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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 4, 2000

MEMORANDUM TO: Stuart A. Richards, Director
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

FROM: Robert M. Pulsifer, Project Manager
Project Directorate I, Section 2
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF MANAGEMENT MEETING WITH THE BOILING WATER REACTOR OWNERS GROUP (BWROG)

On December 8, 1999, the Nuclear Regulatory Commission (NRC) held a management level meeting with the BWROG to discuss various topics. A list of attendees is attached (Attachment 1). The agenda topics and presentation slides are also attached (Attachment 2).

Mr. Collins, Director, Office of Nuclear Reactor Regulation, opened the meeting. Mr. Collins stated resources and the changing landscape of the industry is causing the agency to look for consistency and commonalities between plants. We need to be forward looking in identifying changes. The Office of Nuclear Regulatory Research is supporting NRR by identifying agency issues and the role of the agency to get the work done. The International arena is now more important. Mr. Collins also addressed internal changes. The staff went through a reorganization to better focus on our mission. Mr. Collins described the functional changes for the reorganization with Mr. Jon Johnson, Associate Director for Inspection and Program, developing the product lines and Mr. Brian Sheron, Associate Director for Project Licensing and Technical Analysis, providing the technical support. He said that major work that the staff is addressing includes license renewal and risk-informed initiatives. Mr. Collins stated that the staff is still working on budget activities and that the agency met or exceeded its goals for fiscal year 1999. He said the agency is a strong and credible regulator.

Mr. Glenn Warren stated that there has been good interaction between the BWROG committees and all levels of the staff.

Members of the BWROG continued the meeting as summarized below:

Appendix R - Circuit Analysis

Mr. Warren led the BWROG's discussion on 10 CFR Part 50, Appendix R. Mr. Warren stated that there has been an intensive study on Appendix R and that the BWROG has been talking with other owners groups about their products. The staff indicated that they would finalize a position on the BWROG ADS/LPCI report in early January, and the review of the BWROG deterministic guidance document will be completed about June 2000, depending on how the

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PDR TO PRP BWROG

NEI input fits into the review. The staff will need to review the NEI effort when it is available. The BWROG agreed the deterministic submittal should be reviewed independently of the NEI effort. It was understood that if the staff review does identify safety significant issues the BWROG guidance may need to be revised. The staff indicated that the next Appendix R meeting with the BWROG on their November 15, 1999, BWROG deterministic Appendix R submittal will be established after the scheduled December 20, 1999, meeting with NEI, BWROG, and EPRI regarding NEI's risk-informed effort. Mr. Collins stated that any effort to bring the Appendix R issue to closure is good use of resources by the industry and the NRC. Extension of the Enforcement Guidance Memo (EGM) enforcement discretion on Appendix R will also be reviewed after the December 20, 1999 meeting.

Post Accident Sample System (PASS), H2/O2 Monitoring, H2 Recombiners, and Loose Parts Monitoring

Mr. Kenny led the BWROG's discussion on (1) reduction of PASS and associated sample analysis requirements, (2) reclassification of H2/O2 monitors to non-safety related, (3) elimination of H2 recombiners and/or containment air dilution systems, and loose parts monitoring (LPM). Mr. Kenny stated the relaxation of regulation discussions of the October 7, 1999, meeting with the staff was positive. The staff agreed to set up a conference call with BWROG/GE to discuss LPM. Mr. Kenny stated that the BWROG agreed to work with the NRC on risk-informing 10 CFR 50.44 on combustible gas control. The staff indicated that the H2 recombiner review for BWRs will involve a more extensive review than that performed for the pressurized water reactors (PWRs).

Integrated Risk Informed Regulation (IRIR) Issues

Mr. Kenny led the discussion on IRIR issues. Mr. Kenny stated that the IRIR committee was involved in and is monitoring current risk-informed initiatives. The IRIR committee is also addressing the American Society of Mechanical Engineers (ASME) PRA standard and involved in NEI task forces. The BWROG was requested to discuss at the next BWROG/NRC management meeting IRIR activities regarding A.4 of the maintenance rule.

Risk-Informed Technical Specifications

Mr. Warren led the BWROG discussion on risk-informed technical specifications (TS). Mr. Warren stated that the risk-informed TS should result in fewer plant shutdowns and fewer startup delays. All nuclear steam supply system owners groups are participating in the NEI risk-informed TS task force. Mr. Warren has requested that a call be established between the BWROG and Mr. Beckner and Mr. Hannon of the staff to discuss weather-related TS changes. The staff is still looking at handling such TS changes generically.

Scram Frequency Reduction

Mr. Kenny led the BWROG discussion on scram frequency reduction. Mr. Kenny stated that the BWROG Scram Frequency Reduction Committee has helped the industry effort to reduce tracking system to follow the implementation of the committee's recommendations. Mr. Kenny

said the committee is presently looking at balance-of-plant areas, such as the electro-hydraulic control system of the main turbine, to help in scram reduction. The committee is also looking at improving unplanned capability loss at the plants.

