

March 5, 2003

MEMORANDUM TO: John A. Nakoski, Chief, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

FROM: Christopher Gratton, Sr. Project Manager, Section 1
Project Directorate II */RA/*
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

SUBJECT: SURRY POWER STATION, UNITS 1 AND 2 - FACSIMILE
TRANSMISSION OF ISSUES DISCUSSED IN A CONFERENCE CALL
(TAC NOS. MB6291 AND MB6292)

A facsimile of the attached questions was transmitted on January 20, 2003, to Mr. Gary Miller of Virginia Electric and Power Company. The questions supported a conference call with the licensee held on January 26, 2003, regarding the licensee's submittal dated September 5, 2002. In their submittal, the licensee proposed to add provisions to permit inspection and related repair of a buried fuel oil storage tank during plant operation. This memorandum and the attached questions do not convey or represent an NRC staff position regarding the licensee's request.

Docket Nos. 50-280 and 50-281

Attachment: Request for Additional Information

CONTACT: Christopher Gratton, NRR
(301) 415-1055

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DATE	03/04/03	03/04/03	03/04/03

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DRAFT
REQUESTS FOR ADDITIONAL INFORMATION
LICENSE AMENDMENT REQUEST
EMERGENCY DIESEL GENERATOR FUEL OIL TANK
FOR
VIRGINIA ELECTRIC POWER COMPANY
SURRY POWER STATION UNITS 1 AND 2
DOCKET NUMBERS: 50-280 AND 50-281

By letter dated September 5, 2002, the Virginia Electric and Power Company (the licensee) requested Nuclear Regulatory Commission (NRC) review and approval of a proposed change to the Technical Specifications (TS) for the Surry Power Station, Units 1 and 2. The proposed change would include a 7-day allowed outage time to permit inspection and repair of the buried fuel oil storage tanks that provide fuel for the emergency diesel generators. While the licensee's submittal did not provide a discussion of the regulatory basis that applies to the proposed TS amendment request, the Standard Review Plan and other regulatory criteria typically require that multi-unit sites have the capability to mitigate postulated conditions that may impact one unit (as applicable) while placing the other unit(s) in a safe shutdown condition, with and without offsite power available. The actual criteria that was applied to a particular facility may vary depending on the specific circumstances involved. In order for the Plant Systems Branch to complete its review, the following additional information is required:

1. Provide a complete description of the regulatory basis for the proposed Technical Specification amendment request, including references to applicable NRC safety evaluations and other documents that support this position.
2. What is the expected frequency of the fuel oil storage tank(s) maintenance activities that will require implementation of the following proposed TS modification?
3. Describe the worst-case event scenario that could occur with only one buried fuel oil storage tank available containing 17,500 gallons of fuel oil. Explain in detail how this event will be mitigated and how both Surry units will be placed and maintained in a safe shutdown condition given the constraints of the proposed TS change. Scenarios that involve seismic events, hurricanes, or tornadoes should assume that off-site power is not available and that the above ground fuel oil tank has failed. Note that it is not necessary to assume a single active failure while in the TS LCO. (Other criteria as reviewed and approved by the staff for use at Surry may be used, as applicable).
4. Considering the various hazards that could result in a loss of off-site power situation (grid loading/stability, maintenance, external events, etc.), discuss measures that will be implemented to minimize the likelihood that off-site power will be lost while one of the buried fuel oil storage tanks is removed from service for inspection and repair.

In addition to the information requested by Plant Systems Branch above, the following information has been requested by the Probabilistic Safety Assessment Branch:

5. Describe how the fuel oil supply system typically fails, how often, and how often it should be inspected, as well as what is involved in the inspections and typical repairs.
6. Discuss, and if appropriate estimate, the risk of fire associated with the proposed change.
7. Discuss the industry peer review findings concerning the Surry Probabilistic Risk Assessment (PRA) and how the sensitivity calculations summarized in Tables 3, 4, and 5 address them.
8. To verify that Regulatory Guide 1.174 guidance criteria are met, please provide the following:
 - a. The current average best estimate core damage frequency (CDF) and large early release frequency (LERF) for Unit 1 or 2, which ever is greater (based on the current unavailability for the buried tanks); and
 - b. The projected average best estimate CDF and LERF for Unit 1 or 2 (based on the projected unavailability for the buried tanks on implementation of the proposed TS change and anticipated plant operations).
9. As a bounding case for evaluation of risk significant plant configurations, provide an estimate of the conditional CDF and LERF given a loss of offsite power event during a buried fuel oil storage tank maintenance allowed outage time.
10. Regarding the operability of the fuel oil system:
 - a. Why do the new TS requirements call for verification of greater than or equal to only 67,500 gallons of fuel oil in the combined volumes of the above ground fuel tank and the available buried fuel tank (which have a net capacity of 230,000 gallons) prior to removing a tank from service, when 70,000 gallons minimum is required to operate two diesels for 7 days?
 - b. Does Surry plan to verify the operability of the fuel pumps of the available buried fuel tank before removing the other tank for maintenance?