Exhibit A

Monticello Nuclear Generating Plant
Revision No. 2 to License Amendment Request Dated September 7, 1976

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

Single Loop Operation Technical Specification

Pursuant to 10 CFR 50, Section 50.59 and 50.90, the holders of Operating License DPR-22 hereby propose the following change to Appendix A Technical Specifications:

1. APRM Scram and Rod Block

Proposed Change

a. Change the formula for the APRM scram trip setting, in Section 2.1, to include a factor to account for reverse flow through the inactive jet pumps during periods of Single Loop Operation (SLO) and define this factor for both SLO and two loop operation.

b. Add a reference to "Monticello Nuclear Generating Plant Single Loop Operation", NEDO-24271, June, 1980 (submitted on July 2, 1982 with Revision No. 1 to License Amendment Request dated September 7, 1976) to the Section 2.3 list of references.

c. Change the expression for the Upscale APRM Rod Block in Table 3.2.3 point 3.a. to include the factor to account for reverse flow through the inactive jet pumps during periods of SLO and define this factor in the notes to Table 3.2.3 point 2.

These Proposed changes will be incorporated as shown in Exhibit B pages 6, 20, 56 and 58.

Reason for Change

a,c. During plant operation with a single recirculation pump running, reverse flow is established through the inactive jet pumps. Since core flow instrumentation is not designed to distinguish between forward and reverse flow through the jet pumps, the indicated jet pump flow is artificially high. Because of this condition the process computer would believe that the reactor was being operated further away from the APRM flux scram line than was actually the case. Under this condition a large margin to safety would be indicated, when in fact, the true operating point could be very close to the scram line. Therefore the APRM flux scram line will be shifted down toward the operating region on the power/flow map to maintain current margins to safety. The APRM flux scram trip and APRM Upscale Rod Block setpoints

will be modified to account for the reverse flow of water through the inactive jet pumps.

b. NEDO-24271 is used as the basis for determining the necessary indicated flow correction factor to be used during SLO to account for reverse flow through the inactive jet pumps.

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, Sections 50.91 using the standards provided in Section 50.92. This analysis is provided below:

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

   The proposed technique for determining the APRM flux scram trip setpoint will not change the characteristics of Monticello reactor operation. The indicated flow correction factor for SLO is used to establish the relationship between the acceptable operating region of the power-flow map and the trip setpoint for two recirculation loop operation. Therefore, the proposed amendment 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 evaluated.

   Single Loop Operation is judged not to create the possibility of a new or different kind of accident from any previously analyzed. All abnormal operating transients which could be initiated because of SLO, such as a Recirculation Pump Trip at Power, Recirculation Pump Seizure, Recirculation Flow Control Failure and Startup of an Idle Recirculation Pump have been analyzed and the results presented in the Monticello USAR.

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

   The operating limits and setpoints are being revised for SLO to ensure that the margin of safety will not be reduced as demonstrated in the referenced NEDO-24271 "Monticello Single Loop Operation", June 1980 and subsequent reload analyses. Acceptable margins of safety are therefore preserved by the proposed changes.

The proposed changes are related to the methods used in the calculation of a safety system setpoint based upon previously published and approved information. While these changes may result in some change in the probability or consequences of a previously analyzed accident or may change in some way a safety margin, the results of the changes are clearly within all acceptance criteria established by the commission.

2. Recirculation System

Proposed Changes

a. Add Specification H., "Recirculation System" Limiting Conditions for Operation, delete specification I. "Recirculation System" Limitimg Conditions for Operation in section 3.5.

b. Add Specification H., "Recirculation System" Surveillance Requirements, delete specification I. "Recirculation System" Surveillance Requirements in section 4.5.

c. Add Specification H. containing bases related to the Recirculation System to the section 3.5 Bases. Delete Specification I. containing bases related to the Recirculation System to the section 3.5 Bases.

These Proposed changes will be incorporated as shown in Exhibit B pages 113, 114, 114a, 114b, 119.