European BWR Conferences

Mr. Warren led a short discussion on the BWROGs activities with European BWR groups to ensure that information, technology, and lessons learned is discussed world wide. The BWROG has participated in several conferences that have included utilities in Europe and Asia. Mr. Warren stated that the participants at these meetings discuss common issues and that valve issues have been discussed among European BWROG utilities at five such meetings.

Emergency Procedure Committee

Mr. Warren led the BWROG discussion on Emergency Procedures. Mr. Warren stated that the Emergency Procedure Guidelines/Severe Accident Guidelines (EPGs/SAGs) Revision 2 will be issued in 2000. The staff noted that the NRC will be forwarding the results of their assessment to the BWROG in the near term for the BWROG use in finalizing Revision 2 of the guidelines. The NRC requested that the BWROG keep the staff informed of their progress towards resolving EPG/SAG issues, via periodic NRC/BWROG management meetings, and that the BWROG submit a copy of EPG/SAG, Revision 2 when it is issued.

GL 88-01 Inspection Schedule

Mr. Warren led the BWROG discussion regarding the NRC approval of the Boiling Water Reactor Vessel Internals Project (BWRVIP) document 75 for GL 88-01 inspections. Mr. Hermann of the NRC staff indicated that NRC review of this issue should be completed in March of 2000. Mr. Hermann and Mr. Wessman also stated that the BWRVIP program was an example of the industry undertaking process development in the resolution of technical issues. The NRC staff endorses continued participation by the industry groups in these activities. The BWROG requested that the staff provide a schedule for the safety evaluation on the feedwater nozzle inspection review. The staff will confirm the schedule and inform the BWROG.

Excess Flow Check Valves

Mr. Warren led the BWROG discussion on excess flow check valves. He stated that Duane Arnold is the lead plant and that he projects the issue can be resolved generically soon. Mr. Warren said that Fermi 2 will be submitting a similar package for review this month. He was not certain that it will be plant specific or generic; however, the staff did say it should be reviewed in time for Fermi's March 2000 outage.

The remaining two subjects, DC Motors and JOG Periodic Verification, were not discussed in specifics due to the lack of time. The staff reviewed the action items from the meeting (Attachment 3). The BWROG will notify the NRC staff on their recommendation for the date for the next BWROG/NRR management meeting.

Project No. 691

Attachments: 1. Attendance List
2. Agenda and Presentation Slides
3. Action Items

cc w/atts: See next page

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Project No. 691

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MEETING BETWEEN BOILING WATER REACTOR OWNERS GROUP AND NRC
SENIOR MANAGEMENT MEETING
ATTENDANCE LIST

December 8, 1999

GENERAL ELECTRIC

T. Hurst
P. Negus

BWR OWNERS GROUP

J. Kenny
G. Warren
J. Kelly
D. Fetters

ABB CENP

L. Collins

NUSIS

E. Forrest

McGRAW-HILL

C. Coe

NRC

S. Collins
S. Dembek
J. Williams
W. Beckner
K. Parczewski
R. Wessman
R. Gallo
R. Barrett
T. Collins
J. Caldwell
R. Pulsifer
J. Hannon
A. Malliakos
R. Caruso
N. Gilles
R. Hermann
A. Kuritzky
J. O'Brien
W. Bateman
B. Palla
J. Lyons

