

WESTINGHOUSE OWNERS GROUP / NRC  
SENIOR MANAGEMENT MEETING

April 26, 2000 - 9:00 AM - 11:00 AM  
One White Flint North - Room O-5 B-4  
Rockville, MD

*Agenda*

- 9:00 AM I INTRODUCTION Brew Barron, Duke  
WOG EAC Chairman
- Meeting Purpose
  - Steering Committee/Executive Management Group Changes
  - Agenda Review
  - NRC Opening Comments Sam Collins, Director NRR
- 9:15 AM II DETERMINISTIC ISSUES Karl Jacobs, NYPA  
WOG Chairman
- WOG Baffle Bolt Program Status
  - WOG License Renewal Lead Plant
  - Containment Sump/Coating Issue Status
  - WOG Break Opening Time Topical Report Status
- 9:45 AM III RISK-INFORMED ISSUES Karl Jacobs
- PSA Peer Review Status
  - Status of LBLOCA Redefinition
  - Status of RI ATWS Model
  - RCP Seal Model Topical Report/NRC Response
- 10:15 AM IV PROCESS ISSUES Karl Jacobs
- PASS Elimination Process
  - Mode 3/4 LOCA Topical Report Withdrawal/NRC Response
  - Industry Review of NRC SFP Risk Report
- 10:30 AM V REVIEW WOG NRC SUBMITTALS Karl Jacobs
- Priority of WOG Submittals
  - Future Planned WCAP Submittals
- 10:45 AM VI NRC ITEMS NRC
- Open Discussion
- 11:00 AM VII CLOSING COMMENTS Karl Jacobs
- Comments/Suggestion
  - Action Item Review

