

Attachment 1

Proposed Technical Specification Revision

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The circuits or channels of more than one functional unit of the EPSL may be inoperable only if:

1. The inoperability results from a loss of power due to the inoperability of a 125 VDC instrumentation and control panelboard (see 3.7.2(e) below); and
2. The conditions of Table 3.7-1 for degraded operation are satisfied for the affected functional units.

If any event, if the reactor is subcritical, the inoperable circuit(s) or channel(s) shall be restored to operability and the conditions of Table 3.7-1 for normal operation shall be satisfied for all functional units before the reactor is returned to criticality.

- (c) One 4160 volt main feeder bus may be inoperable for 24 hours.
- (d) One complete single string (i.e., 4160 volt switchgear (TC, TD, or TE), 600 volt load center, (X8, X9, or X10), 600-208 volt XS1, XS2, or XS3), and their loads) of each unit's 4160 volt Engineered Safety Features Power System may be inoperable for hours.
- (e) One or more of the following DC distribution components may be inoperable for periods not exceeding 24 hours (except as noted in 3.7.2(f) below):
 1. One complete single string or single component (i.e., 125VDC battery, charger, distribution center, and panelboards) of the 125VDC 230KV Switching Station Power System.
 - *2. One complete single string or single component (i.e., 125VDC battery, charger, and distribution center) of the Keowee 125VDC Power System may be inoperable provided the remaining string of Keowee is operable and electrically connected to an operable Keowee hydro unit.
 3. One complete single string or single component (i.e., 125VDC battery, charger, distribution center, and associated isolating and transfer diodes) of any units 125VDC Instrumentation and Control Power System. Only one battery more than the number allowed to be inoperable per 3.7.1 (f) for the Station may be removed from service under this paragraph.
 4. One 125 VDC instrumentation and control panelboard and its associated loads, per unit, provided that no additional AC buses are made inoperable beyond the provisions of 3.7.2(a), (c), and (d), and provided that the conditions of Table 3.7-1 for normal operation are satisfied for all functional units of the EPSL before the 125 VDC instrumentation and control panelboard becomes inoperable. Additionally, the provisions of 3.7.2.(h) must be observed for the 120 VAC vital instrumentation power panelboard which is powered by the affected 125 VDC panelboard.
- (f) For periods not to exceed 24 hours each unit's 125 VDC system may be separated from its backup unit via the isolating and transfer diodes.

*A one-time extension of inoperability for a period of 10 days per battery is granted to allow for installation of new Keowee batteries and battery racks.

- (g) One battery each, from one or more of the following 125VDC systems may be simultaneously inoperable for 72 hours in order to perform an equalizer charge after the surveillance requirements of Specification 4.6.10.

1. 230 KV Switching Station 125VDC Power System
2. Keowee Hydro Station 125VDC Power System
3. Each unit's 125VDC Instrumentation and Control Power System, provided that the unit's remaining battery is operable. However, for operation of 1 or 2 units, no more batteries than those allowed to be inoperable per 3.7.1 (f) may be removed from service. For operation of 3 units, at least 4 or the 6 station IC& batteries shall be operable.

- (h) One 120 VAC vital instrumentation power panelboard per unit and/or its associated static inverter may be inoperable for periods as specified below:

<u>Panelboard</u>	<u>Maximum Allowed Period of Inoperability</u>
KVIA	4 hours
KVIB	4 hours
KVIC	24 hours
KVID	24 hours

A single vital bus static inverter per unit may continue to be inoperable beyond the specified period, but no longer than 7 days total, provided that its associated 120 VAC vital instrumentation power panelboard is connected to the 240/120 VAC Regulated Power System and verified to be operable once every 24 hours.

- (i) 1. A startup transformer may be inoperable for periods not exceeding 72 hours for test or maintenance, provided the underground feeder path, through transformer CT4; and to one 4160V standby bus is verified operable within one hour of loss and every eight hours thereafter. The remaining operable startup transformers can be shared between units within the same 72 hours of the above startup transformer being determined inoperable. Prior to exceeding 72 hours, they shall be aligned and connected such that each one is providing a path for power to one and only one unit.
2. In the event that a startup transformer becomes inoperable for unplanned reasons, then one unit shall be in cold shutdown within 72 hours with its loads powered from the standby buses. The remaining operable startup transformers can be shared between units within the same 72 hours of the above startup transformer being determined inoperable. Prior to exceeding 72 hours, they shall be aligned and connected such that each one is providing a path for power to one and only one unit.

