

#### NUCLEAR MANAGEMENT AND RESOURCES COUNCIL

1776 Eye Street, N.W. • Suite 300 • Washington, D.C. 20006-3706 (202) 872-1280

William H. Rasin

Vice President & Director Technical Division

August 31, 1993

Mr. William T. Russell
Associate Director for Inspection
& Technical Assessment
U. S. Nuclear Regulatory Commission
Washington, DC 20555

SUBJECT: EPRI/Steam Generator Strategic Management Program Initiative on Steam Generator Degradation Specific Management

Dear Mr. Russell:

The enclosed letter with attachments and the enclosed technical reports are submitted to you for NRC review to further the mutual desire of the industry and the NRC to improve the technical and regulatory aspects of assuring steam generator integrity. We understand that you believe this material will facilitate NRC resolution of generic concerns and that, therefore, neither EPRI nor NUMARC will incur specific fees associated with the review of this material. We further understand that you intend to proceed on a schedule leading to the resolution of all technical issues associated with this submittal by fall of 1994.

Please note that EPRI has requested two of the enclosed documents to be withheld from disclosure for the immediate future. Letters detailing this request are included as attachments 4 and 5 of the enclosed letter. Non-proprietary versions of these two reports have been included with this transmittal.

Mr. William T. Russell August 31, 1993 Page 2

We will be happy to arrange any technical or management level meetings you desire to facilitate your review of this material. Please let me know if you have further questions or comments.

Sincerely,

William H. Rasin

WHR/ljw Enclosures

c: R. Smith

J. Woodard

C. Welty

August 24, 1993

Mr. William H. Rasin NUMARC 1776 "EYE" Street NW Washington, DC 20006-2496

Dear Bill:

SUBJECT: EPRI/Steam Generator Strategic Management Program (SGMP)

Initiative on Steam Generator Degradation Specific Management

The purpose of this letter is to provide documentation to NUMARC for your transmittal to NRC on the EPRI/Steam Generator Strategic Management Program (SGMP1) initiative on Steam Generator Degradation Specific Management (SGDSM).

EPRI and the SGMP have reviewed the SGDSM initiative with the NRC on several occasions, most recently at a meeting in Charlotte, NC on July 22-23, 1993. As a result of these discussions, EPRI and the SGMP have established a Lead Plant Group (see Attachment 2) for submitting and obtaining NRC approval of the SGDSM initiative, and committed to make this submittal in mid-August 1993. The Lead Plant Group consists of those utilities pursuing implementation of SGDSM in the near term. It is our understanding that NRC review of the SGDSM initiative will be treated as a generic issue and not require separate cost recovery from the industry.

Attachment 3 identifies the six enclosed documents which comprise the SGDSM submittal. These documents describe the SGDSM concept, implementation and technical details. (Four sets of documents are provided, three for transmittal to NRC and one set is for NUMARC records.)

This SGDSM submittal is the result of a multi-year, multi-disciplined EPRI/SGMP effort directed at solving generic problems related to steam generator operation. Participants have included domestic and foreign utilities, NSSS vendors, equipment and services organizations, consultants and research organizations. SGDSM is a generic process for evaluating, monitoring and repairing distinct, individual tube degradation mechanisms. The SGDSM

Formerly titled the Steam Generator Reliability Project. Member utilities of the EPRI/SGMP are listed in Attachment 1.

approach has been to develop generic materials to the maximum extent practical to provide for uniform development, approval, application and updating. Implementation of such a degradation-specific approach is expected to result in the most cost effective means to maintain steam generator safety and reliability.

EPRI/SGMP activities are in progress to continue SGDSM development, data gathering and analyses. For example, the information provided in this transmittal is being actively reviewed and refined by the SGMP Ad Hoc Committee for Alternate Repair Limits and the SGDSM Lead Plant Group. The areas in which work is in progress are identified in each of those documents which include such on-going work. Specifically, items 1, 3 and 5 of Attachment 3 have work in progress and such work is identified on the page immediately following the title page of each document.

At the July 22-23, 1993 meetings in Charlotte, the NRC staff anticipated reaching a consensus with the industry on the technical details of the SGDSM concept and on alternate repair criteria associated with Outside Diameter Stress Corrosion Cracking (ODSCC) within about one year of submittal of the enclosed material. The NRC staff agreed to meet with the industry on a frequent, periodic basis to discuss the status of their review and the regulatory process related to the submittal. EPRI and the SGMP look forward to any early and productive dialog with the NRC on this important industry initiative.