***WESTINGHOUSE OWNERS GROUP***

**WOG / NRC SENIOR MANAGEMENT  
MEETING**

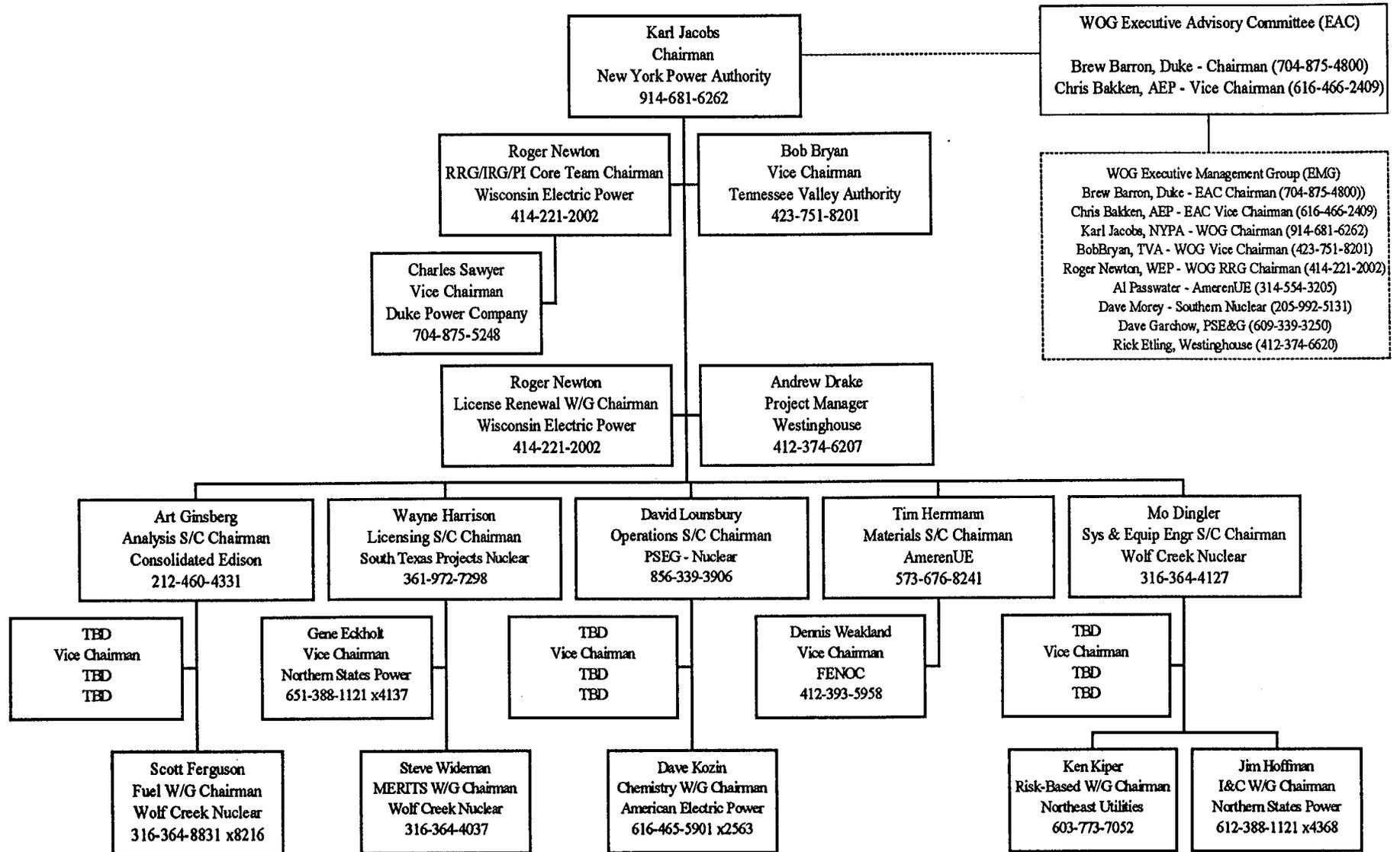
**April 26, 2000**

# WESTINGHOUSE OWNERS GROUPS WOG / NRC SENIOR MANAGEMENT MEETING April 26, 2000

## I. INTRODUCTION

- Meeting Purpose
  - WOG/NRC Information Meetings Implemented in 1992
  
  - Conducted on a Biannual Basis
    - Last Meeting November 2, 1999
  
  - Interface Meetings
    - Maintain & enhance communication channels
    - Allow for candid discussion of open issues / concerns
    - Provide major program activity update
    - Review NRC status of WOG submittals
    - Solicit NRC input to WOG program planning & prioritization process

# Westinghouse Owners Group Steering Committee - 2000



# WESTINGHOUSE OWNERS GROUP WOG / NRC INFORMATION MEETING

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## II. DETERMINISTIC ISSUES

- WOG Baffle Bolt Program Status
  - BBB Program Objectives
    - Maintain safety for WOG plants
    - Proactively manage the program with a systematic approach
  - Current Status
    - Hot cell examination of baffle bolts is scheduled for completion by 12/00
    - Integration of WOG program tasks with MRP/ITG program complete
  - Status of Plant Inspections
    - Four WOG plants have completed bolt inspection / replacement
    - Bolt degradation less than anticipated from European experience

# WESTINGHOUSE OWNERS GROUP WOG / NRC INFORMATION MEETING

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## II. DETERMINISTIC ISSUES - continued

- WOG Baffle Bolt Program Status - continued
  - Future WOG Plans
    - Complete BBB analyses for other plant groupings in 2000
    - Four international WOG plants are planning bolt inspections / replacements
    - No further inspections and/or replacements are planned for domestic Westinghouse PWR plants at this time
  - Conclusion
    - It is appropriate to treat BBB degradation as a potential aging management issue for License Renewal

# WESTINGHOUSE OWNERS GROUP WOG / NRC INFORMATION MEETING April 26, 2000

## II. DETERMINISTIC ISSUES - continued

- WOG License Renewal Lead Plant
  - 6 WOG member utilities with 14 plants have indicated intent to submit LR applications (per NRC LR Web Site)
  - Current WOG Program is nearing completion (1993-2000)
    - Lone remaining task is to get closure on WOG GTRs
  - New Program (2000-2003)
    - Lead Plant for WOG is Turkey Point, FP&L
    - Provide Technology Transfer