ATTACHMENT 1

NRC/BWR OWNERS' GROUP
MANAGEMENT MEETING – December 8, 1999

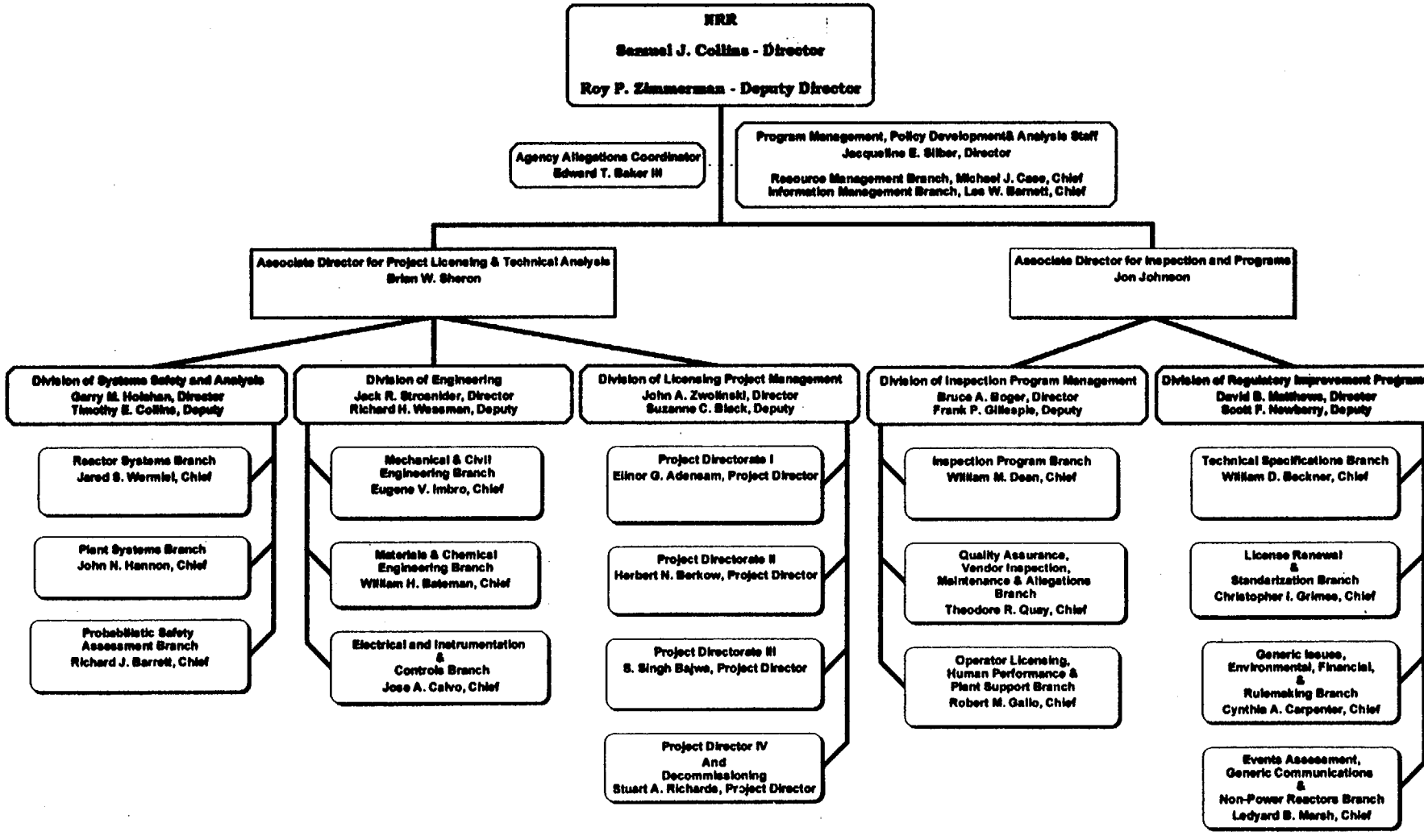
AGENDA

DISCUSSION TOPICS	**PRESENTER**
Introduction *BWROG is proactive in solving problems for the fleet, incorporating the efforts of our technical exchange committees. Opportunity to share efforts, schedules, and priorities with staff members.*	BWROG
Appendix R – Circuit Analysis *Status and highlights of BWROG 11/15/99 submittal .*	BWROG
Post-Accident Sampling System, H2/O2 Monitors, H2 Recombiners, Loose Parts Monitoring System *Following PWR actions, introduce new BWROG committee goals. BWR LTR to be submitted 2Q, 2000*	BWROG
IRIR Issues *Discussion of BWROG involvement in Risk Informed Industry efforts.*	BWROG
Risk Informed Tech Specs *Introduce new BWROG committee and it's participation in the industry effort. Weather related Tech Spec issues.*	BWROG
Scram Frequency Reduction *Since 1985, significant improvements have been accomplished. New focus on BWR loss of production from all sources.*	BWROG

