

DUKE POWER COMPANY
OCONEE NUCLEAR STATION
ATTACHMENT 1

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- (c) If all 230 kV transmission lines are lost, restore at least one of the inoperable 230kV offsite sources to operable status within 24 hours or be in at least hot standby within the next 6 hours. With only one offsite source restored, restore at least two 230kV offsite circuits to operable status within 72 hours from time of initial loss or be in at least hot standby within the next 6 hours and in cold shutdown within the following 30 hours.
- (d) After loss of all 230 kV transmission lines, this information shall be reported within 24 hours to the U.S. NRC Regional Office, Region II. If the outage is expected to exceed 24 hours, a written report shall be submitted detailing the circumstances of the outage and the estimated time to return the 230 kV transmission lines to operating condition.

3.7.6 In the event that all conditions of Specification 3.7.1 are met, and planned tests or maintenance are required which will make both Keowee units unavailable, the 4160 volt standby buses shall first be energized by a Lee gas turbine through the 100 kV transmission circuit and shall be separate from the system grid and offsite non-safety-related loads. The reactor shall then be permitted to remain critical for periods not to exceed 72 hours with both Keowee units unavailable.

Prior to hot restart of a reactor from a tripped condition, the causes and the effects of the shutdown shall be established and analyzed. A restart will be permitted if the cause of such trips is the result of error or of minor equipment malfunctions. A restart will not be permitted if the trip is a result of system transients or valid protection system action.

3.7.7 In the event that all conditions of Specification 3.7.1 are met except that both Keowee hydro units become unavailable for unplanned reasons, the reactor shall be permitted to remain critical for periods not to exceed 24 hours provided the 4160 volt standby buses are energized within 1 hour by the Lee gas turbine through the 100 kV transmission circuit and it shall be separate from the system grid and all offsite non-safety-related loads.

Prior to hot restart of a reactor from a tripped condition, the causes and the effects of the shutdown shall be established and analyzed. A restart will be permitted if the cause of such trips is the result of error or of minor equipment malfunctions. A restart will not be permitted if the trip is a result of system transients or valid protection system action.

3.7.8* In the event that all conditions in Specification 3.7.1 are met except that the Keowee Main Step-up Transformer is expected to be unavailable for longer than the test or maintenance period of 72 hours, as allowed by 3.7.2(a), the reactor may be heated above 200 degrees F if previously shutdown or be permitted to remain critical or be restarted provided the following restrictions are observed:

- (c) If all 230 kV transmission lines are lost, restore at least one of the inoperable 230kV offsite sources to operable status within 24 hours or be in at least hot standby within the next 6 hours. With only one offsite source restored, restore at least two 230kV offsite circuits to operable status within 72 hours from time of initial loss or be in at least hot standby within the next 6 hours and in cold shutdown within the following 30 hours.
- (d) After loss of all 230 kV transmission lines, this information shall be reported within 24 hours to the U.S. NRC Regional Office, Region II. If the outage is expected to exceed 24 hours, a written report shall be submitted detailing the circumstances of the outage and the estimated time to return the 230 kV transmission lines to operating condition.

3.7.6 In the event that all conditions of Specification 3.7.1 are met, and planned tests or maintenance are required which will make both Keowee units unavailable, the 4160 volt standby buses shall first be energized by a Lee gas turbine through the 100 kV transmission circuit and shall be separate from the system grid and offsite non-safety-related loads. The reactor shall then be permitted to remain critical for periods not to exceed 72 hours with both Keowee units unavailable.

Prior to hot restart of a reactor from a tripped condition, the causes and the effects of the shutdown shall be established and analyzed. A restart will be permitted if the cause of such trips is the result of error or of minor equipment malfunctions. A restart will not be permitted if the trip is a result of system transients or valid protection system action.

3.7.7 In the event that all conditions of Specification 3.7.1 are met except that both Keowee hydro units become unavailable for unplanned reasons, the reactor shall be permitted to remain critical for periods not to exceed 24 hours provided the 4160 volt standby buses are energized within 1 hour by the Lee gas turbine through the 100 kV transmission circuit and it shall be separate from the system grid and all offsite non-safety-related loads.

Prior to hot restart of a reactor from a tripped condition, the causes and the effects of the shutdown shall be established and analyzed. A restart will be permitted if the cause of such trips is the result of error or of minor equipment malfunctions. A restart will not be permitted if the trip is a result of system transients or valid protection system action.

3.7.8* In the event that all conditions in Specification 3.7.1 are met except that the Keowee Main Step-up Transformer is expected to be unavailable for longer than the test or maintenance period of 72 hours, as allowed by 3.7.2(a), the reactor may be heated above 200 degrees F if previously shutdown or be permitted to remain critical or be restarted provided the following restrictions are observed:

- * Provided the restrictions of Specification 3.7.8 are observed, a one-time allowable outage time of ten days is granted to allow replacement of PCB-9.