Reason for Change

a. Specification 3.5.H, Limiting Conditions for Operation, will be added to specify the conditions which must be met for operation of the plant with only one recirculation loop in operation. The added section specifies that operational trip setpoints and safety settings are adjusted to assure that all safety margins are preserved. Operational and surveillance restrictions are placed on the plant when the unit is operating in certain areas of the power/flow map. In these areas limit cycle oscillations and/or mechanical vibration may occur. Specification 3.5.I which previously addressed the Recirculation System Limiting Conditions for operation will be deleted.

b. Specification 4.5.H, Surveillance Requirements, will be added to provide baseline data, and periodic monitoring of thermal-hydraulic and mechanical characteristics of the plant. Periodic surveillance results will be compared to the baseline data to detect limit cycle oscillations. Specification 3.5.I which previously addressed the Recirculation System Surveillance Requirements will be deleted.

c. Part H. will be added to the section 3.5 bases to provide background and reference information on single loop operation.

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, Sections 50.91 using the standards provided in Section 50.92. This analysis is provided below:

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

The proposed addition to the Technical Specifications will not

involve significant reductions in current safety margins. Trip setpoints and safety setpoints have been reevaluated to preserve current safety margins without significantly reducing operational flexibility. Additional surveillance will be done, and restrictions placed on neutron flux and core plate ΔP noise. This will aid the operations staff in detecting, and mitigating, core limit cycle oscillations in the unlikely event they should occur. Therefore, the proposed amendment 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 evaluated.

   Single Loop Operation will not create the possibility of a new or different kind of accident from any previously analyzed. All abnormal operating transients which could be initiated because of SLO, such as a Recirculation Pump Trip at Power, Recirculation Pump Seizure, Recirculation Flow Control Failure and Startup of an Idle Recirculation Pump have been analyzed and the results presented in the Monticello USAR.

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

   The operating limits and setpoints are being revised for SLO to ensure that the margin of safety will not be reduced as demonstrated in the referenced NEDO-24271 "Monticello Single Loop Operation", June 1980 and subsequent reload analyses.

The proposed changes are related to surveillance requirements and operational limitations. While these changes may result in some change in the probability or consequences of a previously analyzed accident or may change in some way a safety margin, the results of the changes are clearly within all acceptance criteria established by the Commission.

3. Fuel Thermal Characteristics

Proposed Change

a. Add a multiplying factor for single loop operation which will reduce the MAPLHGR limit by 15%.

b. Specify that the single loop OLMCPR be 0.01 greater than the corresponding two loop OLMCPR.

c. Specify that the MCPR safety limit for single recirculation loop operation be increased by 0.01.

d. Add "Monticello Nuclear Generating Plant Single Loop Operation", NEDO-24271, July, 1980, to the 3.11 Bases list of references.

These Proposed changes will be incorporated as shown in Exhibit B, pages 6, 213, 214, 218.

Reason for Change

a. Due to thermal hydraulic differences between single loop and two loop operation, the MAPLHGR limit is reduced by 15% to preserve the safety margin. During single loop operation there is a possibility of reduced cooling to certain regions of the core. The reduction in the allowable APLHGR will help to ensure that the fuel peak cladding temperature is not exceeded.

b,c. The MCPR fuel cladding integrity safety limit is increased by 0.01 due to the increase in core flow measurement uncertainty during single loop operation. Increasing the MCPR will ensure that the fuel cladding integrity safety limit is maintained.

d. NEDO-24271 is the General Electric analysis for Single Loop Operation of the Monticello plant. This report (submitted on July 2, 1982 with Revision No. 1 to License Amendment Request dated September 7, 1976) is the basis for for this submittal and is therefore added to the list of references.

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, Sections 50.91 using the standards provided in Section 50.92. This analysis is provided below:

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

   The proposed changes will not significantly reduce any safety margins or significantly increase the probability of a previously evaluated accident. Changes to the MAPLHGR and MCPR limits have been evaluated for Single Loop Operation using the same techniques that were used for two loop operation. Adjustments to these parameters for single loop operation were derived to preserve margins to safety.

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

   Single Loop Operation is judged not to create the possibility of a new or different kind of accident from any previously analyzed. All abnormal operating transients which could be initiated because of SLO, such as a Recirculation Pump Trip at Power, Recirculation Pump Seizure, Recirculation Flow Control Failure and Startup of an Idle Recirculation Pump have previously been analyzed and the results presented in the Monticello USAR.

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

   The operating limits and setpoints are being revised for SLO to ensure that the margin of safety will not be reduced as demonstrated in the referenced NEDO-24271 "Monticello Single Loop

Operation", June 1980, and subsequent reload analyses.

The proposed changes are related to limiting safety settings. While these changes may result in some change in the probability or consequences of a previously analyzed accident or may change in some way a safety margin, the results of the changes are clearly within all acceptance criteria established by the Commission.