ATTACHMENT 2

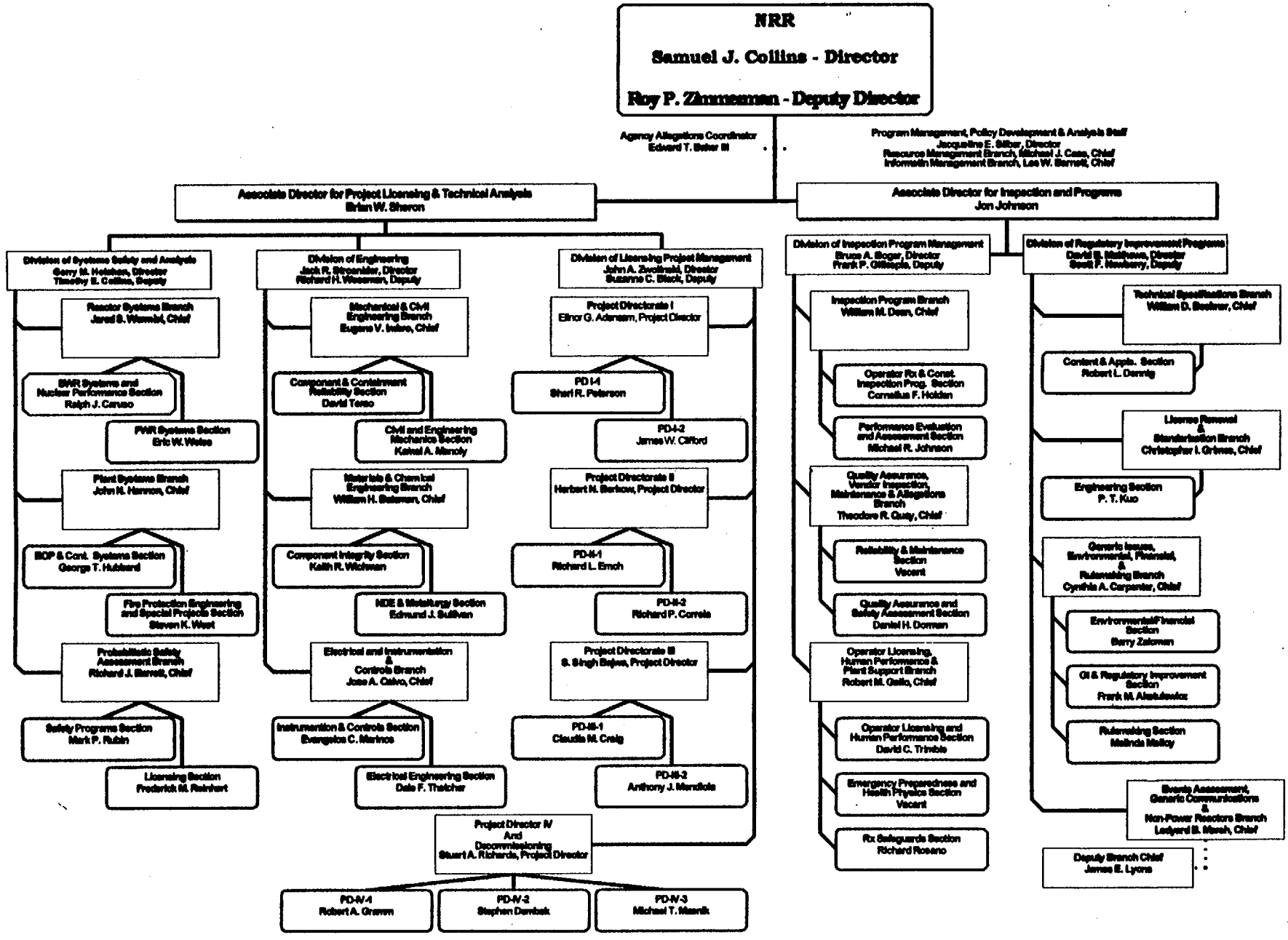
BWROG European Conferences *Brief discussion of European Conferences sponsered by the BWROG.*	BWROG
NRC Items	NRC
STATUS ITEMS	**PRESENTER**
Emergency Procedures *All concerns addressed and Rev 2 will be issued in 2000.*	BWROG
GL 88-01 Inspection Schedule *BWRVIP document 75 has been issued..*	BWROG
Excess Flow Check Valves *Status of Pilot Plant application. Schedule.*	BWROG
DC Motors *Draft report issued; in BWROG review; still on original schedule for completion.*	BWROG
JOG - Periodic Verification (MOVs) *Status of program progress.*	BWROG
Action Item Status Review	BWROG

NRR Organization- Branch Level



Revised or Updated: November 18, 1999 Contact point: S. Bell PMAS/PPRB

NRR Organization -Section Level



Revised or Updated: November 18, 1999 Contact point: S. Bell, PMAS/PPRB

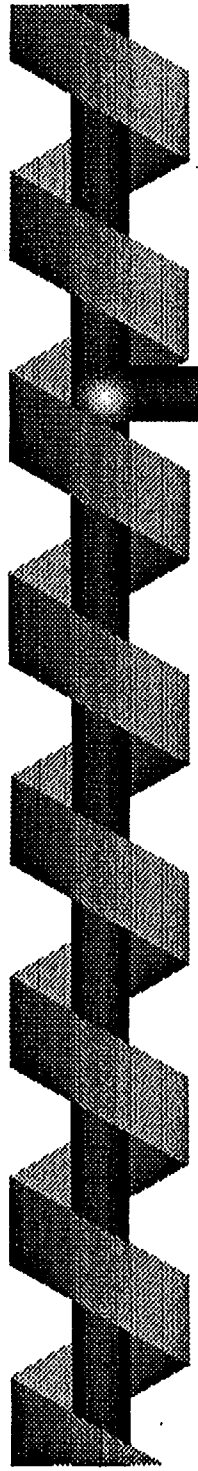
Presentation to NRC Management On Appendix R Committee

BWROG EOC/NRC Management Meeting

December 8, 1999

Background

- NRC concerns related to Appendix R surfaced as part of FPFI's/Inspections
- Committee formed in Fall 1997
- Multiple meetings with NRC Staff
- Letter to Commissioner Diaz 11/3/98
- BWROG Products have been delivered to NRC



Integration within Industry

- BWROG Members participate on NEI CF ITF
- BWROG Committee Members come from Utilities with PWR's
- Periodic Meetings with NRC
- JOG path for use of BWROG products

Progress to Date

- Rev. 1 of BWROG Position on the use of SRV's and Low Pressure Systems for Redundant Shutdown Submitted to NRC (9/1/99)
- Appendix R Guidance Document Submitted to NRC (11/15/99)
- Reviewing draft NRC Regulatory Guide [DG - 1094]
- NRC SER - schedule not identified yet ?