If you have any questions on this subject, please contact Mr. Jack Woodard of Southern Nuclear Operating Co. at (205) 868-5086 regarding questions on the Lead Plant Group or Mr. David A. Steininger of EPRI at (415) 855-2019 regarding questions of a technical nature.

Sincerely,

David A. Steininger Technical Advisor

Steam Generator Project Office

Approved by:

Robert E. Smith

Chairman, Executive Group

Robert & Smith

Utility Steering Committee

Steam Generator Strategic Management Program

### Attachment 1

#### SGMP Member Utilities

#### Domestic

Arizona Public Service Co. Baltimore Gas & Electric Carolina Power & Light Consolidated Edison of NY Duke Power Co. Duquesne Light Co. Entergy - Mississippi P&L Florida Power Corporation GPU Corp. Houston Lighting & Power Maine Yankee Atomic New York Power Authority Northeast Utilities Northern States Power Co. Omaha Public Power District Pacific Gas & Electric Co. Public Service E & G Rochester Gas & Electric South Carolina E & G Southern California Edison Southern Nuclear Operating Toledo Ldison Company TU Electric TVA Union Electric Co. Wisconsin Electric Power Wisconsin Public Service Wolf Creek Nuclear Yankee Atomic

International
CRIEPI
Electrabel
Electricite de France
Nuclear Electric
Ontario Hydro
Spanish Utilities
Swedish State Power Board

## Attachment 2

# SGDSM Lead Plant Group Utilities

American Electric Power
Commonwealth Edison
Duke Power
Duquesne Light Company
Northern States Power
Pacific Gas & Electric
Southern Nuclear Operating Company
Wisconsin Public Service

#### Attackment 3

Enclosed are copies of the following documents which describe the SGDSM concept, implementation and technical details.

 "Steam Generator Degradation Specific Management," EPRI Draft Report, TR-103017, August 1993.

This document describes the overall concept of Steam Generator Degradation Specific Management (SGDSM) and references the other documents listed below. The page immediately following the title page of this document identifies the area in which work is still in progress.

 "PWR Steam Generator Examination Guidelines: Revision 3, EPRI Final Report, NP-6201, Revision 3, November 1992.

This document describes the industry tube inspection guidelines to be implemented as part of SGDSM as indicated in the document identified in item 1.

 "PWR Steam Generator Tube Repair Limits - Technical Support Document for Outside Diameter Stress Corrosion Cracking at Tube Support Plates, Revision 1," EPRI Draft Report, TR-100407, Draft Revision 1, August 1993, Proprietary.

This document describes degradation specific inspection and repair criteria for Outside Diameter Stress Corrosion Cracking (ODSCC) at tube support plates and is also referenced in the item 1. document. The page immediately following the title page of this document identifies areas in which work is still in progress.

Since this report contains proprietary information, an affidavit describing the basis for withholding this information from the public and signed by EPRI, the owner of the information, is provided in Attachment 4. Copies of a non-proprietary version of this report are also provided as identified in item 4. below.

 "PWR Steam Generator Tube Repair Limits - Technical Support Document for Outside Diameter Stress Corrosion Cracking at Tube Support Plates, Revision 1," EPRI Draft Report, TR-100407, Draft Revision 1, August 1993, Non-Proprietary.

This is a non-proprietary version of item 3.

 "PWR Steam Generator Tube Repair Limits: Technical Support Document for Expansion Zone PWSCC in Roll Transitions (Revision 2)," EPRI Draft Report, NP-6864-L Revision 2, August 1993, Proprietary.

This document describes degradation specific inspection and repair criteria for Primary Water Stress Corrosion Cracking (PWSCC) in roll transitions and is also referenced in the item 1. document. The page immediately following the title page of this document identifies the areas in which work is still in progress.

Since this report contains proprietary information, an affidavit describing the basis for withholding this information from the public and signed by EPRI, the owner of the information, is provided in Attachment 5. Copies of a non-proprietary version of this report are also provided as identified in item 6. below.

 "PWR Steam Generator Tube Repair Limits: Technical Support Document for Expansion Zone PWSCC in Roll Transitions (Revision 2)," EPRI Draft Report, NP-6864-L Revision 2, August 1993, Non-Proprietary.

This is a non-proprietary version of item 5.

EPRI and the SGMP approve the copying of the above documents by the NRC only as needed for their internal review and approval of the SGDSM concept.