Domestic Members
AmerenUE
Callaway
American Electric Power Co.
D.C. Cook 1 & 2
Arizona Public Service Co.
Palo Verde 1, 2 & 3
Constellation Energy Group
Calvert Cliffs 1 & 2
Dominion Nuclear Connecticut
Millstone 2 & 3
Dominion Virginia Power
North Anna 1 & 2
Surry 1 & 2
Duke Energy
Catawba 1 & 2
McGuire 1 & 2
Entergy Nuclear Northeast
Indian Point 2 & 3
Entergy Nuclear South
ANO 2
Waterford 3
Exelon Generation Company LLC
Braidwood 1 & 2
Byron 1 & 2
FirstEnergy Nuclear Operating Co.
Beaver Valley 1 & 2
FPL Group
St. Lucie 1 & 2
Seabrook
Turkey Point 3 & 4
Nuclear Management Co.
Kewaunee
Palisades
Point Beach 1 & 2
Prairie Island
Omaha Public Power District
Fort Calhoun
Pacific Gas & Electric Co.
Diablo Canyon 1 & 2
Progress Energy
H. B. Robinson 2
Shearon Harris
PSEG – Nuclear
Salem 1 & 2
Rochester Gas & Electric Co.
R. E. Ginna
South Carolina Electric & Gas Co.
V. C. Summer
Southern California Edison
SONGS 2 & 3
STP Nuclear Operating Co.
South Texas Project 1 & 2
Southern Nuclear Operating Co.
J. M. Farley 1 & 2
A. W. Vogtle 1 & 2
Tennessee Valley Authority
Sequoyah 1 & 2
Watts Bar 1
TXU Electric
Commanche Peak 1 & 2
Wolf Creek Nuclear Operating Corp.
Wolf Creek

International Members
Electrabel
Doel 1, 2, 4
Tihange 1 & 3
Electricité de France
Kansai Electric Power Co.
Mihama 1
Takahama 1
Ohi 1 & 2
Korea Hydro & Nuclear Power Co.
Kori 1 – 4
Ulchin 3 & 4
Yonggwang 1 - 5
British Energy plc
Sizewell B
NEK
Krško
Spanish Utilities
Asco 1 & 2
Vandellos 2
Almaraz 1 & 2
Ringhals AB
Ringhals 2 – 4
Taiwan Power Co.
Maanshan 1 & 2

January 30, 2004
WOG-04-057

WCAP-16180-NP, Rev. 0
Project Number 694

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Attention: Chief, Information Management Branch,
Division of Program Management

Subject: WOG CE Fleet Pressurizer Heater Sleeve Inspection Program

References: 1. WOG-03-610, *Westinghouse Owners Group Activities to Address CE Plant Pressurizer Heater Sleeve Degradation Issues,* November 19, 2003.

2. WOG-03-643, "*WOG CE Fleet Operability Assessment Regarding Pressurizer Heater Sleeves*," December 23, 2003.

As committed in Reference 1, the WOG has provided to the NRC the Operability Assessment performed by the WOG in support of the CE fleet regarding the potential for circumferential cracks in pressurizer heater sleeves (WOG-03-643, Reference 2), as well as the inspection activities currently planned by the CE utilities to address the heater sleeve issue. WOG-03-643 also outlined the WOG recommendations for expanded inspections of pressurizer sleeves that were then under review by the CE utilities.

On January 8, 2004, a meeting was held between the WOG and NRC management to discuss the proposed WOG inspection recommendations and the NRC's expectations for future inspections. The meeting provided particularly useful insight into what the NRC feels is necessary for the CE utilities to incorporate into the inspection program such that effective inspections will be performed during upcoming outages, and in the event of the identification of leaking heater sleeves, a meaningful characterization of the source of the leakage can be determined.

As a result of these discussions, the WOG and the CE utilities have modified the inspection program to be applied for the inspection of heater sleeves during future refueling outages, including those upcoming in the Spring 2004. (As requested in the January 8, 2004 meeting, an outage schedule for the plants in the CE fleet is included as Attachment 1.) The elements of this inspection program are as follows.

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- Perform a bare metal visual inspection of 100% of all pressurizer heater sleeve locations in such a way that visual access to the bare metal 360 degrees around each sleeve can be attained.

- Perform non-destructive examination (NDE) capable of characterizing crack orientation of all sleeves for which visual inspection shows evidence of leakage. The NDE of each leaking sleeve will be performed prior to repair of the sleeve.

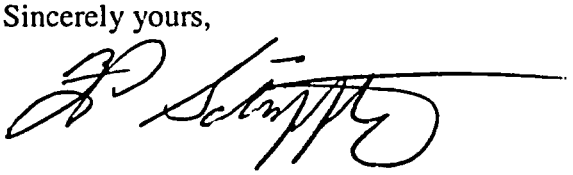
- If the NDE defines the flaw as potential circumferential cracking below the sleeve attachment weld, the NRC will be notified immediately and an appropriate inspection plan developed. The plan will define additional sleeves to be inspected by NDE sufficient to determine the extent of condition commensurate with the characterization of the flaw.

The WOG is currently in the process of issuing a letter to the utilities of the CE fleet directing them to document these inspection commitments by inclusion in each utility's corrective action program, or other appropriate means of documentation.

It is noted here for the record, as was discussed in the January 8, 2004 meeting, that a statement in Attachment 1 to WOG-03-643 indicated that the inspection plans for CE utilities would include "loop piping small bore Alloy 600 J-groove welded locations every refueling outage." WOG-03-643 was intended to address only the pressurizer heater sleeves. We are well aware that the integrity of all Alloy 600 small bore nozzles and attachment welds in the primary system is of concern. These nozzles will be addressed in future long term inspection plans that we expect will be developed through the programs that are coordinated under the Materials Technology Advisory Group (MTAG).

The WOG and the CE utilities are continuing to work toward long term inspection or repair solutions to achieve a permanent resolution of the pressurizer heater sleeve issue. We look forward to meeting with the NRC at your convenience to further discuss the progress of the resolution of this issue.

Sincerely yours,



Frederick P. "Ted" Schiffley, II
Chairman, Westinghouse Owners Group

Attachment (1)

cc:
Dr. Brian Sheron, NRC
Alex Marion, NEI
Dave Mauldin, APS
Materials Subcommittee
Steering Committee
PMO
Drew Holland, NRC
J. Riley, NEI
B. Maurer (W) Pittsburgh
Executive Committee
Licensing Subcommittee

Attachment 1

Scheduled Refueling Outages
For Plants in the CE Fleet

Plant	Next Scheduled Refueling Outage
Arkansas Nuclear One Unit 2	March 2005
Calvert Cliffs Unit 1	April 2004
Calvert Cliffs Unit 2	February 2005
Fort Calhoun	February 2005
Millstone Unit 2	April 2005
Palisades	September 2004
Palo Verde Unit 1	April 2004
Palo Verde Unit 2	April 2005
Palo Verde Unit 3	October 2004
San Onofre Unit 2	February 2004
San Onofre Unit 3	September 2004
St. Lucie Unit 1	March 2004
St. Lucie Unit 2	September 2004
Waterford Unit 3	April 2005