



South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

November 17, 2011
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U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2746

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
Clarification to Response to Request for Additional Information for the
South Texas Project License Renewal Application (TAC No. ME4938 and ME5122))

- References: 1. STPNOC Letter dated October 25, 2010, from G. T. Powell to NRC Document Control Desk, "License Renewal Application" (NOC-AE-10002607) (ML103010257)
2. STPNOC Letter dated September 6, 2011 from G. T. Powell to NRC Document Control Desk, "Response to Request for Additional Information for the South Texas Project License Renewal Application (TAC Nos. ME4938 and ME5122)" (NOC-AE-11002719) (ML11255A211)


By Reference 1, STP Nuclear Operating Company (STPNOC) submitted the License Renewal Application (LRA) for South Texas Project (STP) Units 1 and 2. This letter provides additional information to the response to NRC request for additional information RAI HP-1 (Reference 2).

There are no regulatory commitments in this letter.

Should you have any questions regarding this letter, please contact either Arden Aldridge, STP License Renewal Project Lead, at (361) 972-8243 or Ken Taplett, STP License Renewal Project regulatory point-of-contact, at (361) 972-8416.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 11/17/2011
Date


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KJT
Enclosure: Clarification to STPNOC Response to Requests for Additional Information

A147
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**SOUTH TEXAS PROJECT
LICENSE RENEWAL APPLICATION**

**CLARIFICATION TO STPNOC RESPONSE TO
REQUESTS FOR ADDITIONAL INFORMATION**

Changes to the STPNOC response to the following request for additional information is provided in line-in/line-out format.

Human Health

NRC RAI HP-1:

Issue:

The applicant's evaluation identified five locations where the transmission lines exceeded the National Electrical Safety Code (NESC) recommended standard of 5 milliamperes for electric shock concern. However, the environmental report (ER) does not contain a discussion of any mitigation measures being considered for the locations where the electric shock potential exceeds the NESC standard.

Background:

As required by Title 10 of the *Code of Federal Regulations* (10 CFR) 51.53(c)(3)(ii)(H), Section 4.13 of the STP ER contains an evaluation of the acute shock potential from the transmission lines within the scope of license renewal. The applicant's evaluation identified five locations where the transmission lines exceeded the NESC recommended standard of 5 milliamperes. For these transmission lines, the applicant's ER concluded " ... that electric shock is of MODERATE significance, because 1) there are few exceedances of the NESC standard, 2) the exceedances are a small percentage of the standard, 3) the locations of the exceedances are very remote or on private property, and 4) the transmission service providers have not received any complaints about induced-current shock. Accordingly, no mitigation measures are required." Hence, the ER does not contain a discussion of any mitigation measures being considered for the locations where the electric shock potential exceeds the NESC standard.

10 CFR 51.53(c)(3)(iii) states that the ER " ... must contain a consideration of alternatives for reducing adverse impacts, as required by 10 CFR 51.45(c), for all Category 2 license renewal issues ... " 10 CFR 51.45(c) states, "The environmental report must include an analysis that considers and balances the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects."

Requested Information:

Please provide additional information related to alternatives available for reducing or avoiding adverse environmental effects from those transmission lines that exceed the NESC standard.

STPNOC response:

Potential mitigation measures for reducing or avoiding adverse environmental effects from those transmission lines that exceed the NESC standard could include:

- re-examining the induced current calculations for the selected spans,
- raising the towers at the affected road-transmission line intersections,
- rephasing the double-circuit lines, and/or
- placing caution signs under the lines.

STPNOC re-examined the induced current calculations that support Table 4.13-1 in the Environmental Report. The Transmission Service Providers (TSPs) provided revised sags at 120 degrees for selected spans and the induced current was recalculated. In addition, one TSP calculation is based on more recent engineering data. The re-examination resulted in the Hillje line location and one Skyline location on a low traffic road being verified to be < 5 milliampere (ma). The two Hill Country locations and the remaining Skyline location still exceed the 5 ma standard.

The configuration of two Hill country locations and the remaining Skyline location have changed since the Final Environmental Statement for the construction permit, referenced in the Environmental Report, Section 3.1.3. STP no longer connects directly with the Skyline or Hill Country substations. A substation was constructed at Elm Creek. From STP the original Hill Country and Skyline transmission lines are looped into the Elm Creek substation before proceeding to the Hill Country and Skyline substations. (Reference UFSAR Figure 8.2-4) These STP lines are re-configured and now stop at Elm Creek Substation.

No mitigation is required as stated in the Environmental Report, Section 4.13:

STPNOC's assessment under 10 CFR 51 concludes that electric shock is of MODERATE significance, because 1) there are few exceedances of the NESC standard, 2) the exceedances are a small percentage of the standard, 3) the locations of the exceedances are very remote or on private property, 4) the transmission service providers have not received any complaints about induced-current shock. Accordingly, no mitigation measures are required.

This position is further supported by: (1) the two Hill Country lines and the one Skyline line where the 5 milliampere standard is exceeded are beyond the Elm Creek substation and are no longer connected to STP; and (2) all STP transmission lines will continue to be in service after the STP facility is decommissioned. The Proposed Action to renew the operating licenses for STP Units 1 and 2 has no effect on transmission lines directly connected to the STP switchyard. Therefore, under NEPA, the Proposed Action does not need further analysis.