# WESTINGHOUSE OWNERS GROUP WOG / NRC INFORMATION MEETING April 26, 2000

## II. DETERMINISTIC ISSUES - continued

- WOG License Renewal Lead Plant - continued
  - NRC Submittal Status - GTRs
    - 5 Generic Technical Reports Submitted to NRC for Review
      - RCS Supports
      - Class 1 Piping
      - Pressurizer
      - Containment Structure
      - Reactor Internals
    - Total Review Fees to Date \$366,340; Only 2 DSERs received
    - April 18, 2000 NRC / WOG LR Meeting
      - NRC to provide DSER completion dates

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## II. DETERMINISTIC ISSUES - continued

- Containment Sump / Coating Issue Status
  - WOG is actively participating with NRC in debris transport and coatings failure research program
    - WOG has actively monitored, reviewed, and commented on the NRC Research effort
    - WOG has supported the NRC by providing plant design data, volunteer plants, and technical expertise for PIRT panels
    - Test programs (transport & coatings) are considered well developed; incorporated many Industry comments

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II. DETERMINISTIC ISSUES - continued

- Containment Sump / Coating Issue Status - continued
  - WOG believes this a Risk Informed issue
  - Application of GDC-4 and LBB to debris generation
    - NRC has not formally responded to OGs' position
      - open item over one year old
  - NRC considering limited debris generation testing
    - Have solicited industry comments
    - Have elected not to utilize a PIRT Panel and industry participation through the PIRT Panel
  - WOG will continue our active participation with NRC Research to assist in resolving this issue

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## II. DETERMINISTIC ISSUES - continued

- WOG Break Opening Time Topical Report Status
  - Objective
    - Relax Break Opening Time (BOT) to 20msec for Generic Applications
  - Status
    - NRC to provide draft SER or written RAIs for WCAP-14748

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**III. RISK-INFORMED ISSUES**

- PSA Peer Review Status
  - Uniformly conducted PRA peer reviews for each currently operating domestic WOG member plant (thirty sites)
    - Demonstrate quality
    - Reduce level of NRC review needed to support risk-informed WOG plant licensing changes
  - Reviews completed (not including Surry pilot):
    - Braidwood - Final Report issued 10/19/99
    - Millstone3 - Final Report issued 11/22/99
    - Seabrook - Final Report issued 2/7/00
  - Reviews scheduled
    - Nine WOG sites in 2000
    - Seventeen WOG sites in 2001
  - Developing additional “common issues” guidance for future reviews based on initial review results (ongoing/lessons learned)
    - WOG Peer Review on going process is to incorporate the ASME standard criteria into the peer review checklist

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**III. RISK-INFORMED ISSUES - continued**

- Status of LBLOCA Redefinition
  - Objective
    - Pursue Rule-Making under SECY-98-300, Option 3 to Allow Redefinition of the Limiting LOCA Break Size Required for Plant Licensing Basis
  - March 17 NRC/WOG meeting to present and discuss proposed program strategy
    - Very positive meeting
    - Similarities in approach
    - Agreed to frequent NRC/WOG meetings to work on this issue
  - May 18 next WOG/NRC meeting
    - Provide additional program details in terms of actual scope of work, deliverables and schedule
  - Proposed program:
    - Risk Informed analyses
    - Leak before break analyses
    - Licensing support
    - Industry Coordination (work with NEI, OGs and NSSS vendors)

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## III. RISK-INFORMED ISSUES - continued

