

## ATTACHMENT B

### PROPOSED CHANGES TO APPENDIX A, TECHNICAL SPECIFICATIONS OF FACILITY OPERATING LICENSES DPR-29 AND DPR-30

#### REVISED PAGES

UNIT ONE (DPR-29)

3.8/4.8 - 20

UNIT TWO (DPR-30)

3.8/4.8 - 14b

#### SUMMARY OF CHANGES

Page 3.8/4.8-20 (DPR-29)  
Page 3.8/4.8-14b (DPR-30)

To section 4.8.H.2.b(2) - change the  $\Delta T$  requirement to read "Operability of inlet heater demonstrates heater  $\Delta T$  determined by the following formula:

$$\Delta T \geq 28.5 - (0.0075F);$$

where  $\Delta T$  is the differential temperature and F is the flow (cfm) at which the test is performed.

This change reflects technical analyses which demonstrate that the heater can maintain relative humidity to less than 70% at all flows.

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DPR-29

- 2) In-place test the charcoal adsorber banks with halogenated hydrocarbon tracer to verify leak tight integrity.
  - 3) Remove one carbon test canister from the charcoal adsorber. Subject this sample to a laboratory analysis to verify methyl iodide removal efficiency.
- b. The results of in-place halogenated hydrocarbon tests at 2000 cfm ( $\pm 10\%$ ) on the charcoal banks shall show  $\leq 1\%$  penetration.
- c. The results of laboratory carbon sample analysis shall show  $\geq 90\%$  methyl iodide removal efficiency when tested at 130°C and 95% R.H.
3. Postmaintenance Requirements
- a. After any maintenance or heating that could affect the HEPA filter or HEPA filter mounting frame leaked tight integrity, the results of the in-place DOP tests at 2000 cfm ( $\pm 10\%$ ) on HEPA filters shall show  $\leq 1\%$  DOP penetration.
- b. At least once per operating cycle, but not to exceed 18 months, the following conditions shall be demonstrated:
- 1) Pressure drop across the combined filters is less than 6 inches of water at 2000 cfm ( $\pm 10\%$ ) flow rate.
  - 2) Operability of inlet heater demonstrates heater  $\Delta T$   ~~$\geq 15^\circ\text{F}$~~  determined by the following formula:  
$$\Delta T \geq 28.5 - (0.0075F);$$
  
where  $\Delta T$  is the differential temperature and  $F$  is the flow (cfm) at which the test is performed.
3. Postmaintenance Testing
- a. After any maintenance or testing that could affect the leak tight integrity of the HEPA filters, perform in-place DOP tests on the HEPA filters in accordance with Specification 3.8.H.2.a.

- 3) Remove carbon test canister from the charcoal absorber. Subject this sample to a laboratory analysis to verify methyl iodine removal efficiency.
- b. At least once per operating cycle, but not to exceed 18 months, the following conditions shall be demonstrated:
  - 1) Pressure drop across the combined filters is less than 6 inches of water at 2000 cfm ( $\pm 10\%$ ) flow rate.
  - 2) Operability of inlet heater demonstrates heater  $\Delta T$  determined by the following formula:  
$$\Delta T \geq 28.5 - (0.0075F);$$
where  $\Delta T$  is the differential temperature and F is the flow (cfm) at which the test is performed.

### 3. Postmaintenance Requirements

- a. After any maintenance or heating that could affect the HEPA filter or HEPA filter mounting frame leak-tight integrity, the results of the in-place DOP tests at 2000 cfm ( $\pm 10\%$ ) on HEPA filters shall show  $\leq 1\%$  DOP penetration.
- b. After any maintenance or testing that could affect the charcoal absorber leaktight integrity, the results of in-place halogenated hydrocarbon tests at 2000 cfm ( $\pm 10\%$ ) shall show  $\leq 1\%$  penetration.

### 3. Postmaintenance Testing

- a. After any maintenance or testing that could affect the leaktight integrity of the HEPA filters, perform in-place DOP tests on the HEPA filters in accordance with Specification 3.8.H.2.a.
- b. After any maintenance or testing that could affect the leaktight integrity of the charcoal absorber banks, perform halogenated hydrocarbon tests on the charcoal absorbers in accordance with Specification 3.8.H.2.b.

## ATTACHMENT C

### **EVALUATION OF SIGNIFICANT HAZARDS CONSIDERATION**

Commonwealth Edison has evaluated the proposed Technical Specification and has determined that it does not represent a significant hazards consideration. Based on the criteria which defines a significant hazards consideration established in 10 CFR 50.92(c):

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

The safety objective of the control room air filtration unit is to provide filtered air to pressurize the control room after a design basis accident to limit control room doses within the limits of GDC-19. To accomplish this objective, outside air is passed through a roughing filter, heated to assure that relative humidity is below 70%, filtered through a HEPA filter/charcoal adsorber combination and routed to a booster fan and the "B" train of the control room HVAC. The 70% relative humidity criteria assures that the charcoal adsorbers will function efficiently to limit control room doses.

