Attachment
Marked-up Pages for Proposed Changes
"Application for Amendment to Appendix A, Technical Specifications, Relocation of Technical Specification 3/4.6.I, "Primary System Boundary – Chemistry" "

REVISED PAGES

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LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

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3.6 - LIMITING CONDITIONS FOR OPERATION

I. Chemistry

The chemistry of the reactor coolant system shall be maintained within the limits specified in Table 3.6.I-1.

APPLICABILITY:

OPERATIONAL MODE(s) 1, 2[a] and 3[a].

ACTION:

1. In OPERATIONAL MODE 1:

   a. With the conductivity, chloride concentration or pH exceeding the limit specified in Table 3.6.I-1;

      1) For ≤72 hours during one continuous time interval, and

      2) For ≤336 hours per year for conductivity and chloride concentration, and

      3) With the conductivity ≤10 μmho/cm at 25°C and with the chloride concentration ≤0.5 ppm,

      the condition does not need to be reported to the Commission.

   b. With the conductivity, chloride concentration or pH exceeding the limit specified in Table 3.6.I-1;

      1) For >72 hours during one continuous time interval, or

4.6 - SURVEILLANCE REQUIREMENTS

I. Chemistry

The reactor coolant shall be determined to be within the specified chemistry limit by:

1. Measurement prior to pressurizing the reactor during each startup, if not performed within the previous 72 hours.

2. Analyzing a sample of the reactor coolant for:

   a. Chlorides at least once per:

      1) 72 hours, and

      2) 8 hours whenever conductivity is greater than the limit in Table 3.6.I-1.

   b. Conductivity at least once per 72 hours.

   c. pH at least once per 8 hours whenever conductivity is greater than the limit in Table 3.6.I-1.

3. Continuously recording the conductivity of the reactor coolant, or, when the continuous recording conductivity monitor is inoperable, obtaining an in-line conductivity measurement at least once per 4 hours.

a The provisions of Specification 3.0.D are not applicable during unit shutdown when entering OPERATIONAL MODE(s) 2 and 3 from OPERATIONAL MODE 1.

3.6 - LIMITING CONDITIONS FOR OPERATION	4.6 - SURVEILLANCE REQUIREMENTS
2) For >336 hours per year for conductivity and chloride concentration. Be in at least STARTUP within the next 8 hours. c. With the conductivity >10 μmho/cm at 25°C or chloride concentration >0.5 ppm, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours. 2. In OPERATIONAL MODE(s) 2 and 3 with the conductivity, chloride concentration or pH exceeding the limit specified in Table 3.6.I-1 for >48 hours during one continuous time interval, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.	4. Performance of a CHANNEL CHECK of the continuous conductivity monitor with an in-line flow cell at least once per: a. 7 days, and b. 24 hours whenever conductivity is greater than the limit in Table 3.6.I-1.

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TABLE 3.6.I-1

REACTOR COOLANT SYSTEM CHEMISTRY LIMITS

OPERATIONAL MODE(s)	Chlorides	Conductivity (μmhos/cm @25°C)	pH
1	≤0.2 ppm	≤1.0	5.6≤ pH ≤8.6
2 and 3	≤0.1 ppm	≤2.0	5.6≤ pH ≤8.6

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Each safety/relief valve is equipped with diverse position indicators which monitor the tailpipe acoustic vibration and temperature. Either of these provide sufficient indication of safety/relief valve position for normal operation.

3/4.6.G Leakage Detection Systems

The RCS leakage detection systems required by this specification are provided to monitor and detect leakage from the reactor coolant pressure boundary. Limits on leakage from the reactor coolant pressure boundary are required so that appropriate action can be taken before the integrity of the reactor coolant pressure boundary is impaired. Leakage detection systems for the reactor coolant system are provided to alert the operators when leakage rates above the normal background levels are detected and also to supply quantitative measurement of leakage rates. Leakage from the reactor coolant pressure boundary inside the drywell is detected by at least one or two independently monitored variables, such as sump level changes and drywell atmosphere radioactivity levels. The means of quantifying leakage in the drywell is the drywell floor drain sump pumps. With the drywell floor drain sump pump system inoperable, no other form of monitoring can provide the equivalent information. However, primary containment atmosphere sampling for radioactivity can provide indication of changes in leakage rates.

3/4.6.H Operational Leakage

The allowable leakage rates from the reactor coolant system have been based on the predicted and experimentally observed behavior of cracks in pipes. The normally expected background leakage due to equipment design and the detection capability of the instrumentation for determining system leakage was also considered. The evidence obtained from experiments suggests that for leakage somewhat greater than that specified for UNIDENTIFIED LEAKAGE the probability is small that the imperfection or crack associated with such leakage would grow rapidly. However, in all cases, if the leakage rates exceed the values specified or the leakage is located and known to be PRESSURE BOUNDARY LEAKAGE, the reactor will be shutdown to allow further investigation and corrective action.

An UNIDENTIFIED LEAKAGE increase of more than 2 gpm within a 24 hour period is an indication of a potential flaw in the reactor coolant pressure boundary and must be quickly evaluated. Although the increase does not necessarily violate the absolute UNIDENTIFIED LEAKAGE limit, IGSCC susceptible components must be determined not to be the source of the leakage within the required completion time.

3/4.6.I Chemistry

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The water chemistry limits of the reactor coolant system are established to prevent damage to the reactor materials in contact with the coolant. Chloride limits are specified to prevent stress corrosion cracking of the stainless steel. The effect of chloride is not as great when the oxygen

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concentration in the coolant is low, thus the 0.2 ppm limit on chlorides is permitted during POWER OPERATION.