Attachment 2

Technical Justification

Technical Justification

The Keowee Hydro Station is the source of two independent on-site emergency power paths for Oconee Nuclear Station. They are part of the Auxiliary Electrical System that assures safe reactor operation and provides for continuing availability of engineered safety features systems. The Keowee Hydro Station is in the process of ordering replacement cells for both of the Keowee 125 VDC power system batteries. According to 10CFR50, Appendix A, General Design Criteria 2, the rack must be seismically qualified to the standard set forth by IEEE. Duke has determined that there is insufficient documentation on the seismic capabilities of the existing racks to warrant writing a "Sound Reason to the Contrary" statement allowing purchasing of the same batteries; therefore, batteries from a different manufacturer and new racks to accommodate the batteries are being purchased. The changeout of the batteries and the racks cannot be accomplished during the 24 hour time period currently allowed by Technical Specification 3.7.2(e)2. However, the replacement can be accomplished in a maximum of 10 days for each of the two batteries.

Each Keowee hydro unit is provided with a separate 125 VDC power system consisting of a 125 VDC battery charger, a 125 VDC battery, and a metal clad distribution center. A bus tie arrangement (two breakers in series) is provided between the distribution centers. This arrangement allows one Keowee 125 VDC power system battery to be removed for testing/servicing while maintaining the capability to supply the required DC loads of both Keowee units with the remaining battery (Ref. FSAR Figure. 8.3-5).

The existing Keowee batteries each have an 8-hour rating of 1800 ampere hours with the following 1 minute and 1 hour rating:

- a. Inrush: 1670 ampere hours (1 minute)
- b. One Hour: 906 ampere hours

With one battery out of service the required DC Loads for both Keowee units (assuming the tie breakers are closed) that would have to be supplied by the remaining battery are as follows:

- a. Inrush: 1480 ampere hours
- b. One Hour: 308 ampere hours

As can be seen in comparing the data presented above the capability of each existing Keowee battery is substantially greater than the DC load requirements of both units. Therefore, operating with one Keowee 125 VDC power system battery out of service and the distribution center tie breakers closed for a period of 10 days per battery replacement will allow for installation of the replacement batteries and racks while involving no additional significant safety hazard.

Attachment 3

No Significant Hazards Consideration

No Significant Hazards Consideration Evaluation

The proposed amendment to the Oconee Technical Specification 3.7.2(e)2 would grant a one-time extension of inoperability for a maximum period of 10 days per battery for the installation of new Keowee batteries and battery racks.

Duke Power has made the determination that this amendment request poses no significant hazards as defined by NRC regulations in 10 CFR 50.92. 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; 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.

Further, the commission has provided guidance concerning the application of these standards by providing certain examples (48 FR 14870). Example (vi) of types of amendments considered not likely to involve significant hazards consideration is applicable to this amendment request. This specific example involves amendment requests that are considered to be a change which either may result in some increase to the probability or consequences of a previously-analyzed accident or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptable criteria. The proposed technical specification amendment addressed in this submittal has been determined by Duke to be such a change. As discussed in the Technical Justification (Attachment 2), although the time period for inoperability is temporarily extended, the load requirements for the remaining battery string is substantially below its capability.

In addition, the following evaluation demonstrates that when measured against these standards, this amendment request does not constitute a significant safety hazard.

First Standard

Would not involve a significant increase in the possibility or consequences of an accident previously evaluated.

The possibility of an accident previously evaluated occurring is in no way impacted by this amendment. In addition, as discussed in the Technical Justification (Attachment 2), the load requirements of the Keowee batteries are substantially below the capability of either one of the batteries. Accordingly, Duke contends that the inoperability of one Keowee battery, provided the busses are tied together, will not affect the operability of either Keowee Unit and that one battery is capable of carrying the required Keowee emergency D.C. load. Therefore, the inoperability of one Keowee battery will in no way increase the probability or consequences of an accident previously evaluated.

Second Standard

Would not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed amendment allowing for an extension of inoperability for a period of 10 days per battery does not in any way create the possibility of a new or different kind of accident from any accident previously evaluated.

Third Standard

Would not involve a significant reduction in a margin of safety.

The discussion presented in the Technical Justification (Attachment 2) indicates that the load requirement of the batteries is substantially below their capability and can be met by one battery. Thus, even if there is a slight reduction in the margin of safety, it is clearly within specified criteria.

In summary, Duke has determined and submits that the proposed amendment does not involve a significant safety hazard.