

April 30, 2001

MEMORANDUM TO: Brian W. Sheron, Associate Director  
for Project Licensing and Technical Analysis

R. William Borchardt, Associate Director  
for Inspection and Programs

FROM: Jack R. Strosnider, Director */ra/*  
Division of Engineering

SUBJECT: STEAM GENERATOR ACTION PLAN ITEM 1.11A - REVIEW AND  
REVISE THE BASELINE INSPECTION PROGRAM RELATED TO  
STEAM GENERATOR INSPECTIONS

In the Steam Generator Action Plan (SGAP) dated November 16, 2000, the NRC staff indicated that we would document the completion of each major milestone in the action plan with a memorandum or report from the lead division director to the associate directors in the Office of Nuclear Reactor Regulation. This memorandum documents completion of milestone 1.11a regarding the review and revision of the baseline inspection program related to steam generator (SG) inspections. The draft revision is provided as an attachment to this memorandum.

Milestone 1.11a deals with the development of additional guidance to be used for the NRC baseline inspection program related to SG inspections. A number of issues were raised by the Indian Point 2 (IP2) Lessons Learned Task Group and the Office of Inspector General (OIG) including: the necessity for additional guidance on the NRC oversight of licensee's SG inspection activities (IP2 Lessons Learned Task Group recommendation No. 5a, and Attachment 3 to Staff Review of OIG Report<sup>1</sup>); the inclusion of the SG outage phone calls in the inspection program (IP2 Lessons Learned Task Group recommendation No. 5d); the consideration of whether the licensee SG examination results reports are reviewed as part of the inspection (IP2 Lessons Learned Task Group recommendation No. 6c); review of the training requirements for NRC inspectors for the SG baseline inspection program (IP2 Lessons Learned Task Group recommendation No. 5b and 5c); and the establishment of risk-informed thresholds that can be applied to the results of the periodic SG inspections to identify SG tube degradation that warrants increased NRC attention (IP2 Lessons Learned Task Group recommendation No. 5f). Each of these issues will be addressed below.

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<sup>1</sup>Memorandum from William D. Travers, Executive Director for Operations to the Commission dated November 3, 2000, "Staff Review of OIG Report on the NRC's Response to the Steam Generator Tube Failure at Indian Point 2 and Related Issues"

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The NRC inservice inspection (ISI) baseline inspection procedure, 71111-08, which includes the oversight of SG inspection activities, has been revised and is provided as an attachment to this memorandum. These changes complete SGAP item number 1.11a. The majority of the revisions were related to the SG inspection activities. Minor changes were made related to the ISI inspection activities based on recommendations from NRR/Inspection Program Branch staff. There are a number of significant changes worth noting.

- The level of inspection effort for each plant has been given flexibility and will be at the discretion of the region. This flexibility applies to both the review of ISI program activities as well as SG program activities. This enables the regions to make their inspection scheduling decisions based on the extent of licensee activities as well as the condition of the SGs. In addition, it enables the region to limit the overall inspection hours to meet resource and logistical constraints.
- The frequency of the inspection has been increased from once per site every two years, to once per unit every refueling outage. Also, additional hours (resources) have been allotted and are to be dependent on the extent of the planned NRC oversight activities. This is based on feedback from the regional offices that the current resource estimate is too low to perform the entire inspection procedure. In addition, NRR/DE has determined that additional inspection effort may be necessary at PWR's with more significant SG issues.
- Guidance has been provided to help the region determine the appropriate level of inspection hours (resources) to be allotted to SG inspection activities. In addition, the procedure states that NRR/DE staff can be consulted for input to this decision.
- The list of NRC inspection oversight activities has been expanded in order to provide additional guidance specific to SG inspection. Also, the focus of the inspection has changed from review of tubes with defects to review of licensee condition monitoring activities. The reason for this change is the overriding importance of inspecting the manner in which the licensee is conducting its inspection program, including the licensee's determination regarding satisfaction of the SG performance criteria. The inspection of condition monitoring activities is in line with the concept of performance based inspection, in that appropriate condition monitoring activities directly assess the licensee's SG program performance. It is important to also note that under certain emergent situations, analysis of eddy current data may be necessary. The procedure states that if adequate expertise for this activity does not reside in the regional office, NRR/DE should be contacted and can provide this resource.

With respect to the task group recommendation regarding inclusion of the SG outage phone calls and review of outage summary reports in the inspection program, the staff has concluded that the appropriate regulatory process for the SG outage phone calls is to handle the calls as part of NRR's review of the licensee's outage summary reports. This conclusion was developed in conjunction with SGAP items 1.10 and 1.12. The closeout memorandum for SGAP items 1.10 and 1.12 provide a more complete evaluation of the treatment of phone calls and review of outage summary reports. Notwithstanding, the

baseline inspection procedure contains recommendations that, for the purpose of preparation, regional inspectors should review the summaries of past phone calls, review past outage summary reports, and to the extent permitted participate in outage phone calls.

The issues related to establishment of risk-informed thresholds and training requirements will be addressed separately in SGAP items 1.11b and 1.11c, respectively. However, it should be noted that the staff acknowledges the inspection staff will require training in order to perform this inspection procedure. The necessary training will be developed after feedback on the revised inspection procedure has been received from the regional offices.

The revised inspection procedure is intended to contribute to the NRC's four performance goals for the Nuclear Reactor Safety arena: maintain safety, protect the environment and the common defense and security; make NRC activities and decisions more effective, efficient, and realistic; increase public confidence; and reduce unnecessary regulatory burden. Specifically, this guidance was developed to enhance the NRC oversight of SG inspection activities, which can be used as a tool to achieve the performance goals of maintaining safety and making NRC activities and decisions more effective, efficient, and realistic. In addition, the ability to apply increased resources where the situation warrants additional oversight will assist in leveraging the NRC goal of increasing public confidence. Lastly, the guidance will improve communications among the regional inspectors and headquarters staff, thus assisting the NRC in achieving the goal of reducing unnecessary regulatory burden.

By copy of this memorandum, we are requesting that the Inspection Program Branch, DIPM, request regional review of the draft inspection procedure in accordance with the normal process. Accordingly, since the attached guidance is predecisional, it is not being made publically available. Subsequent to addressing regional comments, the guidance will be issued in final form and made publically available.

In summary, the attached inspection procedure is responsive to the IP2 Lessons Learned Task Group recommendations and the Office of the Inspector General comments and observations on these issues.

Attachment: As stated

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