Conductivity measurements are required on a continuous basis since changes in this parameter are an indication of abnormal conditions. When the conductivity is within limits, the pH, chlorides and other impurities affecting conductivity must also be within their acceptable limits. With the conductivity meter inoperable, additional samples must be analyzed to ensure that the chlorides are not exceeding the limits.

Action 1 permits temporary operation with chemistry limits outside of the limits required in OPERATIONAL MODE 1 without requiring Commission notification. The surveillance requirements provide adequate assurance that concentrations in excess of the limits will be detected in sufficient time to take corrective action.

3/4.6.J Specific Activity

The limitations on the specific activity of the primary coolant ensure that the 2 hour thyroid and whole body doses resulting from a main steam line failure outside the containment during steady state operation will not exceed small fractions of the dose guidelines of 10 CFR 100. The values for the limits on specific activity represent interim limits based upon a parametric evaluation by the NRC of typical site locations. These values are conservative in that specific site parameters, such as site boundary location and meteorological conditions, were not considered in this evaluation.

The ACTION statement permitting POWER OPERATION to continue for limited time periods with the primary coolant's specific activity greater than 0.2 microcuries per gram DOSE EQUIVALENT I-131, but less than or equal to 4.0 microcuries per gram DOSE EQUIVALENT I-131, accommodates possible iodine spiking phenomenon which may occur following changes in THERMAL POWER. Information obtained on iodine spiking will be used to assess the parameters associated with spiking phenomena. A reduction in frequency of isotopic analysis following power changes may be permissible if justified by the data obtained.

Closing the main steam line isolation valves prevents the release of activity to the environs should a steam line rupture occur outside containment. The surveillance requirements provide adequate assurance that excessive specific activity levels in the reactor coolant will be detected in sufficient time to take corrective action.

3/4.6.K Pressure/Temperature Limits

All components in the reactor coolant system are designed to withstand the effects of cyclic loads due to system temperature and pressure changes. These cyclic loads are introduced by normal load transients, reactor trips, and startup and shutdown operations. The various categories of load cycles used for design purposes are provided in Section 4 of the FSAR. During startup and

Attachment
Significant Hazards Consideration
"Application for Amendment to Appendix A, Technical Specifications, Relocation of Technical Specification 3/4.6.I, "Primary System Boundary – Chemistry" "

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

Involve a significant increase in the probability of occurrence or consequences of an accident previously evaluated;

Create the possibility of a new or different kind of accident from any previously analyzed; or

Involve a significant reduction in a margin of safety.

ComEd proposes to relocate, to administrative controls, the chemistry limits provided in Technical Specifications Section 3/4.6.I, Primary System Boundary - Chemistry.

The determination that the criteria set forth in 10 CFR 50.92 (c) is met for this amendment request is indicated below:

Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed changes simplify the TS, meet regulatory requirements for relocated TS's, and implement the recommendations of the NRC Final Policy Statement on TS improvements. The Chemistry requirements will be relocated to the Updated Final Safety Analysis Report (UFSAR) and to applicable station procedures. Future changes to these requirements will be controlled by 10 CFR 50.59. The proposed changes are administrative in nature and do not involve any modification to any plant equipment or affect plant operation. Therefore, the proposed changes do not involve a significant increase in the probability or consequences of any previously evaluated accident.

Consequently, this proposed amendment does not involve a significant increase in the probability or consequences of any accident previously evaluated.

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Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed changes are administrative in nature, do not involve any physical alterations to any plant equipment, and cause no change in the method by which any safety related system performs its function. Therefore, this proposed TS amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated.

Does the change involve a significant reduction in a margin of safety?

The proposed amendment represents the relocation of current requirements, which are based on generic guidance or previously approved provisions for other stations. The proposed changes are administrative in nature and do not adversely affect existing plant safety margins or the reliability of the equipment assumed to operate in the safety analysis. The proposed changes have been evaluated and found to be acceptable for use at Dresden Nuclear Power Station. Since the proposed changes are administrative in nature, and are based on NRC accepted provisions which have been adopted at other nuclear facilities, and maintain the necessary levels of system reliability, the proposed changes do not involve a significant reduction in the margin of safety.

Therefore, based upon the above evaluation, ComEd has concluded that these changes do not constitute a significant hazards consideration.

Attachment
Environmental Assessment
"Application for Amendment to Appendix A, Technical Specifications, Relocation of Technical Specification 3/4.6.I, "Primary System Boundary – Chemistry" "

ComEd has evaluated this proposed operating license amendment request against the criteria for identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21. ComEd has determined that this proposed license amendment request meets the criteria for a categorical exclusion set forth in 10 CFR 51.22(c)(9) and as such, has determined that no irreversible consequences exist in accordance with 10 CFR 50.92(b). This determination is based on the fact that this change is being proposed as an amendment to a license issued pursuant to 10 CFR 50 that changes a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or that changes an inspection or a surveillance requirement, and the amendment meets the following specific criteria:

(i) The amendment involves no significant hazards consideration.

As demonstrated in Attachment 3, this proposed amendment does not involve any significant hazards consideration.

(ii) There is no significant change in the types or significant increase in the amounts of any effluent that may be released offsite.

The proposed change is administrative in nature. There will be no change in the types or significant increase in the amounts of any effluents released offsite.

(iii) There is no significant increase in individual or cumulative occupational radiation exposure.

The proposed changes will not result in changes in the operation or configuration of the facility. There will be no change in the level of controls or methodology used for processing of radioactive effluents or handling of solid radioactive waste, nor will the proposal result in any change in the normal radiation levels within the plant. Therefore, there will be no increase in individual or cumulative occupational radiation exposure resulting from this change.