

50-263

PROPOSED TECHNICAL SPECIFICATIONS CHANGES  
(Fwded Under Appli. for Amendment)

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Exhibit A

Monticello Nuclear Generating Plant  
License Amendment Request Dated March 7, 1986

Evaluation of Proposed Changes to the  
Technical Specifications Appendix A of  
Operating License DPR-22

Pursuant to 10 CFR Part 50, Sections 50.59 and 50.90 the holders of Operating License DPR-22 hereby propose the following changes:

1. Addition of ARTS Curves

Proposed Change

Add four ARTS (Average Power Range Monitor, Rod Block Monitor and Technical Specification Improvements Program) curves to the Monticello Technical Specifications (Figures 3.11.1, 2, 3 and 4).

List these figures on the List of Figures (Page v).

Change text from referring to Reference 1 Figure 3-2 thru 5 to Technical Specification Figure 3.11.1 thru 5 (Pages 211, 213, 216 and 217).

| <u>Old Figure<br/>in Reference 1</u> | <u>New Figure</u> |
|--------------------------------------|-------------------|
| 3-2                                  | 3.11.3            |
| 3-3                                  | 3.11.1            |
| 3-4                                  | 3.11.4            |
| 3-5                                  | 3.11.2            |

Reason For Change

When the ARTS License Amendment was submitted (May 30, 1984), the four curves referenced in the Technical Specifications were proprietary to General Electric. Since that time General Electric has made the curves non-proprietary. Therefore, we are proposing to add these curves to the specifications.

The curves have been redrawn and nomenclature simplified.

Determination of Significant Hazards Considerations

The proposed change to the Operating License has been evaluated to determine whether it constitutes a significant hazards consideration as required by 10 CFR Part 50, Section 50.91 using the standards provided in Section 50.92. This analysis is provided below:

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

This change has no effect on the probability or consequences of previously evaluated accidents, since the same information is being used to determine the limiting MAPLHGR and MCPR values as in the existing specifications only the location of the curves is changing.

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

This will not create the possibility of a new or different kind of accident, since the same information is being used to determine the limiting MAPLHGR and MCPR values as in the existing specifications only the location of the curves is changing.

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

This change has no effect on margin of safety, since the same curves are being used to determine the limiting MAPLHGR and MCPR values as in the existing specifications only the location of the curves is changing.

For these reasons stated above, we have concluded that this change does not involve a significant hazards consideration. This change is an administrative change.

2. Addition of New Fuel Type, BP8DRB299L, GE-7 Barrier Fuel

#### Proposed Change

Add MAPLHGR values for the new fuel type to Table 3.11.1.

Extend the MAPLHGR limits to 45,000 MWD/ST for the P8DRB284LB fuel type in Table 3.11.1.

Five columns have been combined into 2. The most limiting, i.e. lowest, MAPLHGR for each exposure range for the fuel types being combined in one column is used in the combined column.

Add the barrier fuel designator (B) to the column headings for the pressurized fuel in Table 3.11.1.

#### Reason For Change

This new fuel type is planned to be installed in Cycle 12.

The consolidation of the number of fuel types is desirable to maintain all fuel types on one page. Older fuel types that are not limiting were combined.

The barrier designator has been added to the column headings in Table 3.11.1 for the pressurized fuel types, since the MAPLHGR limits are the same for barrier and non-barrier fuel types (See NEDE-24011 page US.2-55, Reference 3).

#### Determination of Significant Hazards Considerations

The proposed change to the Operating License has been evaluated to determine whether it constitutes a significant hazards consideration as required by 10 CFR Part 50, Section 50.91 using the standards provided in Section 50.92. This analysis is provided below:

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

The methods used to analyze the Loss of Coolant Accident response of the BP8DRB299L and P8DRB284LB fuel types conforms to 10 CFR 50 Appendix K requirements and are identical to those previously used. The results of the Loss of Coolant Accident response for BP8DRB299L fuel are shown in Exhibit D (Section 17, page 12) and Exhibit E. Since the results demonstrate compliance with 10 CFR 50 Appendix K, the proposed change will not result in a significant increase in the probability or consequences of an accident previously evaluated.