DUKE POWER COMPANY
OCONEE NUCLEAR STATION
ATTACHMENT 2
TECHNICAL JUSTIFICATION

Technical Justification

Replacement of Power Circuit Breakers in the 230kV switchyard has been ongoing for the last two years. The 10CFR50.59 evaluation of the modification indicated that no changes to Technical Specifications were required and no unreviewed safety questions were created, thus prior NRC approval is not required. However, to implement the modification this proposed amendment was deemed necessary in order to avoid shutdown of all three Oconee units. Upon NRC approval, this amendment will allow a one-time extension of the allowable outage time for PCB-9 from 72 hours to 10 days.

The purpose of the Oconee 230 kV Switchyard (see FSAR Figure 8.1-1) is to provide a reliable interface between Oconee generating units (Units 1 and 2) and the 230 kV Duke transmission line network. The switchyard provides multiple connections for distributing power from Oconee Units 1 and 2 to the 230 kV transmission lines and for feeding the power to the unit auxiliary loads, during the unit start-ups or shutdowns. The switchyard has 24 PCBs which are used for operation and protection. Each PCB is provided with two separate tripping circuits/coils for the redundant tripping operation. When an abnormal power condition is detected by protective relays and removal of the line or bus experiencing a fault is necessary, the protective relaying circuit will energize the tripping coil(s) to trip the breaker. Each PCB is also provided with a closing coil circuit. The closing coil circuit is connected to the relaying scheme in such a way so the operation can be initiated remotely by the operators in the control room and supervised by the protective relay scheme. Each PCB has a current interrupting rating of 43 kA. This modification will replace the 230 kV switchyard PCBs with ones capable of interrupting 67.5 kA of fault current.

PCB-9 is explicitly identified in Technical Specification 3.7.1(b)2 as part of the overhead emergency power path. In the event of inoperability of an emergency power path, an allowable outage time of 72 hours has been established in Specification 3.7.2(a). Risk associated with inoperability of the overhead emergency power path for longer than 72 hours has previously been reviewed and found acceptable by the NRC. Specifically, Specification 3.7.8 establishes a 28 day special inoperability period for the overhead emergency power path due to Keowee Main Step-up Transformer unavailability. The following restrictions are included within Specification 3.7.8:

- (a) Prior to heating the reactor above 200 degrees F or prior to the restart of the shutdown reactor or within 72 hours of the loss of the Keowee Main Step-up Transformer, the 4160 volt standby buses shall be energized by a Lee gas turbine through the 100 kV circuit. The Lee gas turbine and 100 kV transmission circuit shall be electrically separate from the system grid and off-site and non-safety related loads.
- (b) A Keowee hydro unit shall be connected to the underground feeder circuit and this path shall be verified operable within 1 hour and weekly thereafter.
- (c) The remaining Keowee Hydro Unit shall be available to the underground feeder circuit.

- (d) Operating in this mode is restricted to periods not to exceed 28 days and the provisions of this specification may be utilized without prior NRC approval. The U.S. NRC Regional Office, Region II, will be notified within 24 hours.

The proposed amendment in Attachment 1 will expand the scope of Specification 3.7.8 on a one-time basis to allow inoperability of the overhead emergency path due to PCB-9 unavailability for 10 days. Further justification for the expansion of the scope of Specification 3.7.8 is provided by the increased reliability of the 230kV switchyard upon implementation of the modification.

DUKE POWER COMPANY

OCONEE NUCLEAR STATION

ATTACHMENT 3

NO SIGNIFICANT HAZARDS CONSIDERATION EVALUATION

No Significant Hazards Consideration Evaluation

Duke Power Company (Duke) has made the determination that this amendment request involves a no significant hazards consideration by applying the standards established by NRC regulations in 10CFR50.92. This ensures that 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.

Each accident analysis addressed within the Oconee FSAR has been examined with respect to changes proposed within this amendment request. The design basis of the auxiliary electrical systems is to supply the required engineered safeguards (ES) loads of one unit and safe shutdown loads of the other two units and are so arranged that no single failure will jeopardize plant safety. The applicable design basis accidents (Loss of Electric Power Accidents) are addressed in FSAR Chapter 15.8.

Although changes included within this amendment request may involve an increase in the probability of previously analyzed accidents, the consequences of the accidents are within the bounds of FSAR analyses. Upon implementation of the modification, the probability of previously analyzed accidents will be reduced due to the increased fault current interrupting capability of PCB-9 concurrent with the reduced probability of a unit separation from the system grid.

As such, the probability of any Design Basis Accident will not be significantly increased by this change. Consequences of accident analyses addressed in the Oconee FSAR will not be effected by this change.

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

Inoperability of PCB-9 is functionally equivalent to inoperability of the Keowee Main Step-up Transformer in that it renders the overhead emergency power path inoperable. Operation of Oconee Nuclear Station (ONS) in accordance with these Technical Specifications will not create any failure modes not bounded by previously evaluated accidents. Consequently, this change will not create the possibility of a new or different kind of accident from any kind of accident previously evaluated.

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

Risk associated with inoperability of the overhead emergency power path for longer than 72 hours has previously been reviewed and found acceptable by the NRC with Specification 3.7.8. Inoperability of PCB-9 is functionally equivalent to inoperability of the Keowee main step-up transformer. Therefore, operation of Oconee Nuclear Station in accordance with these Technical Specifications will not involve a reduction in any margins of safety.

Duke has concluded based on the above and the technical justification in Attachment 2 that there are no significant hazard considerations involved in this amendment request.