

FINAL

Request for Additional Information #01

Vogtle 3 & 4 LAR-18-015

“Fire Protection System Non-Safety Cable Spray Removal”

Issue Date: July 12, 2018

Operating Company: Southern Nuclear Operating Co.

Docket No. 52-025 and 52-026

GDC 3, Fire protection, states in part that; “Structures, systems, and components important to safety shall be designed and located to minimize, consistent with other safety requirements, the probability and effect of fires and explosions.”

On page 3 of 24 of the license amendment request the licensee states that:

“The fire protection program utilizes the guidance of various industry and regulatory documents including that provided in Revision 1 of Regulatory Guide 1.189, "Fire Protection for Nuclear Power Plants" (RG 1.189). RG 1.189 recognizes the use of passive fire stops in lieu of water spray systems.”

On page 5 of 24 of the license amendment request the license states that

“These passive fire stops will be placed in the nonsafety-related open cable trays near the boundary of fire zone 11300B prior to where the trays continue into adjacent fire zones. The purpose of the passive fire stops is to prevent a fire in the nonsafety-related open cable trays of fire zone 11300B from propagating to another fire zone.”

Section 4.2.3.3, “Fire Stops for Cable Routing,” of Regulatory Guide 1.189, Revision 1, states the following:

“Fire stops should be installed every 6.1 m (20 ft) along horizontal cable routings in areas important to safety that are not protected by automatic water systems. Vertical cable routings should have fire stops installed at each floor-ceiling level. Between levels or in vertical cable chases, fire stops should be installed at the mid-height if the vertical run is 6.1 m (20 ft) or more, but less than 9.1 m (30 ft), or at 4.6-m (15-ft) intervals in vertical runs of 9.1 m (30 ft) or more unless such vertical cable routings are protected by automatic water systems directed on the cable trays.”

It is not clear to the staff if passive fire stops discussed in the license amendment request will be installed according to staff approved guidance (e.g., RG 1.189 Section 4.2.3.3). Therefore, the staff requests the licensee to provide additional information:

1. Indicate whether fire stops will be installed every 6.1 M (20 ft) along horizontal cable routings or provide justification why the fire stops should not be installed.
2. Indicate whether vertical cable routings will have fire stops installed at each floor and ceiling level. In addition, whether fire stops will be installed between levels or in vertical cable chases if the mid-height of the vertical run is 6.1 m (20 ft) or more, but less than 9.1 m (30 ft), or at 4.6-m (15-ft) intervals in vertical runs of 9.1 m (30 ft) or more, or provide

justification why the fire stops should not be installed.

3. Explain applicability of regulatory guidance used in Items 1 and 2 above.