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

The Loss of Coolant Accident response demonstrates the similarity of this fuel type to previously analyzed fuel. Therefore, the addition of BP8DRB299L fuel will not create the possibility of a new or different kind of accident.

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

The Loss of Coolant Accident response demonstrates compliance with 10 CFR 50 Appendix K (Exhibit D, Section 17, Page 12).

The  $k_{\infty}$  for the new fuel type is 1.25 which will conform the the requirements in Section 5.5 of the Monticello Technical Specifications.

Therefore, the addition of BP8DRB299L fuel and MAPLHGR extension of the P8DRB284LB fuel type will not involve a significant reduction in the margin of safety.

This change is the result of a reactor core reloading in which no fuel assemblies are significantly different from those found in Monticello reloads found previously acceptable to the NRC. For the reasons stated above, we have concluded that the proposed changes do not involve a significant hazards consideration.

### 3. M CPR Limit Changes

#### Proposed Change

Change the M CPR limits for fuel types listed in Table 3.11.2. Change the title of the Table 3.11.2 on the Table and add this table to List of Tables, proposed page vii.

Revise the first paragraph of 3.11.C as shown in Exhibit B and C and the associated Bases (pages 216 and 217). The M CPR limits calculated by the transient analysis each cycle will be referred to as the "Rated Minimum Critical Power Ratio" or abbreviated as "M CPR(100)." The term operating limit M CPR will be deleted.

Below 45% power, the reference to Figure 3-4 (proposed Figure 3.11.4) has been deleted.

#### Reason For Change

Operation of Cycle 12 will require higher M CPR limits as shown in Exhibit D.

Section 3.11.C has been rewritten to simplify the requirements. The term "Rated Minimum Critical Power Ratio" is used to differentiate the 100% power and flow values from the reduced power and flow values and factors shown in proposed Figures 3.11.3 and 4. The term Operating Limit M CPR is not necessary.

Below 45% power, the reference to Figure 3-4 (proposed Figure 3.11.4) has been deleted since Figure 3-2 (proposed Figure 3.11.3) is more limiting in all cases.

#### Determination of Significant Hazards Considerations

The proposed change to the Operating License has been evaluated to determine whether it constitutes a significant hazards consideration as required by 10 CFR Part 50, Section 50.91 using the standards provided in Section 50.92. This analysis is provided below:

1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated.
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The proposed changes are the result General Electric's evaluation of Cycle 12 transient analysis; attached in Exhibit D. The approved methods, described in Reference 3, demonstrate that the transient analyses results are within all acceptable criteria. Therefore, this change will not involve a significant increase in the probability or consequences of an accident previously evaluated.

With respect to thermal hydraulic stability, it was not necessary to perform a stability analysis on Cycle 12, since Cycle 12 is typical of previously evaluated cores which had acceptable stability margin (References 1 and 2).

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

This reload is very similar to previous reloads and does not create the possibility of a new or different kind of accident from those previously analyzed.

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

As demonstrated by the transient analyses contained in Exhibit D this change will not involve a significant reduction in the margin of safety.

This change is the result of a reactor core reloading in which no fuel assemblies are significantly different from those found in Monticello reloads found previously acceptable to the NRC. For the reasons stated above, we have concluded that the proposed changes do not involve a significant hazards consideration.

References:

1. Letter dated 4/24/85 from C O Thomas (NRC) to H C Pfefferlen (GE) titled, "Acceptance for Referencing of Licensing Topical Report NEDE-24011, REV 6, Amendment 8, 'Thermal Hydraulic Stability Amendment to GESTAR II'"
2. Letter dated 1/23/86 from R M Bernero (NRC) to All Licensees of Operating BWRs titled, "Technical Resolution of Generic Issue B-19-Thermal Hydraulic Stability (Generic Letter No. 86-02)."
3. General Electric Standard Application for Reactor Fuel, NEDE-24011-P-A-7-US, August 1985.

Exhibit B

Monticello Nuclear Generating Plant  
License Amendment Request Dated March 7, 1986

Proposed Changes Marked Up  
on Existing Technical Specification Pages

Exhibit B consists of the Existing Technical Specification pages with the proposed changes written on those pages. Existing pages affected by this change are listed below:

v  
vi  
vii  
211  
213  
214  
215  
216  
217