PASS, H_2/O_2 Monitors, H_2 Recombiner, Loose Parts Monitoring System Regulatory Relaxations

Presentation for

NRC/BWROG Management Meeting

December 8, 1999

Washington, DC

PASS, H_2/O_2 Monitors, H_2 Recombiner, Loose Parts Monitoring System Regulatory Relaxations

Committee Objective:

- Eliminate unnecessary post-accident sampling and analysis requirements for BWRs
- Declassify H_2/O_2 monitors to non-safety related
- Eliminate requirements for H_2 recombiners and Containment Air Dilution (CAD) systems
- Justify elimination of Loose Parts Monitoring System

Presentation Objective:

- Update NRC Management
- Request NRC provide comments regarding elimination of Loose Parts Monitor System as promised on October 7, 1999

PASS, H_2/O_2 Monitors, H_2 Recombiner, Loose Parts Monitoring System Regulatory Relaxations

Current Status/Schedule:

- BWROG monitoring similar work performed by PWR Owners
  - Awaiting issuance of Safety Evaluation Reports
  - **Expected December 1999 ?**
- Discussed issues with NRC Staff on October 7, 1999
  - NRC provided comments and suggestions regarding BWROG approach
  - **NRC promised comments regarding elimination of Loose Parts Monitor System**
- BWROG agreed to work with NRC on risk informing 10CFR50.44 (combustible gas control)
  - Utility cost burden important

PASS, H_2/O_2 Monitors, H_2 Recombiner, Loose Parts Monitoring System Regulatory Relaxations

Current Status/Schedule (Continued):

- Developing required technical support documents for LTR
- Committee has determined that cost burden estimates provided to NRC on October 7, 1999 were significantly underestimated:

	PASS	H_2/O_2 Monitor	H_2 Recombiner
Median Annual Cost		$ 60K	$ 30K
Maximum Annual Cost	$50K	$360K	$300K

  - Revised comprehensive cost burden estimate under development
- BWROG planning to submit generic LTR 2Q2000
- Utilities expected to make individual submittals shortly after generic BWROG LTR is submitted

INTEGRATED RISK INFORMED REGULATION (IRIR) COMMITTEE

Presentation for BWROG/NRC Management Meeting

December 8, 1999

Current Activities

- Regulatory Oversight Process
- Risk Informed Part 50 Activities
- Maintenance Rule Changes
- ASME PRA Standard

IRIR Influence

- IRIR is involved in, or monitoring, current risk-informed initiatives.
- Input from IRIR has influenced the Standard and a number of NEI Task Forces.
- PWRs have committed to PSA Certification
- BWR PRAs and design attributes are being addressed as a result of IRIR participation.

ASME PRA Standard

- Scheduled for completion in 2000
- Background
  - An appropriate PRA Standard will facilitate risk informed applications and regulatory reform.
- BWROG Understanding of Status
  - Primary focus of the draft standard is now on applications rather than technical requirements.
  - The standard now provides a graded approach to quality depending on the application.
  - It is compatible with existing methods currently in use to address PSA quality (Certification).

BWROG/NRC

MANAGEMENT MEETING

Risk Informed Technical Specification Project Status

December 8, 1999

BACKGROUND

- FORMED IN AUG 1999 TO PARTICIPATE IN NEI/JOG RITS INITIATIVES
- GOAL TO IMPROVE SAFETY, WHILE REDUCING COSTS
- FIRST MEETING HELD IN SEPT 1999
- VERY ENTHUSIASTIC OVER PROSPECT FOR USING A RISK INFORMED APPROACH TO IMPROVE TS

Expected Benefits

- Fewer shutdowns
  - Remaining in Mode 3 as a first step
  - Remaining in Mode 2 as a next step
  - Not for a missed surveillance
- Fewer startup delays
  - Make mode change when appropriate
- Reduced need for NOEDs

Committee Interfaces

- NEI Risk Informed Technical Specification Task Force
  - All 4 NSSS Owners Groups participating
    - » Meet bimonthly with the NRC
  - Maintaining consistency in Owners' Groups
    - » Trying to find and support a median approach
- Products from Owners Groups
  - Submitted as TSTFs with technical justification

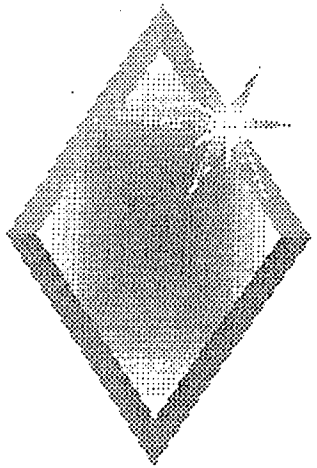
Industry Initiatives

- Initiative 1: End State Changes
  - BWROG efforts focussed on this initiative
- Initiative 2: Missed Surveillance Requirement
- Initiative 3: Mode Restraint Flexibility
- Initiative 4: AOT Extensions
- Initiative 5: Relocate SRs/STIs
- Initiative 6: LCO 3.0.3
- Initiative 7: Operable vs. Functional