The proposed amendment provides revised operability criteria for the differential temperature requirement of the CREF System heater. This revised criteria is based upon the flow at which the heater operability test is performed.

The proposed Technical Specification does not involve any new operation of the plant or affect any accident initiators or precursors. The change does not involve the new installation of equipment. As such, the probability of the accident remains unchanged.

The proposed amendment does not affect the consequences of the accident. The design bases for the heater is to reduce the relative humidity of the atmosphere to the inlet of the charcoal adsorbers to less than 70% to assure efficient charcoal adsorber performance. To achieve a relative humidity of less than 70%, assuming that the incoming air supply is less than 95°F wet-bulb temperature, a 12°F  $\Delta T$  is required. The Technical Specification requirement of 15°F  $\Delta T$  ensures that the relative humidity of the inlet air to the charcoal adsorbers is less than 70% under all flow conditions. This is unnecessarily conservative when the system is successfully tested at flows greater than 1800 cfm. The proposed amendment revises the differential temperature requirement to establish a  $\Delta T$  range of 15°F to 12°F based on a system flow of 1800 cfm to 2200 cfm, respectively. This proposed differential temperature and associated flow requirement will ensure that the relative humidity at the charcoal adsorber inlet remains below 70%, provided that the incoming air supply remains below 95° wet-bulb temperature. As such, the proposed differential temperature requirement will ensure that relative humidity will be maintained at less than 70%. This in turn will ensure efficient charcoal adsorber performance and thus maintain control room doses below the requirements of GDC-19.

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

The design objective of the CREF System is to provide filtered outside air to pressurize the control room to limit the control room dose during and after the design basis accident. The control room air filtration unit does not affect any accident precursors or accident initiators. The proposed amendment requests revised differential temperature criteria based on flow conditions, in order to assure that relative humidity to the inlet of the charcoal adsorbers is maintained below 70%, thereby assuring control room doses are maintained below GDC-19 requirements. As such, the proposed amendment does not involve any new modes of operation and does not involve the installation of new equipment. Consequently, the proposed amendment does not create the possibility of a new or different kind of an accident from any previously evaluated.

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

The CREF System is designed to ensure that control room occupants are not subject to excessive radiation doses during an accident. The limiting dose which can be received by control room occupants is defined in GDC-19. The control room dose is dependent on the efficiency of the charcoal adsorbers which in turn is dependent upon the relative humidity at the inlet of the charcoal adsorbers. Regulatory Guide 1.52, "Design, Testing and Maintenance Criteria for Post Accident Engineered-Safety-Feature Atmosphere Cleanup Air Filtration and Adsorption Units of Light-Water-Cooled Nuclear Power Plants" requires that the relative humidity is maintained at less than 70%.

The existing Technical Specification requires that the heater maintain a  $15^{\circ} \Delta T$  to assure that the atmosphere at the inlet of the charcoal adsorber is maintained at less than 70% to assure efficient charcoal adsorber performance thereby maintaining control room doses within the limits of GDC-19. The  $15^{\circ} \Delta T$  is valid for the range of all temperature/humidity conditions up to an outside air temperature of 95°F wet-bulb temperature.

The proposed amendment requests a revised criteria for the differential temperature requirement which will ensure that inlet relative humidity will be limited to less than 70%, based on outside air temperature/humidity conditions which correspond to 95°F wet-bulb temperature. The requested differential temperature criteria provides a range of  $\Delta T$ s required for the range of operable flows. As a result, control room doses will remain below GDC-19 limits.

The margin of safety is not significantly reduced with this proposed change since control room doses will be maintained below GDC-19 limits.

The proposed amendment does not involve a significant relaxation of the criteria used to establish safety limits, a significant relaxation of the bases for the Limiting Safety System Settings or a significant relaxation of the bases for the Limiting Conditions for Operation. Therefore, based on the criteria of 10 CFR 50.92(c), the proposed change does not constitute a significant hazards consideration.



## ATTACHMENT D

### ENVIRONMENTAL ASSESSMENT

Commonwealth Edison has verified through meteorological data and analytical calculations, that decreasing the differential temperature criteria of the Control Room Emergency Filtration System would not result in any increase in dose to control room personnel; therefore, the environmental consequences remain unchanged.

The request does not involve a change in the installation or use of the facilities or components located within the restricted areas as defined in 10 CFR 20. This Technical Specification amendment does not affect the operation of the reactor or core cooling mechanism following a postulated loss-of-cooling accident, and therefore will not increase the fission product source term. As a result of the analysis which demonstrates that the Control Room Emergency Filtration System will function as designed, Commonwealth Edison has determined that this request does not involve a significant increase in the amounts or change in the types of effluents that may be released offsite. The analysis also demonstrates that there is no increase in individual or cumulative occupational radiation exposure. Accordingly, this Technical Specification Amendment meets the eligibility criteria for categorical exclusion as defined in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with granting of this Technical Specification Amendment.