ATTACHMENT B

MARKED UP PAGES FOR
PROPOSED CHANGES TO APPENDIX A
TECHNICAL SPECIFICATIONS OF
FACILITY OPERATING LICENSE
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BRAIDWOOD STATION UNIT 2
REVISED PAGES:

3/4 7-1
3/4 7-3

k:nla:bwrd:u2trevi:5

3/4.7.1 TURBINE CYCLE

SAFETY VALVES

LIMITING CONDITION FOR OPERATION

3.7.1.1 All main steam line Code safety valves associated with each steam generator shall be OPERABLE with lift settings as specified in Table 3.7-2.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

a. With four reactor coolant loops and associated steam generators in operation and with one or more main steam line Code safety valves inoperable, operation in MODES 1, 2, and 3 may proceed provided, that within 4 hours, either the inoperable valve is restored to OPERABLE status or the Power Range Neutron Flux High Trip Setpoint is reduced per Table 3.7-1; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.1.1 No additional requirements other than those required by Specification 4.0.5. The provisions of Specification 4.0.4 are not applicable for Braidwood, Unit 1, Cycle 5, until the initial entry into MODE 2. The provisions of Specification 4.0.4 are not applicable for Braidwood Unit 2 until the initial entry into Mode 2 following forced outage A2F27.

TABLE 3.7-2

STEAM LINE SAFETY VALVES PER LOOP

VALVE NUMBER	LIFT SETTING (±1%)*~~#~~	ORIFICE SIZE
MS013(A-D)	1235 psig	16 in^2
MS014(A-D)	1220 psig	16 in^2
MS015(A-D)	1205 psig	16 in^2
MS016(A-D)	1190 psig	16 in^2
MS017(A-D)	1175 psig	16 in^2

*The lift setting pressure shall correspond to ambient conditions of the valve at nominal operating temperature and pressure.

~~#Main steam line Code safety valve lift settings may have a ±3% tolerance until May 9, 1994, by which time the lift settings will be reset to ±1%.~~

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Commonwealth Edison has evaluated this proposed amendment and determined that it involves no significant hazards considerations. According to 10 CFR 50.92(c), a proposed amendment to an operating license involves no significant hazards considerations if operation of the facility in accordance with the proposed amendment would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated; or,

2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or

3. Involve a significant reduction in a margin of safety.

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

In the analysis performed for a ± 3% as-found MSSV setpoint, all of the applicable Loss of Coolant Accident (LOCA) and non-LOCA design basis acceptance criteria remain valid both for the transients evaluated and the single event analyzed, Loss of External Load/Turbine Trip.

The MSSVs are actuated after accident initiation to protect the secondary systems from overpressurization. Increasing the as-found setpoint tolerance will not result in any hardware modification to the MSSVs. Therefore, there is not an increase in the likelihood of spurious opening of a MSSV. Sufficient margin exists between the normal steam system operating pressure and the valve setpoint with the increased tolerance to preclude an increase in the probability of actuating the valves.

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The peak primary and secondary pressures remain below 110% of design at all times. The Departure from Nucleate Boiling Ratio (DNBR) and Peak Clad Temperature (PCT) values remain within the specified limits of the licensing basis. Although increasing the valve setpoint tolerance may increase the steam release from the ruptured steam generator above the UFSAR value by approximately 2%, the Steam Generator Tube Rupture (SGTR) analysis indicates that the calculated break flow is still less than the value reported in the UFSAR. Therefore, the radiological analysis indicates that the slight increase in the steam release is offset by the decrease in the break flow such that the offsite radiation doses are less than those reported in the UFSAR. The evaluation also concluded that the existing mass releases used in the offsite dose calculation for the remaining transients (i.e., steamline break, rod ejection) are still applicable. Therefore, based on the above, there is no increase in the dose releases.

The effects of increased tolerances for MSSV setpoints on the LOCA safety analyses has been previously performed for VANTAGE 5 fuel. Calculations performed to determine the response to a hypothetical large break LOCA do not model the MSSVs, since a large break LOCA is characterized by a rapid depressurization of the reactor coolant system below the pressure of the steam generators. Thus, the calculated consequences of a large break LOCA are not dependent upon assumptions of MSSV performance. Therefore, the large break LOCA analysis results are not adversely affected by revising setpoint tolerances.

The small break LOCA analyses presented in Appendix C of the Byron/Braidwood Stations Units 1 and 2 VANTAGE 5 Reload Transition Safety Report were performed using a 3% higher safety valve setpoint pressure. The standard 3% accumulation between valve actuation and full flow was also accounted for in the analyses. These analyses calculated peak cladding temperatures well below the allowed 2200° F limit as specified in 10 CFR 50.46 demonstrating that the change to the MSSV setpoint tolerance can be accommodated for small break LOCAs.

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Neither the mass and energy release to the containment following a postulated LOCA, nor the containment response following the LOCA analysis, credit the MSSV in mitigating the consequences of an accident. Therefore, changing the MSSV lift setpoint tolerances would have no impact on the containment integrity analysis. In addition, based on the conclusion of the transient analysis, the change to the MSSV tolerance will not affect the calculated steamline break mass and energy releases inside containment.

