

Comments to Draft Report of NUREG-1924

Electric Raceway Fire Barrier Systems in U.S. Nuclear Power Plants

Table 1-1. ERFBS Currently Used in U.S. NPPs

The table does not identify that 3M Interam is also used at Cook, Oyster Creek, Prairie Island, Nine Mile Point, River Bend, Surry, and Fitzpatrick. Since GL-86-10/S1, it has been almost the sole ERFBS system used and is installed in more plants than Thermo-Lag. Thus, it should be in the first column to show it is the most popular barrier used.

5.2 3M Interam™ E-50 Series & Rigid Panel System

Although this section correctly names the many ERFBS systems that have evolved from 3M over the years, the opening sentence states that Minnesota Mining and Manufacturing (3M) manufactures [present tense] several lines of fire protection products used in electrical raceways...". In fact, 3M now only manufactures E54A (E54C for containment) for use as ERFBS systems in nuclear facilities, exclusively for PCI Promatec.

PCI Promatec (formerly Peak Seals Inc.) successfully completed bounding GL-86-10/S1 qualification testing of E54 series Interam systems for all 1-hour and 3-hour applications. Based on the success of this testing, 3M and PCI Promatec opted to eliminate other pre-86-10/S1 systems from ERFBS product offerings, including E53, M-20, and FS-195.

In order to avoid confusing the industry, we request that the beginning of this section open by clarifying the fact that 3M once manufactured several lines of fire protection products to protect electrical raceways...; however, based on ERFBS qualification testing performed by PCI Promatec (formerly Peak Seals Inc.), only E54 series Interam is now manufactured for use as a GL-86-10/S1 ERFBS.

General Comments regarding Fire Testing in Section 5.2

This section contains of myriad of often random tests, some of which were formal and some of which were R&D to measure pre-supplement 1 designs with the new requirements. All of the tests performed by 3M were pre-supplement 1.

The referenced Peak Seals tests that did not meet supplement 1 were part of a systematic process to design an Interam system that would meet the new requirements. Unfortunately, IN-95-52 was issued before we completed the process. Peak Seals completed its qualification test program in 1998 and successfully designed and qualified fully bounded systems using E54 configurations. The applicable test reports and tables are herewith submitted.

We request that NUREG 1924 provide a clear delineation between old 3M designs, R&D fire tests, and successful GL-86-10/S1 designs qualified by PCI Promatec.

5.2.4 Resolution and Staff Conclusion

This paragraph indicates that while Interam ERFBS appears to have no generic issues, there may be “case specific” problems. The data that we have submitted in this package demonstrates that Interam E54 has passed every fire test performed with the designs we finalized by 1998. Successful bounding tests have been performed that are at least equal to those performed on Darmatt KM-1 ERFBS.

Based on these facts, there should be a paragraph pertaining to new installations using qualified Promatec designs that reads identical to paragraph 5.3.4 for Darmatt KM-1. Anything less would provide an unfair and unsubstantiated advantage to KM-1 over E54.