

December 5, 1995



Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: LaSalle County Station Units 1 and 2  
Response to the NRC Request for Additional Information  
Regarding Use of Darmatt KM-1 in a Seismic Event  
NRC Docket Numbers 50-373 and 50-374

- Reference: 1) NRC Letter dated January 10, 1995, from W. D. Reckley to D. L. Farrar
- 2) May 31, 1995, R. Querio letter to USNRC
- 3) November 1, 1995, D. Saccomando letter to USNRC

Reference (1) provided the NRC Request For Additional Information regarding the expected behavior of the Darmatt KM-1 Fire Barrier System and related plant structures during a seismic event. Reference (2) provided the ComEd response to the NRC's request, which was discussed in a LaSalle Co. site meeting with the NRC staff on August 16, 1995. Reference (3) provided the ComEd response to the NRC staff questions from the LaSalle Co. site meeting, which was discussed in a teleconference held with the NRC staff on November 28, 1995.

The following is the ComEd response to the questions from the November 28, 1995 teleconference:

**1) Question:**

"Provide confirmation that the deflection determined for the HVAC duct will not result in damage, such that the function of the HVAC system is impaired."

**Answer:**

The impact of a falling piece of Darmatt KM-1 on the HVAC duct has been re-evaluated based on the Darmatt weight of 36.5 lbs per linear foot of tray. This value calculates to a maximum impact force on the duct of 481 lbs. The thickness of the duct plate is .0598 inches (16 gauge), the duct stiffeners are 2" x 2" x 1/8" every 24 inches along the duct, and the stiffener welds are one inch long and spaced every eight inches along the stiffener. If a section of Darmatt impacts the HVAC duct, the maximum, worst case deflection is 1.99 inches. Using this value, the force on each 1 inch of weld due to the impact is calculated to be 184 lbs. The weld resistance is

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1800 lbs, based on the carbon steel base metal. In comparing the force on the weld value to the weld resistance value, the stress increase in the weld due to the impact is negligible. Therefore, the worst case deflection from the impact of a falling piece of Darmatt will not result in a failure of the HVAC duct. The deflection will not cause air flow in the duct to change. Accordingly, no loss in function of the HVAC system will occur.

**2) Question:**

"In the November 1, 1995 ComEd response, a new weight value for the Darmatt KM-1 material of 36.5 lbs per linear foot of tray is specified. Has this weight value been taken into account or used to re-evaluate the strength of the cable tray and the cable tray supports?"

**Answer:**

The raceway supports and anchorages have been re-evaluated for the applicable design basis loads using the new distributed weight of 36.5 lbs per linear foot of tray for the Darmatt KM-1 material and its required mounting components, plus a conservative 5% for any residual material from the removed fire proofing system (Kaowool and Thermo-Lag 330-1). The evaluation applied the weight of the One-hour Darmatt KM-1 fire barrier enveloping each power cable tray and each control cable tray for the following Unit 1 and Unit 2 cable tray routing points:

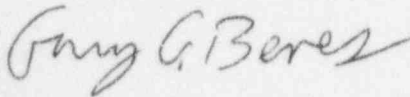
<u>Unit</u>	<u>Cable Tray Type</u>	<u>Routing Points</u>
1	Power	163A
		164A
		165A
	Control	163B
		164B
		165B
2	Power	153A
		154A
		155A
	Control	153B
		154B
		155B

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The results of the evaluation have determined and confirmed that the affected cable tray, and cable tray supports and anchorages are acceptable as-installed for the new, required design load changes.

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

Sincerely,



Gary G. Benes  
Nuclear Licensing Administrator

cc: H. Miller, Regional Administrator - RIII  
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