- Status of RI ATWS Model
  - Objectives
    - Develop Risk-Informed ATWS model and evaluation approach that can be used to address NRC concerns with WCAP-11992
  - Draft Risk-Informed ATWS model developed and presented to NRC 12/98
    - Responses developed to address NRC issues from 12/98 meeting
  - NRC concerns/issued raised during 12/98 meeting:
    - Defense-in-Depth / Safety Margins
    - Large Early Release Frequency
    - Steam Generator Tube Integrity
    - UET / MTC Link
  - Written responses to be provided to NRC for review by mid-May
  - Proposed WOG/NRC meeting to review responses in early June
  - Lead Plant analysis and RI ATWS model submittal for NRC review 4th Q00

# WESTINGHOUSE OWNERS GROUP WOG / NRC INFORMATION MEETING April 26, 2000

## III. RISK-INFORMED ISSUES - continued

- RCP Seal Model Topical Report / NRC Response
  - WOG requested the NRC complete their review of WCAP-10541 at 11/2/99  
WOG/NRC Senior Management Meeting
  - WOG received denial of WCAP without RAIs
  - NRC letter not granting SER to WCAP requires clarification
  - NRC communications identified that parts of the WCAP were acceptable
  - However the letter concluded that “the staff cannot approve the WOG topical report and it should not be used in license amendment applications.”
  - WOG requesting a mechanism to obtain clarification on the acceptable parts
  - WOG requests to continue our discussions on the model and probabilities

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## IV. PROCESS ISSUES

- PASS Elimination Process
  - Eliminate Post Accident Sampling System Regulatory Requirements (WCAP-14986, Rev. 1)
  - SER should be clear that the effectiveness of the plant emergency response is not decreased as a result of PASS elimination
  - Status
    - Marked-up version of WCAP -14986 provided to the NRC April 10
      - Incorporates comments/changes agreed to during the review process

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## IV. PROCESS ISSUES - continued

- Mode 3/4 LOCA Topical Report Withdrawal / NRC Response
  - WCAP-12476, “Evaluation of LOCA During Mode 3 and Mode 4 Operation for Westinghouse NSSS” withdrawal from NRC review (4/99 OG-99-039)
  - NRC Senior Management suggested WCAP be withdrawn and NRC concurrence on use be obtained
  - WOG complied and submitted request
  - NRC declined to concur but dropped the WCAP from the review list
  - Status
    - Plants are utilizing the WCAP
  - WOG still expecting concurrence

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IV. PROCESS ISSUES - *continued*

- Industry Review of NRC SFP Risk Report
  - Notice published in Federal Register on 2/15/00. WOG received the opportunity to review report from NEI on 3/24/00
  - WOG requested extension to the review period via NEI
  - Extension was not granted
  - WOG requests the opportunity to review and provide comments on the SFP Risk Report

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V. REVIEW WOG NRC SUBMITTALS

- Priority of WOG Submittals
- Future Planned WCAP Submittals

### WOG WCAP Submittals to NRC

WCAP #	WOG Priority	Title	OG Letter	Lead Plant	Estimated SER Date	Actions/Comments
14986 Rev 1 14987 Rev 1	1	WOG Post Accident Sampling System Requirements: A Technical Basis	OG-98-108 October 26, 1998	Wolf Creek	4/00	Wolf Creek submitted LAR 11/98. Marked up / corrected WCAP provided to NRC.
14748/14749	2	Justification for Increasing Postulated Break Opening Times in Westinghouse Pressurized Water Reactors	OG-97-006 January 31, 1997 Re-submitted OG-98-120 December 10, 1998	Generic	Issued 10/1/98 for BBB Generic TBD	Limited applicability to BBB program. Re-request approval for generic application via OG-98-120 12/98. Approved version of WCAP issued to NRC via OG-99-008 2/99.
10541, Rev. 2	3	Reactor Coolant Pump Seal Performance Following Loss of All AC Power	OG-84-122 May 3, 1984 OG-86-206 (Rev. 2) December 10, 1986	Generic	SER denied 1/5/00	GSI-23 closed. Model in NUREG/CR-5167 to be used in PRAs supporting licensing actions
12476	*	Evaluation of LOCA During Mode 3 and Mode 4 Operation for Westinghouse NSSS - Class 3 non-prop.	OG-91-61 November 27, 1991	Generic	N/A	Withdrawn via OG-99-039 4/28/99. Withdrawal required NRC concurrence.