The loss of load/turbine trip event was analyzed in order to quantify the impact of the setpoint tolerance relaxation. As was demonstrated in the evaluation, all applicable acceptance criteria for this event have been satisfied and the conclusions presented in the UFSAR remain valid. The conclusions presented in the Overpressure Protection Report remain valid. Therefore, the probability or consequences of an accident previously evaluated in the UFSAR would not be increased as a result of increasing the MSSV lift setpoint as found tolerance to 3% above or below the current Technical Specification lift setpoint value.

The probability of an accident occurring will not be affected by granting this amendment request.

Therefore, the requested amendment does not significantly increase the probability or consequences of an accident previously evaluated.

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

No new system configurations are introduced, and no equipment is being operated in a new or different manner than has been previously analyzed. Accordingly, no new or different failure modes are being created. Increasing the as-left setpoint tolerance on the MSSV does not create the possibility of an accident which is different than any already evaluated in the UFSAR. Increasing the as-left lift setpoint tolerance on the MSSVs does not introduce a new accident initiator

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mechanism. No new failure modes have been defined for any system or component important to safety nor has any new limiting single failure been identified. No accident will be created that will increase the challenge to the MSSVs and result in increased actuation of the valves. Therefore, the possibility of an accident different than any already evaluated is not created.

C.The proposed change does not involve a significant reduction in a margin of safety.

Although the proposed amendment is requested for equipment utilized to prevent overpressurization on the secondary side and to provide an additional heat removal path, increasing the as-left lift setpoint tolerance on the MSSVs will not adversely affect the operation of the reactor protection system, any of the protection setpoints or any other device required for accident mitigation.

The proposed increase in the as-left MSSV lift setpoint tolerance will not invalidate the LOCA and non-LOCA conclusions presented in the UFSAR accident analyses. The new loss of load/turbine trip analysis concluded that all applicable acceptance criteria are still satisfied. For all the UFSAR non-LOCA transients, the DNB design basis, primary and secondary pressure limits and dose release limits continue to be met. Peak cladding temperatures remain well below the limits specified in 10 CFR 50.46. Thus, there is no reduction in the margin of safety.

Therefore, based upon the above evaluation, Commonwealth Edison has concluded that these changes involve no significant hazards considerations.

ATTACHMENT D

ENVIRONMENTAL ASSESSMENT FOR
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Commonwealth Edison has evaluated the proposed amendment and determined that it meets the criteria for a categorical exclusion set forth in 10 CFR 51.22(c)(9). This determination is based upon the following: The proposed amendment changes requirements regarding the installation and use of facility components located within the restricted area (as defined in 10 CFR 20) and surveillance requirements; and the proposed amendment involves no significant hazards considerations, no change in the amount or type of any effluent that may be released offsite, and no increase in individual or cumulative occupational radiation exposure. Pursuant to 10 CFR 51.22(b), neither an environmental impact statement nor an environmental assessment is necessary for the proposed amendment.

Attachment E

JUSTIFICATION OF EXIGENT REQUEST

This exigent change could not be avoided because CECo could not foresee that the Unit 2 Main Steam Safety Valves (MSSV)s could not be reset prior to May 9, 1994. The following provides details as to the events leading up to the submittal of this exigent request.

At about 1730 hours on March 9, 1994, Braidwood System Engineering received a phone call from Furmanite Company indicating that an improper value for mean seat area was used in the Trevitest calculation for Main Steam Safety Valve setpoints. Calculations to determine the as-left condition of the MSSVs for each unit based on the revised mean seat area were completed at approximately 1500 hours on March 10, 1994. Results indicate that 17 valves each for Braidwood Units 1 and 2 fall outside the Technical Specification requirement of ±1%. All valves for both units fall within ±3% of the nominal setpoints for the individual valves.

On March 10, 1994, CECo requested that the NRC exercise its discretion not to enforce compliance with the Technical Specification 3.7.1.1 action statement for Byron Station Units 1 and 2 and Braidwood Station Unit 2. A formal Notice of Enforcement Discretion (NOED) was requested by CECo on March 11, 1994, and was transmitted in Reference 3.

Reference 2 transmitted Braidwood's requests for a one time amendment for Specification Section 3/4.7.1 to allow Unit 1 to reach MODE 3 to reset the Safety Valves following the current refueling outage, and to allow Unit 2 to operate until May 9, 1994, by which time the Safety Valves would have been reset. This schedule was based on unit operating schedules and Furmanite availability. On April 18, 1994, Reference 3 transmitted the NRC Safety Evaluation for this amendment request

At 1539 hours on April 5, 1994, Braidwood Unit 2 reactor tripped as a result of a Main Power Transformer (MPT) fault. The MPT sustained enough damage to require replacement. During this reactor trip, all systems functioned normally except for Control Bank B(CBB)control rod K-2 which failed to fully insert.

The Trevitesting procedure involves lifting the MSSV very slightly off its closed seat with a resultant small steam release. Therefore, as a conservative measure, to preclude the remote possibility of a positive reactivity transient with CBB rod K-2 not fully inserted, the MSSVs will not be reset until the problem with CBB rod K-2 has been resolved. The combination of the MPT replacement schedule and CBB rod K-2 repair plan will prevent Braidwood Unit 2 from resetting the MSSVs by the original date of May 9, 1994.

Accordingly, CECo is requesting the proposed Technical Specification amendment to allow Braidwood Unit 2 to reach Mode 3 to reset the valves following the current forced outage.

Since the April 5th trip of Unit 2, CECo has been in almost continual communications with the NRC appraising them of the unit's status and the pending need to process this exigent amendment request.