24

MEMORANDUM TO: William D. Travers
Executive Director for Operations

FROM: Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

SUBJECT: TRANSMITTAL OF THE INDIAN POINT 2 STEAM GENERATOR TUBE FAILURE LESSONS-LEARNED REPORT

The purpose of this memorandum is to transmit the completed Indian Point 2 (IP2) Steam Generator (SG) Tube Failure Lessons-Learned Report, which is attached. As you are aware, this lessons-learned activity was described in a May 24, 2000 memorandum, "Indian Point Unit 2 Steam Generator Tube Failure Lessons-Learned Task Group and Charter", and the group activity was initiated on June 19, 2000. In the May 24, 2000 memorandum, I committed to using the lessons-learned assessment to identify any generic technical or process elements that could be improved in the NRC's review and oversight of SG issues. My office plans to implement the recommendations of the lessons-learned report unless we are directed otherwise.

I have directed my staff to review the lessons-learned report, and develop an action plan that considers the input of the lessons-learned report in an integrated manner with all the SG activities, such as the NEI 97-06 change package review, by November 17, 2000. In developing the action plan, the staff will consider appropriate stakeholder involvement, perhaps soliciting comments on the action plan.

The lessons-learned charter stated that the objective of this effort was to conduct an evaluation of the staff's technical and regulatory processes related to assuring SG tube integrity in order to identify and recommend areas for improvements applicable to the NRC and/or the industry. In order to satisfy this objective, the lessons learned task group reviewed many of the licensee and NRC staff documents associated with the SG examinations, inspections, and the root cause analysis. The task group also reviewed the Office of Nuclear Regulatory Research (RES) March 16, 2000 Technical Review and the Office of the Inspector General (OIG) Event Inquiry Report. In order to better understand the technical and regulatory positions in the documents, the task group interviewed selected NRC staff and contractors as well as some technical staff at Con Ed.

CONTACT: Louise Lund, EMCB/DE
415-2786

EE18

The objective of the lessons-learned effort was broader than the other reviews, specifically the RES Technical Review and the OIG Report. The sole objective of the RES Technical Review was to perform an independent technical review of two safety evaluations regarding steam generator tube inspection and repair issues for IP2. The OIG report reviewed three issues: 1) the adequacy of the NRC staff's handling of actions by IP2 associated with the SG tube failure, i.e., Con Ed's 1997 SG examination and the NRC's 1999 SG examination interval extension, 2) NRC's handling of shortcomings identified in the IP2 Emergency Preparedness Plan, and 3) the adequacy of the NRC staff's review of the Con Ed proposal to restart IP2 after the February 15, 2000 shutdown. In contrast, the lessons-learned task group was asked to consider the technical and regulatory process issues in an integrated fashion in order to assess the lessons learned as they apply to both the industry and the NRC. I believe that the lessons-learned report provides a context for reviewing the other reports and provides a comprehensive review of the technical and regulatory aspects of the SG tube failure at IP2.

After a preliminary review of the lessons-learned report, I am pleased to note that several of the recommendations in the report support ongoing and planned activities by the NRC staff and the industry. The NRC staff and the industry have been working proactively to address some of the issues arising from the IP2 tube failure and already have activities underway to strengthen SG programs in response to the IP2 steam generator tube failure. Many of these actions to improve the SG programs have been coordinated within the framework of the industry initiative, NEI 97-06, that has been the focus of industry and NRC staff efforts to improve the industry SG management programs during the past five years. Other recommendations will need to be considered carefully in the context of our ongoing management of steam generator issues.

As I mentioned above, the NRC staff and the industry have been working on activities to strengthen the steam generator programs. Soon after the IP2 tube failure, some of the plants with older steam generators used the high frequency eddy current probe during the Spring 2000 outages to improve the data quality in the small radius U-bend region of the tubes. In the Fall 2000 outages, the NRC headquarters staff has continued to have calls with certain licensees during their steam generator outages and has involved the NRC regional office staff in the calls. The staff has asked the licensees to explicitly discuss in the phone calls what steps have been taken, or will be taken, in response to the industry lessons learned from the IP2 tube failure. The staff has asked the licensees to make a summary of the significant items discussed in the phone call available in the public record using the licensee's SG examination summary report.

In addition, the staff is preparing a Regulatory Issue Summary (RIS), drawing on issues in the IP2 Technical Evaluation and the Arkansas Nuclear One, Unit 2 Safety Evaluation on the risk-informed demonstration of predicted tube integrity. The RIS will be released in the near future. The staff is working on performance indicators, which will be incorporated into the revised reactor oversight program. The staff is planning a stakeholder workshop early in 2001 to discuss recent steam generator operating experience and to solicit views from a broad range of stakeholders on the steam generator issues, including the NRC lessons-learned report.

We understand that NEI has performed a lesson's learned review for the industry based on the tube failure. The industry is working on revising the Electric Power Research Institute guidelines that support the framework of the steam generator industry initiative based on their lessons learned activity and input from the NRC staff. The industry discussed with the NRC staff their plan to provide interim guidance on data quality to assist licensees with Fall 2000 outages that include SG examinations. The NRC staff met with the industry on July 26, 2000 to discuss specific issues the staff identified for consideration and will meet with industry in the near future to discuss the industry lessons learned from the tube failure.

The NRC staff had been working on the industry steam generator initiative, NEI 97-06, but staff review on the initiative was deferred by the agency in response to the IP2 event. The agency deferred the review to allow the staff sufficient time to properly assess the issues arising from the tube failure. When this review recommences, the staff will consider the lessons learned developed by the NRC task force that reviewed the IP2 event.

Attachment: As stated

We understand that NEI has performed a lesson's learned review for the industry based on the tube failure. The industry is working on revising the Electric Power Research Institute guidelines that support the framework of the steam generator industry initiative based on their lessons learned activity and input from the NRC staff. The industry discussed with the NRC staff their plan to provide interim guidance on data quality to assist licensees with Fall 2000 outages that include SG examinations. The NRC staff met with the industry on July 26, 2000 to discuss specific issues the staff identified for consideration and will meet with industry in the near future to discuss the industry lessons learned from the tube failure.

The NRC staff had been working on the industry steam generator initiative, NEI 97-06, but staff review on the initiative was deferred by the agency in response to the IP2 event. The agency deferred the review to allow the staff sufficient time to properly assess the issues arising from the tube failure. When this review recommences, the staff will consider the lessons learned developed by the NRC task force that reviewed the IP2 event.

Attachment: As stated

DISTRIBUTION

REnnis	BBoger	SNewberry
DMatthews	CPaperiello	ARubin
JZwolinski	KCyr	JGoldberg
GHolahan	HMiller	JYerokun
MGamberoni	FMiraglia	MBanerjee
EAdensam	PNorry	TFrye
PMilano	JCraig	JDonoghue
RCroteau	OGC	OPA
OCA	Non-Public	EMCB R/F

ADAMS/ACCESSION NO.:

OFFICE		D/NRR	DD/NRR	ADPT/NRR	ADIP/NRR
NAME		SCollins	RZimmerman	BSheron	JJohnson
DATE		10/ /00	10/ /00	10/ /00	10/ /00
OFFICE	EMCB:DE:NRR	SC/EMCB:DE:NRR	C/EMCB:DE:NRR	DD/DE:NRR	D/DE:NRR
NAME	LLund:nkw	TSullivan	WBateman	RWessman	JStrosnider
DATE	10/ /00	10/ /00	10/ /00	10/ /00	10/ /00

OFFICIAL RECORD COPY