



Commonwealth Edison
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June 7, 1982

Mr. A. Schwencer, Chief
Licensing Branch #2
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: LaSalle County Station Units 1 and 2
Separation of Class 1E and Non-Class 1E
Cable Trays
NRC Docket Nos. 50-373 and 50-374

References (a): License NPF-11, Condition 2.C.(24).

(b): NUREG 0519, LSCS SER, Section 8.4.6.1.

Dear Mr. Schwencer:

Reference (a) requires that Commonwealth Edison shall provide adequate separation or barriers between Class 1E and adjacent non-Class 1E cable trays prior to startup, following the first refuel outage. Reference (b) provides additional detail and concludes:

"As a result, the applicant committed by letter dated September 11, 1981, to perform a test (of the most limiting separation configuration in their plants) to demonstrate that faults induced in nonsafety-related cable will not cause the failure of adjacent safety-related cables. If the test fails as determined by the NRC staff, the applicant has further committed to make the necessary modifications to provide adequate separation of barriers prior to startup after the first refueling outage. The existing separation between Class 1E cables and non-Class 1E cables is such that there is a low probability during early life of the cables that a short or failure of non-Class 1E cables will cause failure of Class 1E cables. We find this commitment acceptable. Therefore, we will condition the operating licenses for these modifications to be completed prior to startup after the first refueling outage for LaSalle if this separation test fails."

Boo!

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Commonwealth Edison and its architect engineer, Sargent and Lundy, have prepared a proposed "Electrical Separation Test" configuration to demonstrate that faults induced in nonsafety-related cable will not cause the failure of adjacent safety-related cables. This proposed test configuration is enclosed. It is requested that the NRC review the proposed test configuration, determine its acceptability, and notify Commonwealth Edison so that detailed test procedures can be developed.

If there are any questions in this matter, please contact this office.

Very truly yours,

CW Schroeder 6/8/82

C. W. Schroeder
Nuclear Licensing Administrator

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cc: NRC Resident Inspector - LSCS

4279N

5-19-82

ELECTRICAL SEPARATION TEST
PUNCHLIST ITEM 3.52
(REFERENCE: SER SECTION 8.4.6.1)

1. PURPOSE

To justify the conclusion that fire or failure resulting from electrical faults induced in Non-Class 1E cables will not cause electrical failure of Class 1E cables directly above.

2. TEST CONFIGURATIONS:

- a. All cables tested will be obtained from La Salle stock and be qualified to IEEE 383-1974.
- b. Cable failures will be induced by electrical faults only.
- c. Both power and control cable configurations will be tested.
(Instrumentation cable trays all have covers and have insufficient potential energy to induce damage.)
- d. "Non-1E" power cable trays will be filled to a design index of 1.25. "Non-1E" control cable trays will be filled to a design index of 1.4.
- e. Failed cables will be located in the center of the cable tray representing the non-Class 1E installation.
- f. Cable trays will be solid bottom 10 foot lengths of 30" wide tray from La Salle stock.
- g. Cable trays representing Class 1E configurations will be installed 1 foot above the top of the lower "Non-Class 1E" tray. Centerlines of both trays will be parallel to each other.
- h. Conduit will be rigid steel, 1½" diameter, 10 foot lengths and liquid-tight galvanized steel (sealtite) 5 foot lengths from La Salle stock.

SARGENT & LUNDY
ENGINEERS
CHICAGO

ELECTRICAL SEPARATION TEST
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- i. Conduits representing Class 1E installations shall be installed within two-inches of the "Non-1E" tray.
Centerlines of conduit will be perpendicular to the centerline of the cable tray.
- j. Class 1E cable trays and rigid steel conduit will be supported with seismic hangers (Unistrut) at maximum 9 foot intervals. Sealtite will be supported just beyond its coupling to a length of rigid steel conduit.
- k. Power cable test configuration is shown in Figure 1.
The control cable configuration is shown in Figure 2.

