# ATTACHMENT A

# PROPOSED CHANGES TO APPENDIX A TECHNICAL SPECIFICATIONS FOR FACILITY OPERATING LICENSES NPF-37, 66, 72, and 77

Revised Pages 3/4 2-9

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#### POWER DISTRIBUTION LIMIT

#### JMITING CONDITION FOR COVERATION

#### ACIION (Continued)

- Within 24 hours of initially being outside the above limits, verify through incore flux mapping and RCS total flow rate comparison that the combination of  $F_{\Delta H}^{N}$  and RCS total flow rate are restored to within the above limits, or neduce THERMAL POWER to less than 5% of RATED THERMAL POWER within the next 2 hours; and
- c. Identify and correct the cause of the out-of-limit condition prior to increasing THERMAL POWER above the reduced THERMAL POWER limit required by ACTION a.2. and/or b. above; subsequent POWER OPERATION

may proceed provided that the combination of  $F^{\rm N}_{\Delta H}$  and indicated RCS

total flow rate are demonstrated, through incore flux mapping and RCS total flow rate comparison, to be within the region of acceptable operation defined by Specification 3.2.3 prior to exceeding the following THERMAL POWER levels:

- A nominal 50% of RATED THERMAL POWER.
- A nominal 75% of RATED THERMAL POWER, and
- Within 24 hours of attaining greater than or equal to 95% of RATED THERMAL POWER.

### SURVEILLANCE REQUIREMENTS

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4.2.3.1 The provisions of Specification 4.0.4 are not applicable.

4.2.3.2 The combination of indicated RCS total flow rate and  $F^N_{\Delta H}$  shall be determined to be within the region of acceptable operation of Specification 3.2.3:

- a. Frior to operation above 75% of RATED THERMAL POWER after each fuel loading, and
- b. At least once per 31 Effective Full Power Days.

4.2.3.3 The indicated RCS total flow rate shall be verified to be within the region of acceptable operation of Specification 3.2.3 at least once per 12 hours when the most recently obtained value of  $F_{\Delta H}^{N}$ , obtained per Specification 4.2.3.2, is assumed to exist.

4.2.3.4 The RCS total flow rate indicators shall be subjected to a CHANNEL CALIBRATION at least once per 18 months.

4.2.3.5 The RCS total flow rate shall be determined by precision heat balance measurement at least once per 18 months. The measurement instrumentation shall be calibrated within seven days prior to the performance of the calorimetric flow measurement. Prior to the precision heat balance measurement, at least two of the four feedwater flow meter venturis shall be visually inspected and, if fouling is found, all venturis shall be cleaned.

\*The specified 18 month interval may be extended to 32 months for Cycle 1 only.

BYRON - UNITE 1 & 2

AMENDMENT NO. X

### POWER DISTRIBUTION LIMITS

#### LIMITING CONDITION FOR OPERATION

#### ACTION (Continued)

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- b. within 24 hours of initially being outside the above limits, verify through incore flux mapping and RCS total flow rate comparison that the combination of  $F^{\rm N}_{\Delta H}$  and RCS total flow rate are restored to within the above limits, or reduce THERMAL POWER to less than 5% of RATED THERMAL POWER within the next 2 hours; and
- Identify and correct the cause of the out-of-limit condition prior C. . to increasing THERMAL POWER above the reduced THERMAL POWER limit required by ACTION a.2. and/or b. above; subsequent POWER OPERATION

may proceed provided that the combination of  $F_{\rm eq}^{\rm N}$ AH and indicated RCS

total flow rate are demonstrated, through incore flux mapping and RCS total flow rate comparison, to be within the region of acceptable operation defined by Specification 3.2.3 prior to exceeding the following THERMAL POWER levels:

- 1. A nominal 50% of RATED THERMAL POWER,
- 2. A nominal 75% of RATED THERMAL POWER, and
- Within 24 hours of attaining greater than or equal to 95% of 3. RATED THERMAL POWER.

### SURVEILLANCE REQUIREMENTS

4.2.3.1 The provisions of Specification 4.0.4 are not applicable.

4.2.3.2 The combination of indicated RCS total flow rate and  $F_{\Delta H}^{N}$  shall be determined to be within the region of acceptable operation of Specification 3.2.3:

- Prior to operation above 75% of RATED THERMAL POWER after each fuel a., loading, and
- At least once per 31 Effective Full Power Days. b.

4.2.3.3 The indicated RCS total flow rate shall be verified to be within the region of acceptable operation of Specification 3.2.3 at least once per 12 hours when the most recently obtained value of  $F_{\Delta H}^{N}$ , obtained per Specification 4.2.3.2, is assumed to exist.

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"The specified 18 month interval may be extended to 32 months for cycle 1 only.

BRAIDWOOD - UNITS 1 & 2

3/4 2-9

AMENDMENT NO. 2

### ATTACHMENT B

## DETAILED DESCRIPTION

### BASIS FOR THE EXISTING TECHNICAL SPECIFICATION:

The existing Specification 4.2.3.5 requires that the "The RCS total flow rate shall be determined by precision heat balance measurement at least once per 18 months." The purpose of this surveillance is to assure that the RCS flowrate is verified after each refueling. This testing is performed as part of PHYSICS TESTS during the startup following each refueling outage. The existing surveillance does not specify any power restrictions for performance of this test. The testing was previously performed at approximately 75% RATED THERMAL POWER (RTP). Currently, this testing is performed at greater than 90% RTP per CECO Engineering recommendations based on Westinghouse report WCAP-12523.