BWROG Committee Status

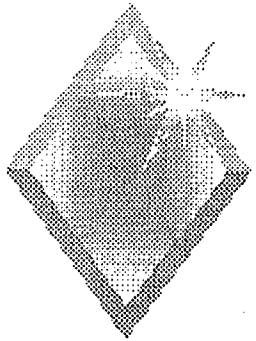
- BWR specific strategy being developed
- Funding Request being developed
- Working with TSTF and LATF to understand potential "Generic" Approval process

Scram Frequency Reduction Committee



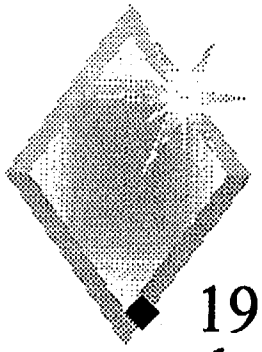
Presentation for NRC/BWROG Management Meeting

December 8, 1999



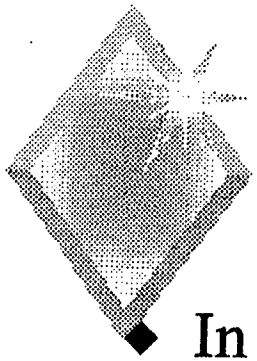
Mission

- Assist the utilities in reducing and maintaining the number of unnecessary scrams at the lowest achievable level.



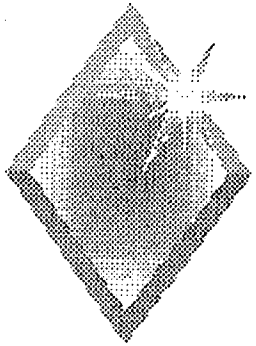
Background

- 1985 NUMARC (now NEI) initiative designed to reduce the frequency of unplanned scrams
- BWROG responds by chartering the Scram Frequency Reduction Committee
  - Forum for exchange of information and best practices
  - Objective of 0.7 scrams/plant/7000critical hours for two consecutive years
  - Has contributed to the successful industry effort to reduce the frequency of reactor scrams



Background

- In 1988 the committee established the Recommendation Tracking System for the following:
  - Ensure visibility of recommendations
  - Provide measure of benefit of committee recommendations
  - Provide means of tracking implementation of recommendations



Recent Status

- Continued focus on scram reduction being emphasized
- Utility interest in committee efforts remains high
- Actively review all factors contributing to unplanned scrams.
- Focus on BOP issues (EHC System)
- Improve unplanned capability loss

BWROG/NRC Management Meeting

European BWR Conferences

December 8, 1999

GOAL

- Provide forum for European BWRs to share information
- Insure information, technology, and lessons learned is spanning the globe
- Present products available to BWROG associate members

Associate Members

- Finland: TVO
- Germany: KGB, KKP,KKK
- Japan: Chubu, Chugoku, JAPC, Tohoku, TEPCO
- Mexico: CFE
- Spain: Iberdrola, Nuclenor
- Sweden: Forsmarks, OKG
- Switzerland: KKL, KKM
- Taiwan: TPC

Recent Conferences

- European Conference
- Radiation Protection ALARA
- PSA Issues
- Turbine Outage Optimization
- Valve Issues

European Conference

- 1st Conference occurred in 1993 hosted by KKL in Switzerland
- Each year a different European utility hosts the conference
- 1999 Conference occurred in September again hosted by KKL in Switzerland

European Conference

- Provide a means to communicate common issues and establish contacts in the BWR community
- Information sharing committees have resulted from European Conference round table discussions -- Valve Issues, PSA
- GE currently surveying European Owners' desire to address obsolescence

Radiation Protection ALARA

- July '99 Meeting held in Baden, Switzerland
  - Hosted by KKL
- Attended by 8 European utilities, 7 U.S. utilities, and GE
- Discussion Topics
  - Radiological/ALARA Experiences from Failed Fuel
    - Iberdrola, Hatch, KKL, ISAR, GE
  - Dose Reduction Techniques
    - PP&L (US. Summary), KKL, KKK
  - Radwaste Handling, Processing and Shipping
    - PP&L (including dry cask storage), CP&L, KKL, KKM

PSA Issues

- European meeting held at TVO's Olkiluoto's site during June 20-21, 1999
- This was the third such meeting of European BWROG utilities
- Attending utilities included:
  - FKA, KGB, KKP, KKL, OKG, TVO