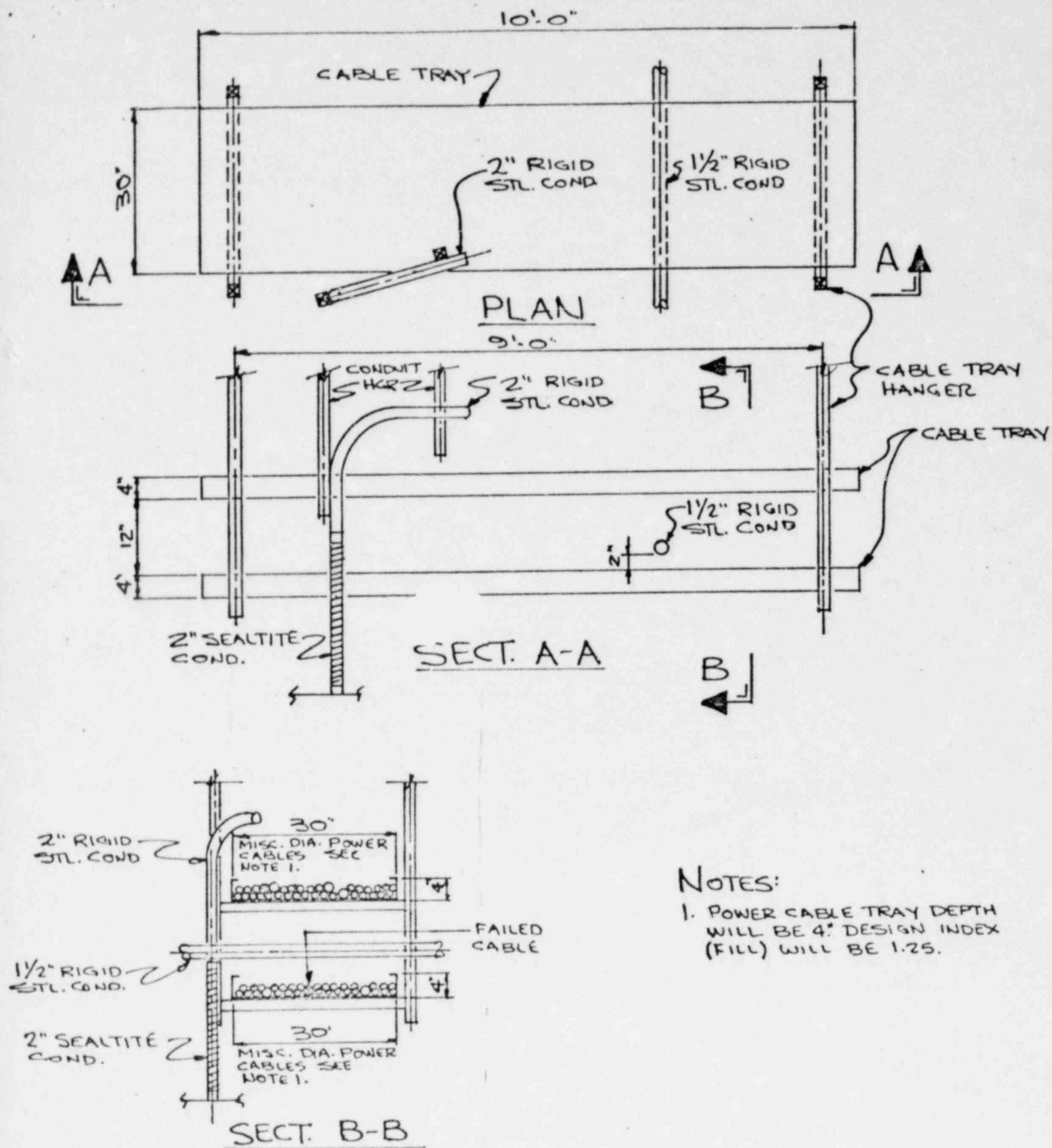


FIGURE - 1