### BASIS FOR THE PREVIOUS TECHNICAL SPECIFICATION CHANGE REQUEST:

The previous request added the statement "prior to exceeding 75% of RATED THERMAL POWER" to Surveillance 4.2.3.5. This phrase was added to put a limitation on when the surveillance could be performed. The concern is that it is not prudent to operate at power for an extended period of time prior to verifying the precision of the RCS flowrate. The power level of 75% was chosen primarily because it is consistent with the RCS flow check required by surveillance 4.2.3.2 and the plant procedures current at the time of our submittal.

The statement "The 24 hour completion time provisions of Specification 4.0.3 are not applicable" was added. Due to the preparation time and required plant conditions, this surveillance cannot be completed in less than 24 hours, therefore, the relief granted by Specification 4.0.3 was not considered a viable alternative. This statement also emphasizes the importance of performing this surveillance prior to extended power operations since no relief for performing the surveillance is allowed through Specification 4.0.3.

# DESCRIPTION OF THE PROPOSED TECHNICAL SPECIFICATION CHANGE REQUEST:

The proposed changes deletes the words "at least once per 18 months" and adds the phrase "prior to completion of PHYSICS TESTS after each fuel loading." This phrase will ensure that the RCS flow precision heat balance measurement is performed prior to resuming normal power operations following each refueling. The 18 month requirement is redundant since requiring the surveillance to be performed prior to completion of PHYSICS TESTS assures performance at approximately this interval. This wording also allows flexibility if the surveillance cannot be performed within 18 months due to extended refueling or maintenance outages. Since the purpose of the 18 month requirement is to ensure that the surveillance is performed prior to extended power operations, we believe the new wording still meets the intent of the original specification. The proposed wording also allows the performance of this surveillance at any power level. This is also consistent with the original specification. This change would allow us to perform the surveillance at greater than 90% RTP per Engineering's recommendations.

The statement "The 24 hour completion time provisions of Specification 4.0.3 are not applicable" is retained but placed in a different position in the paragraph to flow better with the text. This change is purely editor in nature. In addition, we would like to delete the note at the bottom of page 3/4 2 9 since it no longer applies. This change is also editorial.

### BASIS FOR THE PROPOSED TECHNICAL SPECIFICATION CHANGE REQUEST:

Westinghouse Electric Company issued WCAP-12523 in October 1990. In this report, Westinghouse analyzed the design basis for the reactor protection system setpoints. Specific guidance was given on the proper methods for accounting for instrumentation uncertainties. After reviewing this document, CECO Engineering performed calculations to verify the adequacy of current testing methodology. Engineering determined that in order to assure Technical Specifications acceptance criteria were conservative with respect to the analysis, the prevision heat balance should be performed at greater than 90% RTP. Engineering calculations showed that if the precision heat balance was performed at less than 75% RTP, procedural acceptance criteria for RCS flow rate would have to be higher than the Technical Specifications limit. This would be necessary in order to account for the increased instrument uncertainties. In order to avoid this situation, CECo wishes to revise our previous request that would require performing the precision heat balance at less than 75% RTP.

# ATTACHMENT C

### 10CFR 50.92 SIGNIFICANT HAZARDS CONSIDERATION

The Commission may make a final determination that an amendment does not involve a significant hazards consideration if operation of the facility in accordance with the proposed amendment would not:

- Involve a significant increase in the probability or consequences of an accident previously evaluated; or
- Create the possibility of a new or different kind of accident from any accident previously evaluated; or
- Involve a significant reduction in a margin of safety.

Commonwealth Edison has reviewed the proposed changes for significant hazards consideration in accordance with these criteria. The results of this review are given below.

The proposed change provides clarification on when the precision heat balance will be performed. Performance of the surveillance as indicated will ensure that all assumptions made in the accident analysis are valid. Therefore, this change does not result in an increase in the probability or consequences of a previously analyzed accident.

All initial accident assumptions remain valid. No new operating conditions are proposed by this change. Current Technical Specifications allow operation in the manner proposed by this change. Therefore, this change will not create the possibility of a new or different accident.

This change is primarily administrative in nature. The change will not permit operation in a manner prohibited by the current Technical Specifications. This change provides clarification on the performance of Surveillance 4.2.3.5 based on the latest evaluation of instrument uncertainties. The proposed method of testing ensures that initial conditions are maintained and assumed in the analysis. No change is being made to the intent of the Technical Specification. Therefore, this change does not result in the decrease of any margin of safety stated in the Bases of the Technical Specification. Based on the above this change will not increase the probability or consequences of a previously analyzed accident, introduce the possibility of an accident not previously evaluated or decrease the margin of safety. The proposed change is primarily administrative in nature and does not change the Significant Hazards Consideration evaluation provided in Reference a.

### ATTACHMENT D

## ENVIRONMENTAL ASSE3SMENT

Commonwealth Edison has evaluated the proposed amendment against the criteria for an identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21. It has been determined that the proposed change meets the criteria for a categorical exclusion as provided for under 10CFR51.22(c)(9).

The proposed changes provides clarification on the performance of the precision heat balance. This change does not affect the requirements or intent of the Technical Specifications.

The proposed change does not involve a significant hazards consideration as discussed in Attachment C to this letter. Also, this proposed amendment will not involve significant changes in the types or amounts of any radioactive effluents nor does it affect any of the permitted release paths. In addition, this change does not involve a significant increase in individual or cumulative occurrational exposure. Therefore, this change meets the categorical exclusion permitted by 10CFR51.22(c)(9).