LICENSEE: South Texas Project Nuclear Operating Company

FACILITY: South Texas Project, Unit 1

SUBJECT: SUMMARY OF MEETING WITH STPNOC REGARDING SOUTH TEXAS

PROJECT, UNIT 1 REACTOR VESSEL AND BOTTOM MOUNTED INSTRUMENTATION PENETRATION INTERFACE LEAKAGE

On May 1, 2003, STP Nuclear Operating Company (STPNOC), the licensee for South Texas Project (STP), Units 1 and 2, met with the U.S. Nuclear Regulatory Commission (NRC) staff at the NRC Headquarters. The purpose of the meeting was for STPNOC to brief the NRC management regarding STPNOC's efforts to address the issues arising from the April 12, 2003 discoveries of indications of leakage from the STP, Unit 1 bottom mounted instrument (BMI) penetrations 1 and 46. There are 58 penetrations at STP, Unit 1. Enclosure 1 contains the licensee's presentation view-graphs. A list of meeting attendees is included as Enclosure 2.

The STPNOC outlined its desired meeting outcomes to keep NRC fully informed; and to ensure that NRC understands STPNOC's non-destructive examination (NDE) process, repair options, root and probable cause investigation process, and significant milestones for corrective actions and resolution of concerns.

The licensee stated that a very small amount of residue (approximately 150 milligrams at penetration 1 and 3 milligrams at penetration 46) was accumulated at the two penetration interfaces. Chemical analyses revealed the presence of boron in the deposits indicating the source of the leakage to be primary coolant. The ratio of Cs-134 and Cs-137 isotopes in the deposits, respectively, indicated the age of the residue to be up to 4 years. The licensee stated that it inspects the exterior of the reactor vessel bottom each refueling outage and other outages that exceeds 72 hours. Previous inspections did not identify any leakage indications at penetrations 1 and 46.

The STPNOC discussed the results of both visual examination and chemical analysis of residue found at the two penetrations, and some potential causal mechanisms. The licensee discussed its plans for further NDE to help determine the type of flaws, causes of the flaws, and options for repair of the condition. The licensee also provided a schedule of milestones of activities to address the BMI leakage issue.

The core will be offloaded by mid-May. NDE and analysis will be completed by late-May. Design approval relief request will be submitted to NRC for review by early June. Repairs will commence in mid-June. Final breaker closure is envisaged by STPNOC for late-summer.

The licensee stated that it has been in communication with the industry, and has received considerable help from the industry, in its efforts to evaluate the root cause and probable cause of the leakage indications. The licensee is employing teams of experts in concert with its senior staff to assist in its on-going evaluations. The licensee stated that Unit 1 will not be restarted

until the root cause has been determined and the condition has been repaired. The licensee proposed a second meeting for the first week in June.

In response to the licensee's presentation, the NRC staff stated that the licensee's response following the discovery of BMI leakage has been prompt, and the licensee has maintained a high level of activity.

Following the licensee's presentation public participants asked questions of the NRC staff and the licensee. The NRC staff and the licensee provided clarifications. Following is a summary of the questions and answers included in the exchange:

Question: What are other plants doing about the issue?

Answer: The staff is doing general survey to address the other plants' activities.

Question: How will the data collected by STPNOC be used to benefit the plant's

understanding of the issues?

Answer: The licensee answered that the data will be used as best as they can to learn all

that is possible to benefit not only the plant but the entire industry.

Question: What are the repair costs?

Answer: It is too early to say.

The meeting was then adjourned.

## /RA/

Mohan C. Thadani, Senior Project Manager, Section 1 Project Directorate IV Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-498

Enclosures: 1. View-graphs

2. List of Attendees

cc w/encls: See next page

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/RA/ Mohan C. Thadani, Senior Project Manager, Section 1

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Docket No. 50-498

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**KGott** 

JCollins.

ACCESSION NUMBER: ML0

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DATE	6/17/03	6/13/03	6/16/03

## MEETING PARTICIPANTS FOR MEETING BETWEEN STPNOC AND NRC ON MAY 1, 2003

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Jay Collins	NRC
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Donald Harrison	NRC
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Veronica Klein	NRC
Jim Strnisha	NRC
Michelle Honcharik	NRC
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Steve Long	NRC
John Minns	NRC
DyLanne Duvigneaud	NRC
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Bill Reckley	NRC
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Herb Berkow	NRC
Karen Gott	NRC
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Bob Davis	NRC
Rich Barrett	NRC
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