PSA Topics

- Information exchange on models
  - Model sophistication reflects the regulatory uses for which it can be applied
  - United States is clearly leading in risk informing regulations and applications
- Information exchange in application, e.g.,
  - KKL: Leibstadt Power up-rate
    - Risk evaluations required for approval of power up-rate

Turbine Outage

- Benchmark meeting held at Rauma Finland, near TVO's Olkiluoto's site during August 17-19, 1999
- TVO is recognized by WANO as world class on outages
- United States BWROG participants requested the meeting

Meeting Preparations

- Understanding US BWR outage processes
  - The committee developed
    - Outage schedules for EHC, generator and auxiliaries, a single low pressure turbine and the high pressure turbine
    - Benchmark guide for the trip
- Understanding TVO design prior to arrival
- Ensuring appropriate TVO skills attend
  - I&C, mechanical and electrical maintenance
  - Project management and Engineering

Valves Issues

- European meeting held at KKP's Philippsburg site during September 14-16, 1999
- This was the fifth such meeting of European BWROG utilities
- Attending utilities included:
  - FKA, KGB, KKP, KKL, Ibedrola, OKG, TVO

Meeting Results

- The Europeans are finding some of the same issues previously found in the US
  - Torque switch adjustments for actuators on globe valves
  - Shearing of actuator worm shaft key
  - Hydrogen explosions in MSIV pilot valves
  - Loss of self locking on globe valves

Next Meeting Focus

- Active Power Monitors vs. Direct Thrust/Torque Measurements
  - Europeans divided on ability of active power monitors to calculate thrust/torque without direct measurement calibration
- The BWROG is supporting the European utilities with our experience

Future Conferences

- European Conference 2000, November 14-16 in Valencia, Spain (Iberdrola hosting)
- Next European PSA Committee meeting will be hosted by Oskarshamn (OKG) in January/February 2001.
- Next European Valve Committee meeting will be held at OKG, September 12-14, 2000.
- OKG will host a Radiation Protection ALARA meeting in 2001.

BWROG/NRC Meeting

EMERGENCY PROCEDURE COMMITTEE

BACKGROUND

- Since 1979, the EPGs have been modified in response to NRC requirements for additional guidance and to industry operating experience with EOPs.
- Severe Accident Guidelines were incorporated into the generic guidelines with the issuance of EPG/SAG Rev 0 in 1997
- The latest revision of the generic guidelines is EPG/SAG, Revision 1 (1998).

BACKGROUND

- The EPC has been tasked by the BWROG to perform the following:
  - Finalize the EPG/SAG document with Revision 2
  - Shift the committee focus to a "maintenance role".
  - Evaluate the committee charter and business practices to address utility issues more efficiently and cost effectively.
  - Continue to foster information exchange

ISSUES

- Open EPG/SAG Issues:
  - Priority 1 Issues: Those issues that challenge the technical basis - **No Open issues.**
  - Priority 2 Issues: Those issues that are not Priority 1 but the EPC considers important.– **4 open issues.**

Committee Action in 2000

- EPC to issue Rev 2 in 2000 including
  - BWROG resolution of the four major open issues
  - Revision 2 will be the BWROG EPC/SAG guidance and not changed unless new technical information indicates a need for change.
  - The EPC will provide guidance interpretation and maintain a record of the interpretations.

GL 88-01 Inspection Schedule

Presentation for NRC/BWROG Management Meeting

December 8, 1999

GL 88-01 Inspection Schedule

- Presentation Objective
  - Request NRC schedule for approval of BWRVIP document 75

GL 88-01 Inspection Schedule

Background

- BWROG submitted EPRI report TR-110172, "Technical Justification for the Extension of the Interval between Inspections of Weld Overlay Repairs," 3/5/99
- Combined NRC/BWROG/BWRVIP meeting on coordinating overall program task to revise NUREG-0313 - 3/16/99
- A BWRVIP Focus Group was formed to develop the BWRVIP Report
- The BWROG report was incorporated into the overall BWRVIP effort to address NUREG - 0313
- NRC issued letter granting scheduler relief for weld overlay inspections until 2001

GL 88-01 Inspection Schedule

- Current Status
  - BWRVIP-75 was submitted to the NRC 10/22/99
  - BWROG continues to support BWRVIP efforts
- Request status of NRC review

Excess Flow Check Valve Committee

Presentation for NRC/BWROG Management Meeting

December 8, 1999

Mission

- Provide a basis for extending excess flow check valve test intervals
  - Develop a comprehensive set of industry data
  - Evaluate the data
  - Define appropriate testing requirements for EFCVs

Background

- In 1996/97 Excess flow check valve testing requirements discussed by BWR Maintenance Committee
- GPU-N raised the issue as a potential BWROG effort
- Outage Management Committee did not have substantive data on EFCVs

Background

- First Committee meeting held on June 24, 1997 and recommended the following:
  - Conduct industry survey of design and testing parameters
  - Develop the justification for extension of testing intervals
  - Define a testing standard based upon above justification

