



**Commonwealth Edison**  
Quad Cities Nuclear Power Station  
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NJK-83-117

April 4, 1983

Mr. Edson G. Case, Deputy Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

50-254

Dear Mr. Case:

Enclosed, please find a listing of those changes, tests, and experiments completed during the month of March, 1983, for Quad-Cities Station Units One and Two, DPR-29 and DPR-30. A summary of the safety evaluation is being reported in compliance with 10 CFR 50.59.

Thirty-nine copies are provided for your use.

Very truly yours,

COMMONWEALTH EDISON COMPANY  
QUAD-CITIES NUCLEAR POWER STATION

N. J. Kalivianakis  
Station Superintendent

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Enclosure

cc R. Rybak

IE24

M-4-1-81-27

24/48 Volt DC Meter Rewire

Description

This modification was to rewire the 24/48 Volt DC bus undervoltage relay and Control Room meter to be tied directly to the 1A and 1B distribution panel bus bars.

Per SEED recommendation, only the Control Room meter will be tied directly to the bus bars. This will provide bus load voltage metering along with battery voltage monitoring.

Evaluation

This modification will provide a means of monitoring both battery voltage and bus load voltage, thus providing overall voltage monitoring of the 24/48 Volt DC system. The basic function of the Control Room meter is not altered; thus, safe plant operation is not affected.

M-4-1-82-32

Main Steam Relief Valve Logic Change

Description

This modification prevents possible overstress conditions that have been identified for the Mark I Suppression Chamber when Main Steam Safety Relief Valves are reactuated within a few seconds after valve closure with steam present.

Additional relays and contacts have been added to the Electromatic Relief Valves 203-3B and 3C logic schemes to provide a ten second re-opening inhibit following valve closure. Also, the Relief Valve opening setpoints have been changed as follows:

203-3A	1135 psig
203-3B	1115 psig
203-3C	1115 psig
203-3D	1135 psig
203-3E	1135 psig

### Evaluation

The logic change has been applied to only two of the five Relief Valves and is on a valve-by-valve basis; thus, no failure in one valve can affect the remaining valves. Also, the logic change is redundant, therefore, no single failure will prevent ADS from opening or closing the RVs outside of the inhibit function, nor will a single failure override the inhibit function when required. The addition of the inhibit logic does not affect initial actuation of the RVs in the ADS mode, and manual control remains available at all times.

The change in setpoints has produced a net RV setpoint decrease thereby lowering the peak pressure and power during the limiting transient. The increase in Target Rock Safety Relief Valve (203-3A) setpoint will increase peak pressure less than 5 psi during the postulated ASME over-pressurization event. No change has been identified for the large break LOCA and the impact on worst case small break LOCA is estimated to be +20°F in peak cladding temperature. This increase is insignificant.