### License Renewal Submittals

WCAP #	WOG Priority	Title	OG Letter	Lead Plant	Estimated SER Date	Actions/Comments
14422 Rev. 2	1	License Renewal Evaluation: Aging Management for Reactor Coolant Supports	OG-97-024 March 4, 1997	Generic	DSER received 2/25/00	Evaluating open items from DSER
14575	2	License Renewal Evaluation: Aging Management for Class 1 Piping	OG-96-071 August 28, 1996	Generic	DSER received 2/10/00	Evaluating open items from DSER
14574	3	License Renewal Evaluation: Aging Management for Pressurizer	OG-96-052 July 3, 1996	Generic	4/18/00	RAI process complete. Awaiting draft SER.
14756	4	License Renewal Evaluation : Aging Management for Pressurized Water Reactor Containment Structure	OG-96-103 December 11, 1996	Generic	4/18/00	RAI process complete. Awaiting draft SER.
14577	5	License Renewal Evaluation: Aging Management for Reactor Vessel Internals	OG-97-088 September 2, 1997	Generic	6/00 (?)	RAIs issued 6/99; responses provided 11/99. Meeting with NRC on 4/18/00

Note: Estimated SER dates provided by NRC.

## ASIC Subgroup Program

WCAP #	WOG Priority	Title	OG Letter	Lead Plant	Estimated SER Date	Comments
XXXXXX		ASICS Based Replacement Modules for Use in Analog Process Control and Protection Applications	OG-97-069, July 10, 1997 WOG-ASIC-98-002, June 5, 1998;	South Texas	8/2000	ASIC Topical Report Chapters 1, 2, 3, 4, 5, 6, 7 and 8 have been submitted. EMC section of Chapter 6 and Chapters 8 and 9 are scheduled for submittal 5/00.
15215 Rev 0		Seismic Test Report Westinghouse ASIC-Based Replacement Module for 7300 Process Protection System May 1999	WOG-ASIC-99-019, August 9, 1999	South Texas	8/2000	
15371 Rev 0		Fault Conditions Test Report Westinghouse ASIC-Based Replacement Module for 7300 Process Protection System February 2000	WOG ASIC-00-005 February 7, 2000	South Texas	8/2000	
15378 Rev 0		Environmental Test Report Westinghouse ASIC-Based Replacement Modules for 7300 Process Protection System February 2000	WOG ASIC-00-007 March 6, 2000	South Texas	8/2000	

## Anticipated WOG WCAP Submittals to NRC

WCAP #	WOG Priority	Title	Estimated Submittal Date	Comments
15376		RT & ESF Logic and Rx Trip AOT and STI	2 <sup>nd</sup> Quarter, 2000	
XXXXXX		Risk Informed ATWS	4 <sup>th</sup> Quarter, 2000	
XXXXXX		Risk Informed AOT Extensions (1 of 4) - AC Power Sources & Distribution	4 <sup>th</sup> Quarter, 2000	
XXXXXX		Risk Informed AOT Extensions (2 of 4) - DC Power Sources & Distribution	1 <sup>st</sup> Quarter, 2001	
XXXXXX		Risk Informed AOT Extensions (3 of 4) - Fluid Systems (ECCS, SW, CCW, CS)	2 <sup>nd</sup> Quarter, 2001	
XXXXXX		Risk Informed AOT Ext. (4 of 4) - Generic (CIV, RWST, MSSV, ADV, PAM )	3rd Quarter, 2001	

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VI. NRC

- Open Discussion

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**VII. CLOSING COMMENTS**

- Comments / Suggestions
- Action Item Review