

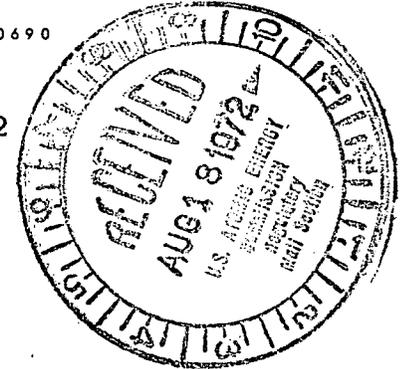
# Commonwealth Edison Company

ONE FIRST NATIONAL PLAZA ★ CHICAGO, ILLINOIS

Address Reply to:

POST OFFICE BOX 767 ★ CHICAGO, ILLINOIS 60690

August 15, 1972



Mr. Donald J. Skovholt  
Assistant Director for  
Operating Reactors  
Directorate of Licensing  
U.S. Atomic Energy Commission  
Washington, D.C. 20545

Subject: Responses to Additional Questions concerning  
the error in placement of an electrical jumper  
at Quad-Cities Station - AEC Dkts 50-254 and  
50-265

Dear Mr. Skovholt:

This is in response to your letter of July 11, 1972, concerning the need for additional measures to preclude recurrence of the jumper error. As mentioned previously, the station is making a thorough review of panel and switchboard labeling throughout the station to insure that the labels are correct and unique. Along with the other corrective measures presented in the May 4, 1972 letter of Mr. Palmer to Dr. Morris, the administrative procedure for the control of jumpers has been substantially expanded to protect against jumper errors (particularly by means of independent verification). It should also be pointed out that the use of jumpers is much less frequent now that the startup program is essentially completed, thus reducing the probability for error (62 jumpers were logged in April, 47 in May, 27 in June and 14 in July).

The specific suggestions for further corrective measures mentioned in your letter of July 11 were considered and the following comments are offered:

1 - "...procedures for control of jumpers..."

- a. All jumpers are numbered. Only numbered jumpers are used and the location of all jumpers is audited daily by the shift engineer.

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- b. Placement of a jumper must be authorized by an Operating Engineer.
- c. Master log of jumpers in use is maintained.
- d. After jumpers are in place the shift engineer has their proper placement verified by a person, usually himself, not involved with the original placement.
- e. The same procedure is followed for jumper removal.

Item d has been instituted as a result of the incident. The remaining items were in effect prior to the incident.

2 - "...mechanical means to prevent entry...unique locks..." We feel this is undesirable. If a person, while performing routine surveillance, were to detect a problem in a locked cabinet, he would have to go to the control room to get a key prior to investigating the problem. We attempt to encourage operators to look for anomalous behavior in plant systems and feel that locking doors would discourage the operators.

3 - "...color coding panels...coding on terminal boards..." We do not feel that these are necessary. If a person does not check the label on the panel when placing a jumper, it is doubtful that he will stop and think about color or additional coding on the terminal boards. Alert, attentative operation is our aim in training and retraining operators.

4 - "Provisions for alarms..." To provide an alarm or annunciation in the control room when a jumper is installed to bypass a function important to safety would be impractical.

5 - "...providing a chart, panel, or other device..." An experiment is being considered at Dresden to modify the control room indication from red and green lights on valves to all green circles and bars with abnormal positions being a different color. As a normal procedure, each operator reviews the control boards prior to going on shift to acquaint himself with the status of the unit and the nature of equipment out of service. We do not feel a status board is necessary in the control room.

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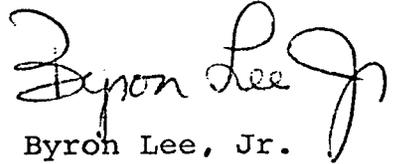
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We hope this is responsive to your concerns.

Very truly yours,

A handwritten signature in cursive script that reads "Byron Lee Jr." The signature is written in dark ink and is positioned above the typed name.

Byron Lee, Jr.  
Assistant to the President