



# Brown Boveri Electric, Inc.

Manufacturer of I-T-E Electrical Power Equipment

December 22, 1982

Mr. Victor Stello, Jr., Director  
U. S. Nuclear Regulatory Commission  
Office of Inspection & Enforcement  
Washington, D. C. 20555

Dear Mr. Stello:

The purpose of this report is to document a deficiency in the Class 1E low voltage switchgear furnished by Brown Boveri Electric at the Public Service Indiana Marble Hill Project.

On December 13-14, 1982, personnel from Brown Boveri Electric performed an inspection of the low voltage switchgear enclosures at the Marble Hill Project to verify that spotwelds and equivalent arc welds were in accordance with drawings and procedures. This inspection covered PSI Bus No's. 131X and 132X which is a total of 10 switchgear enclosures. In the rear bus section of the enclosure, the spotwelds connecting the rear vertical corner channel with the rear horizontal channel were not completed because of manufacturing equipment limitations at the Tulsa facility. BBE procedures authorize equivalent arc welds to be added to cover these situations. The arc welds were not added at the time of fabrication.

Brown Boveri Electric Engineering has evaluated this situation and has recommended the following:

- 1) To assure that this equipment is essentially equivalent to the design that has been seismically qualified, the welding mentioned below should be added to the switchgear enclosure.
- 2) To correct this nonconforming condition, it is recommended that equivalent arc welds be placed on both sides of the switchgear enclosure. To make the corrective action uniform, these arc welds should be the same in all 10 switchgear enclosures.

It is proposed that PSI perform the welding in accordance with instructions furnished by BBE using qualified welders and qualified procedures. Inspection can be performed in accordance with AWS D9.1-80 Section 5.

BBE will provide qualified personnel to supervise this work at the jobsite.

There are a total of twenty-six (26) remaining low voltage switchgear enclosures at Marble Hill which will be inspected in January, 1983 for this condition and repaired if needed. These include PSI Bus No's. 131Z, 132Z, 231X, 231Z, 132X and 232Z.

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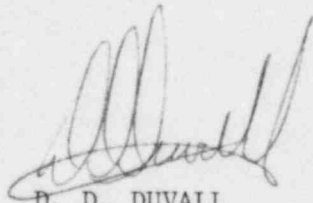
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from VS. Let's discuss.  
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The switchgear enclosures mentioned above were fabricated and assembled at the BBE Tulsa, Oklahoma facility. The only other Class 1E switchgear enclosures manufactured at our Tulsa facility that could have this deficiency were delivered to the Perry Project of Cleveland Electric Illuminating Company. However, many of the switchgear enclosures for the Class 1E equipment at this station were fabricated in our Chalfont, Pennsylvania facility. Because of manufacturing equipment differences and better fixturing, these enclosures were fabricated with all spotwelds and did not require the additional arc weld in the area of the deficiency noted above.

To verify that this condition does or does not exist at the Perry Project, BBE will arrange for and conduct an inspection of the low voltage switchgear at this location. There are a total of forty (40) switchgear enclosures at the Perry Project that are identified as Class 1E.



D. D. DUVALL  
Vice President

EWR/jm

cc: W. Lauden