

July 17, 2008

Mr. J. Randy Johnson
Vice President - Farley
Joseph M. Farley Nuclear Plant
7388 North State Highway 95
Columbia, AL 36319

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2, REQUEST FOR
ADDITIONAL INFORMATION REGARDING THE LICENSE AMENDMENT
REQUEST TO ALLOW PERSONNEL AIR LOCKS OPEN DURING FUEL
MOVEMENT (TAC NOS. MD5433 AND MD5434)

Dear Mr. Johnson

The U.S. Nuclear Regulatory Commission Staff (NRC) has reviewed the License
Amendment Request dated April 27, 2007, submitted by Southern Nuclear Operating Company.
The NRC staff has identified additional information needed to complete its review of this
amendment request. The Request for Additional Information is provided as an enclosure to this
letter.

Sincerely,

/RA/

R. A. Jervy, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-348 and 50-364

Enclosure:
Request for Additional Information

cc w/encl: See next page

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R. A. Jervey, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-348 and 50-364

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Request for Additional Information

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REQUEST FOR ADDITIONAL INFORMATION

LICENSE AMENDMENT REQUEST RE: TO ALLOW PERSONNEL AIR LOCKS OPEN

DURING FUEL MOVEMENT

JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2

TAC NOS. MD5433 AND MD5434

1. Table 2 of Enclosure 1 to the April 27, 2007 license amendment request (LAR) concerning the status of containment penetrations and personnel air lock doors during fuel movement provides atmospheric dispersion factors (χ/Q values) for assumed releases from the equipment hatch and personnel air locks to the control room, site boundary and low population zone.

Other than the 0–30 second χ/Q value for postulated releases from the personnel air locks to the control room, the χ/Q values appear to be those previously approved in Farley Unit 1 and Unit 2 Amendment Nos. 165 and 157, (ADAMS Accession Number ML042820368) and Amendment Nos. 166 and 158 (ADAMS Accession Number ML042780424), all dated September 30, 2004. However, the value in Table 2 is presented for the site boundary whereas the amendments present χ/Q values for the exclusion area boundary (EAB). Please confirm that the χ/Q values presented in Table 2 also apply to the EAB. In addition, please confirm that the only new χ/Q value proposed in this LAR is the 0–30 second χ/Q value for postulated releases from the personnel air locks to the control room and that the other previously approved χ/Q values apply to the dose assessment for the current LAR.

2. Section 3.1.1.2 of Enclosure 1 states that the release from the containment personnel air locks into the auxiliary building is picked up by the auxiliary building rad-side ventilation system and vented out the auxiliary building through the plant vent stack. Item 1 on page 8 of Enclosure 1 states that the normal control room air intake is closer to the release pathways as compared to the control room emergency air intakes, but bounded by the Unit 2 to Technical Support Center (TSC) intake location. When the control room is isolated, the control room normal air intake and the TSC intake are closed.

Atmospheric dispersion factors were provided for assumed releases from the Unit 1 and Unit 2 vents, equipment hatches, and reactor building walls to the TSC intake and to the emergency air intakes, but not to the control room normal intake. The licensee stated that the normal control room air intake is closer to the release pathways as compared to the control room emergency air intakes, but bounded by the Unit 2 to TSC intake location. Thus, the routine outside air makeup through the normal air intake can be represented by the Unit 2 release locations to the TSC air intake χ/Q values for the fuel handling accident. What are the distances and directions from the Unit 2 vent and the closest location on the Unit 2 reactor wall to the normal intake? What is the height of the normal intake? What is the scale of Figure 2 of Enclosure 1? Is the direction shown true north?

Joseph M. Farley Nuclear Plant, Units 1 & 2

cc:

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