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Docket No.: 50-508

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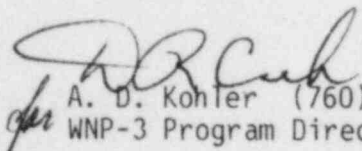
U.S. Nuclear Regulatory Commission, Region V
Office of Inspection and Enforcement
1450 Maria Lane, Suite 260
Walnut Creek, California 94596-5368

Attention: Mr. D. F. Kirsch, Acting Director
Division of Reactor Safety and Projects

Subject: NUCLEAR PROJECT NO. 3
POTENTIAL 10CFR50.55(e) DEFICIENCY
ROCKBESTOS CABLE INSULATION DAMAGE (D/N#53)

On October 12, 1984, the Supply system notified your office of a potential 10CFR50.55(e) deficiency concerning the subject condition. A subsequent Engineering/Licensing evaluation has determined that if the deficiencies remained uncorrected they could have affected adversely the safety of operations of the plant. Therefore, the subject condition is reportable in accordance with the provisions of 10CFR50.55(e).

Attached is the Supply System approved final report. The report provides a description of the deficiency, analysis of safety implications and corrective actions taken/planned. Should you have any questions or desire further information, please contact me directly.


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WNP-3 Program Director

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WASHINGTON NUCLEAR PROJECT NO. 3
(DOCKET NO. 50-508)
10CFR50.55(e) DEFICIENCY
FINAL REPORT
ROCKBESTOS CABLE INSULATION DAMAGE (D/N#53)

DESCRIPTION OF THE DEFICIENCY

The Rockbestos Co. notified the Supply System of a 10CFR21 deficiency concerning possible damage in certain reels of low voltage control and instrumentation cable supplied to WNP-3. The damage is in the form of small nicks or cuts in the insulation which may have occurred during the process of reworking the outer jackets to remove spot imperfections. While doing so, an operator may have allowed a cutting blade to come into contact with the insulation, thus reducing the effective insulation thickness. Damage was confined to one operator and was present only to a limited degree in that operator's work.

By utilizing jacket rework traceability records, Rockbestos was able to determine that one hundred seven (107) reels of cable with potential insulation damage were shipped to WNP-3 on Contract 3240-62B.

Subsequent investigations by Ebasco revealed the following status of the one hundred seven (107) affected cable reels:

- 1) One hundred four (104) reels have not been utilized for any cable installed to date.
- 2) Two reels were utilized in a total of twenty-three (23) non-safety related circuits. Each reel has one reworked area. Therefore, not more than two non-safety circuits may have insulation defects.
- 3) One reel was utilized for one hundred twenty-three (123) safety related circuits. This reel has two known rework areas. Therefore, not more than two installed safety related circuits may have insulation defects.

ANALYSIS OF THE SAFETY IMPLICATIONS

According to Rockbestos, analysis of the damage found does not indicate severity sufficient to cause failure in normal service. All reels were fully tested electrically following all manufacturing operations, including jacket rework. Records of these tests are on file for each reel.

The safety hazard that could be created would be a possible failure of an affected cable to operate in an accident environment. The phrase "accident environment" means, that which could exist in the Reactor Building during a loss of coolant accident (LOCA). Such conditions include high temperature, pressure, humidity, radiation, etc. None of the affected safety related cables were actually installed in the Reactor Building. However, if this condition were to continue undetected, the one hundred four (104) reels of affected cable, or a portion of them, could have been used as such. Therefore, the failure of safety related cables to perform their intended function during a LOCA is a possibility, and the subject deviation is determined to be significant and reportable per 10CFR50.55(e).

CORRECTIVE ACTION

The four installed cables having reworked areas will be identified and either removed or abandoned. Of the one hundred four (104) unused reels, eighty-eight (88) of these have all the rework areas identified by the sequential footage markers printed on the cable jacket. For these reels, the affected areas will be removed or the cable will be replaced. Removal will be accomplished by respooling onto subreels and cutting out the reworked areas as indicated by the footage markers. Minimum acceptable reel lengths of subreels would have to be in accordance with project requirements. The remaining sixteen (16) reels do not have the reworked areas identified. These reels will be rejected. Returned, rejected, and unusable lengths of cable will be sent to Rockbestos for replacement or as otherwise agreed.

Since the project is currently in an extended construction delay, no cables are being installed. The anticipated completion date for the above actions would be some time prior to construction restart.