

ATTACHMENT C

PROPOSED CHANGES TO APPENDIX A,  
TECHNICAL SPECIFICATIONS, OF FACILITY OPERATING LICENSE DPR-25

REVISED PAGES

UNIT 3 (DPR-25)

1/2.1-1

6-19

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1.1 SAFETY LIMIT

FUEL CLADDING INTEGRITY

Applicability:

The Safety Limits established to preserve the fuel cladding integrity apply to these variables which monitor the fuel thermal behavior.

Objective:

The objective of the Safety Limits is to establish limits below which the integrity of the fuel cladding is preserved.

Specifications:

- A. Reactor Pressure greater than 800 psig and Core Flow greater than 10% of Rated.

The existence of a minimum critical power ratio (MCPR) less than ~~1.05~~ shall constitute a violation of the MCPR fuel cladding integrity safety limit.

1 p/ 1.08

When in Single Loop Operation, the MCPR safety limit shall be increased by 0.01.

2.1 LIMITING SAFETY SYSTEM SETTING

FUEL CLADDING INTEGRITY

Applicability:

The Limiting Safety System Settings apply to trip settings of the instruments and devices which are provided to prevent the fuel cladding integrity Safety Limits from being exceeded.

Objective:

The objective of the Limiting Safety System Settings is to define the level of the process variables at which automatic protective action is initiated to prevent the fuel cladding integrity Safety Limits from being exceeded.

Specifications:

- A. Neutron Flux Trip Settings

The limiting safety system trip settings shall be as specified below:

1. APRM Flux Scram Trip Setting (Run Mode)

When the reactor mode switch is in the run position, the APRM flux scram setting shall be:

S less than or equal to  $[.58W_D + 62]$  during Dual Loop Operation or S less than or equal to  $[.58W_D + 58.5]$  during Single Loop Operation with a maximum setpoint of 120% for core flow equal to  $98 \times 10^6$  lb/hr and greater, where:

S - setting in percent of rated thermal power.

6.0 ADMINISTRATIVE CONTROLS (Cont'd.)

- 3) The Local Steady State Linear Heat Generation Rate (LHGR) for Specification 3.5.J.
- 4) The Local Transient Linear Heat Generation Rate (LHGR) for Specification 3.5.K.
- 5) The Minimum Critical Power Operating Limit for Specification 3.5.L. This includes rated and off-rated flow conditions.

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC in the latest approved revision or supplement of the topical reports describing the methodology. For Dresden Unit 3, the topical reports are:

Insert 'A' from following page

Insert 'B' from following page

- 1) ~~XN-NF-512(P)(A), "XN-3 Critical Power Correlation."~~
- 2) ~~XN-NF-524(P)(A), "Exxon Nuclear Critical Power Methodology for Boiling Water Reactors."~~
- 3) XN-NF-79-71(P)(A), "Exxon Nuclear Plant Transient Methodology for Boiling Water Reactors".
- 4) XN-NF-80-19(P)(A), "Exxon Nuclear Methodology for Boiling Water Reactors".
- 5) XN-NF-85-67(P)(A), "Generic Mechanical Design for Exxon Nuclear Jet Pump Boiling Water Reactors Reload Fuel".
- 6) XN-NF-81-22(P)(A), "Generic Statistical Uncertainty Analysis Methodology".

Insert 'C' from following page

- c. The core operating limits shall be determined so that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met.
- d. The Core Operating Limits Report, including any mid-cycle revisions or supplements thereto, shall be provided upon issuance to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

B. Reportable Events

Reportable events will be submitted as required by 10 CFR 50.73.

Inserts for Page 6-19 (DPR-25)

Insert 'A'

ANF-1125(P)(A), "Critical Power Correlation - ANFB".

Insert 'B'

ANF-524(P)(A), "ANF Critical Power Methodology for Boiling Water Reactors".

Insert 'C'

7) ANF-913(P)(A), "COTRANSA2: A Computer Program for Boiling Water Reactor Transient Analyses".

## ATTACHMENT D

### EVALUATION OF SIGNIFICANT HAZARDS CONSIDERATION

Commonwealth Edison Company (CECo) proposes an amendment to Facility Operating License DPR-25 (Dresden Station Unit 3) to reflect the use of new Advanced Nuclear Fuels' (ANF) reload licensing methodologies beginning with Cycle 13 for Unit 3. As discussed in Attachment 'A' (Description of Amendment Request), CECo proposes to reference these NRC-approved methodologies and incorporate the resultant increase in the Minimum Critical Power Ratio (MCPR) Safety Limit (from 1.05 to 1.08).

CECo has evaluated the proposed amendment and concluded that it does not involve a significant hazards consideration. In accordance with 10 CFR 50.92(c):

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

The NRC-approved methodologies to be referenced in the Technical Specifications are used to evaluate core operating limits and do not introduce physical changes to the plant. ANF will continue to analyze the same spectrum of limiting events for each reload under the new methodology. The increase in the MCPR Safety Limit adequately accounts for the effects of the new methods and potential effects of channel bow, and will continue to maintain fuel cladding integrity by ensuring that 99.9% of the fuel rods will avoid transition boiling during limiting anticipated operational occurrences. Therefore, the changes do not effect the probability or consequences of accidents previously evaluated.

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

The referenced NRC-approved methodologies will continue to be used to analyze limiting transients, and do not introduce any physical changes to the plant; therefore, the possibility of a new or different kind of accident is not created. Similarly, the basis of the MCPR Safety Limit has not been changed and will continue to maintain fuel cladding integrity during limiting anticipated operational occurrences.

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

The referenced NRC-approved methodologies will continue to ensure fuel design and licensing criteria are met. The increase in the MCPR Safety Limit reflects the new methods, bounds the effect of channel bow for Cycle 13, and provides additional conservatism to facilitate future reload licensing reviews under the provisions of 10 CFR 50.59. Therefore, the margin between the safety limit and potential fuel failure after the onset of transition boiling is not decreased.

## ATTACHMENT E

### ENVIRONMENTAL ASSESSMENT

The proposed amendment to the Unit 3 Technical Specifications reflects the use of new, NRC-approved reload licensing methodologies beginning with Cycle 13, and the resultant increase in the MCPR Safety Limit. The new methodologies and MCPR Safety Limit increase will maintain the current margin of safety and fuel cladding integrity so that no environmental impact will result. Additionally, the proposed amendment does not involve a significant hazards consideration as previously presented in Attachment D.