

June 26, 1984

Docket Nos. 50-254/265

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Mr. Dennis L. Farrar
 Director of Nuclear Licensing
 Commonwealth Edison Company
 Post Office Box 767
 Chicago, Illinois 60690

Dear Mr. Farrar:

Re: Quad Cities Nuclear Power Station, Units 1 and 2

We are in the process of reviewing your justification for continued operation contained in your letter of May 11, 1984. Your letter was in response to an NRC, Region III Confirmatory Action Letter, dated May 7, 1984, concerning the 125V DC power source at Quad Cities Station.

Enclosed is a request for additional information related to this subject. Please provide your responses within 30 days after receipt of this letter in order that we can complete our evaluation expeditiously. If you require clarification of any of the enclosure, please contact your NRR Project Manager, Roby Bevan.

The information requested in this letter affects fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

Original signed by/

Domenic B. Vassallo, Chief
 Operating Reactors Branch #2
 Division of Licensing

Enclosure:
 Request for Additional
 Information

cc w/enclosure:
 See next page

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SURNAME	SNorris:ajs	RBevan <i>rb</i>	DVassallo			
DATE	06/26/84	06/26/84	06/26/84			

Mr. Dennis L. Farrar
Commonwealth Edison Company
Quad Cities Nuclear Power Station, Units 1 and 2

cc:

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REQUEST FOR ADDITIONAL INFORMATION

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

DOCKET NOS. 50-254/265

125V DC SYSTEM QUESTIONS

1. The load cycle shown in attachment A of your May 11, 1984 letter utilizes manual load shedding in determining the endurance of the 125V dc battery. Explain why each of the loads which is shed is no longer needed after the first half-hour of the event and can be secured. Also provide a load cycle for the same event which does not utilize manual load shedding, and calculate battery endurance based on it.
2. The loading during the first minute of the load cycle of attachment A of your letter is essentially equal to the one minute rating of the battery. However, not all the loads that occur during the first minute are necessarily simultaneous. Therefore, provide a profile of the loading during this first minute period. In accordance with IEEE Standard 485 the maximum current at any instant should be less than the battery one minute rating after accounting for the temperature correction factor, design margin, and compensation for age. Provide a discussion of your battery rating covering these factors.
3. Demonstrate that the 125V dc battery has the capacity to supply its first minute loads assuming a LOOP concurrent with a LOCA in one unit and safe shutdown of the other unit, assuming loss of one 125V dc system (i.e. Turbine Building 125V dc main bus fault). Provide the load cycle for this event and calculate battery endurance assuming battery chargers are available and there is no manual load shedding. Provide the same information assuming safe shutdown of both units in lieu of a LOCA in one unit and safe shutdown in the other.
4. The 125V battery should be capable of supplying its required loads during those times that additional loads are transferred to it in order to carryout maintenance or surveillance activities in a shutdown unit. Therefore, assuming one unit shutdown and maintenance or surveillance activities being performed on its 125V dc system or battery which results in the largest dc load transferred to the opposite battery, demonstrate that the battery has the capability of supplying the resulting first minute loads assuming a LOOP and safe shutdown on the operating unit. Provide the load cycle for this event and calculate battery endurance assuming the battery charger is available and there is no manual load shedding.

5. A NRC Region III daily report states that during preparations for a battery discharge test on 5/10/84 the battery charger was not capable of carrying both units dc loads and would trip after a few minutes. Are the Quad Cities battery chargers current limiting? Explain why the charger tripped. Will the charger trip during a load cycle which exceeds its capacity such as is identified in the previous questions?