unit 2) and DPR-25 (Dresden Unit 3) to support the licensing under 10 CFR 50.59 of future reload cores for Dresden Units 2 and 3. The purpose of the proposed revisions are to remove cycle specific power distribution limits from the Technical Specifications. Although a general description of the changes follows, a more detailed discussion of the changes and their technical bases can be found in Enclosure A.

DESCRIPTION OF AMENDMENT REQUEST

The proposed changes in Facility Operating License DPR-19 for Dresden Unit 2 and DPR-25 for Dresden Unit 3 are as follows:

1. A definition for the Core Operating Limits Report is added.
2. The limits for the Average Planar Linear Heat Generation Rate and appropriate multipliers for certain out-of-service conditions, Minimum Critical Power Ratio Limiting Condition for Operation, Steady State Linear Heat Generation Rate, Transient Linear Heat Generation Rate, and Rod Block Monitor Upscale Setpoints are removed and references to the Core Operating Limits Report are inserted. Appropriate simplifying changes are similarly made to the respective Bases sections, which are administrative in nature and do not change the intent.
3. A new administrative reporting requirement entitled "Core Operating Limits Report" is added to the existing reporting requirements.

BASIS FOR PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Commonwealth Edison Company has evaluated the proposed Technical Specifications and determined that they do not represent a significant hazards consideration. Based on the criteria for defining a significant hazard established in 10 CFR 50.92(c):

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

No plant protective functions are changed by this amendment. The amendment is administrative in nature by removing cycle specific and fuel bundle type specific power distribution limits from the Technical Specifications and placing these same parameters in a separate station controlled document entitled "Core Operating Limits Report (COLR)". NRC-approved methodology will continue to be required to determine the results reported in the COLR. The surveillance requirements for these power distribution limits remain unchanged.

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2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

No plant protective functions are changed by this amendment. Thus, these changes do not create any new accident mode. The current spectrum of reactor transient and accident analyses remain unchanged.

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3. The proposed amendment does not involve a significant reduction in the margin of safety.

No plant functions are changed by this amendment. The change only removes cycle specific and fuel bundle type specific power distribution limits from the Technical Specifications and incorporates these limits in the COLR. The plant will continue to be operated under limits on these same power distribution parameters, which will be calculated using NRC approved methodology.

Similar changes have been approved for Quad Cities Station Units 1 and 2, as well as other plants, per the recommendations of NRC Generic Letter 88-16.

Based on the above discussion, Commonwealth Edison concludes that the proposed amendments do not represent a significant hazards consideration.