Recent Status

- Lead Plant (DAEC) submittal of topical report to NRC on reduced testing of excess flow check valves (8/99)
  - DAEC SR requires verification of actuation capability of each reactor instrumentation line EFCV every 24 months
  - Submittal proposes to relax surveillance requirement frequency by allowing representative sample to be tested every 24 months
  - Proposal defines EFCV testing such that **each** EFCV is tested at least once every 10 years (nominal)

Recent Status

- BWROG Prime Representatives approve generic response to RAIs posed to Lead Plant(11/99)
  - Planned submittal in 12/99
- Fermi 2 currently plans to submit request for increased test interval in 12/99

BWR OWNERS' GROUP
DC MOTOR ACTIVITY

PRESENTATION FOR NRC/BWROG MANAGEMENT MEETING

December 8, 1999

STATUS OF CURRENT EFFORT

- BWROG Executives classified effort as Generic
- Objective

  Develop, justify and validate a motor/actuator output methodology using best available information to determine actuator output and stroke time for MOVs with DC motors.

  - Effect of elevated temp on motor speed & output
  - Effect of degraded voltage on motor speed & output
  - Effect of dynamic thrust load on motor speed

STATUS OF CURRENT EFFORT *(Continued)*

Current available information

- NUREG/CR-6620
- INEEL test data
- Utility test data
- Limitorque analytical evaluations
- Vendor and/or laboratory test data

Expected Product

- Methodology & justification
- Validation of methodology
- Tools for methodology implementation
- Screening criteria

STATUS OF CURRENT EFFORT
(Continued)

NRC Interaction

- Discussed with NRC during 4/99 and 10/99 NRC-JOG PV Status meetings

Schedule

- Draft report: Fall 1999
- Limitorque review/endorsement: 2000

JOINT OWNERS' GROUP PERIODIC VERIFICATION (MOV)

Presentation for NRC/BWROG Management Meeting

December 8, 1999

BACKGROUND

- **JOG-PV Program Objective: Provide a standard (3 phase) approach in response to Generic Letter 96-05**
  - Interim static test program
  - Dynamic test program
  - Final program review

- **JOG is made up of utilities in all four OGs**
  - 38 utilities
  - 60 plants
  - 95 units
  - Two additional utilities have announced their intention to join

PROGRAM STATUS

- ***5-year JOG effort into its 3rd year; closure scheduled for 2002***

- ***192 valves in JOG dynamic test program***

  (Could go to 196 if additional utilities join)

- ***134 valve test packages evaluated to date***
  - *105 baseline tests*
  - *27 second (repeat) tests*
  - *2 third (repeat) test*

NRC INTERACTION

- **JOG meets semi-annually with NRC to:**
  - Present status of program progress
  - Present evaluation of test results collected to date
  - Share program feedback issued to utilities
  - Collect NRC feedback on MOV issues
  - Last JOG-NRC meeting: October 13, 1999
  - Next JOG-NRC meeting: April 12, 2000

PROGRAM TEST RESULTS (To Date)

- Globe Valves: trend has been for valve factors to remain constant

- Data is grouped by valve characteristics and system conditions to determine whether certain configurations are more susceptible to degradation.

FEEDBACK

- **JOG has "feedback" process with utilities to relay timely program information**
  - 2 Feedback Notices issued to date; 1 in process
  - Contents shared with NRC

- **Most recent NRC feedback to JOG:**
  - Comfortable with JOG progress
  - Allowing JOG to manage program
  - Anxious to see more Second and Third round test results

JOG-PV PROGRAM CLOSURE

- **At conclusion of JOG dynamic testing, JOG will evaluate all test results and prepare final program report**
  - Submit to NRC
  - Request NRC to issue final Safety Evaluation

- **JOG conclusions will either:**
  - Confirm interim program assumptions
  - Provide justification for modification of interim program

BWROG ACTION ITEMS FROM 12/08/99 MEETING

1) NRC to arrange a call with Tom Green of General Electric to review Loose Parts Monitoring issue. Depending upon the discussion a decision will be made after the discussion as to whether a formal docketed letter will be requested from BWROG/GE. (Bob Pulsifer/Ralph Caruso)

2) The next meeting regarding the BWROG Appendix R guidance document will be set up after the 12/20/99 meeting with BWROG, EPRI, and NEI on NEI's proposed plan to integrate the deterministic BWROG guidance document with NEI's risk-informed effort. (John Hannon)

3) After the 12/20/99 meeting with BWROG, EPRI, and NEI a decision will be made regarding the extension of the EGM enforcement discretion which expires in January 2000. (John Hannon)

4) The BWROG will discuss at the next management meeting the activities of the IRIR committee regarding A.4 of the maintenance rule.

5) Glen Warren (BWROG) will set up a call with Bill Beckner and John Hannon to discuss weather related TS.

6) NRC to provide BWROG (Tom Hurst) the schedule for the SE on Feedwater Nozzle Inspection. (Bob Pulsifer/Bill Bateman)