



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
ADVISORY COMMITTEE ON NUCLEAR WASTE  
WASHINGTON, D.C. 20555

MEMORANDUM TO: Ramin Assa, Senior Staff Engineer  
ACRS

FROM: Graham M. Leitch, Chairman  
Plant License Renewal Subcommittee

SUBJECT: CERTIFICATION OF THE MINUTES OF THE ACRS SUBCOMMITTEE  
MEETING ON THE SAFETY EVALUATION REPORT RELATED TO  
THE LICENSE RENEWAL APPLICATION FOR PEACH BOTTOM  
ATOMIC POWER STATION, UNITS 2 AND 3, OCTOBER 30 , 2002 -  
ROCKVILLE, MARYLAND

I hereby certify that, to the best of my knowledge and belief, the minutes of the subject meeting issued on December 7, 2002, are an accurate record of the proceedings of the meeting.

A handwritten signature in cursive script that reads "Graham M. Leitch".

Graham M. Leitch, Chairman  
Plant License Renewal Subcommittee

12/7/02

Date Issued:



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D.C. 20555-0001

December 17, 2002

MEMORANDUM TO: ACRS Members

FROM: Ramin Assa, Senior Staff Engineer  
ACRS

A handwritten signature in black ink, appearing to read "Ramin Assa", written over the "FROM:" line.

SUBJECT: CERTIFICATION OF THE MINUTES FOR THE ACRS SUBCOMMITTEE  
MEETING ON THE SAFETY EVALUATION REPORT RELATED TO  
THE LICENSE RENEWAL APPLICATION FOR PEACH BOTTOM  
ATOMIC POWER STATION, UNITS 2 AND 3, OCTOBER 30 , 2002 -  
ROCKVILLE, MARYLAND

The minutes of the subject meeting, issued on December 7, 2002, have been certified as the official record of the proceedings of that meeting. A copy of the certified minutes is attached.

Attachment: As stated

cc via e-mail:

J. Larkins  
S. Bahadur  
ACRS Fellows and Technical Staff

cc: ACRS Secretary  
E. Barnard



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D.C. 20555-0001

December 6, 2002

MEMORANDUM TO: Mr. Graham M. Leitch, Chairman  
Plant License Renewal Subcommittee

FROM: Ramin Assa, Senior Staff Engineer  
ACRS

A handwritten signature in black ink, appearing to read "Ramin Assa", written over the printed name.

SUBJECT: WORKING COPY OF THE MINUTES FOR THE ACRS  
SUBCOMMITTEE MEETING ON THE SAFETY EVALUATION REPORT  
RELATED TO THE LICENSE RENEWAL APPLICATION FOR PEACH  
BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3, OCTOBER 30 ,  
2002 - ROCKVILLE, MARYLAND

A working copy of the minutes for the subject meeting is attached for your review. I would appreciate your review and comment as soon as possible. Copies will be sent to the Plant Licensee Renewal Subcommittee members for information and/or review.

Attachment: As stated

cc: M. Bonaca  
T. Kress  
S. Rosen  
J. Sieber  
G. Wallis  
J. Barton, Consultant

cc via e-mail:

J. Larkins  
S. Bahadur  
S. Duraiswamy

Certified by: G. LEITCH  
Certified: DECEMBER 7, 2002

ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
MINUTES OF ACRS SUBCOMMITTEE MEETING ON  
PLANT LICENSE RENEWAL  
PEACH BOTTOM ATOMIC POWER STATION  
UNITS 2 & 3  
OCTOBER 30, 2002  
ROCKVILLE, MD

**INTRODUCTION**

The ACRS Subcommittee on Plant License Renewal held a meeting on October 30, 2002, at 11545 Rockville Pike, Rockville, Maryland, in Room T-2B3. The purpose of the meeting was to hold discussions with representatives of NRC staff and Exelon Generation Company, LLC concerning the safety evaluation report (SER), with open and confirmatory items and associated supporting information, for the license renewal of Peach Bottom Units 2 & 3. Mr. Ramin Assa was the cognizant ACRS staff engineer for this meeting. The meeting was convened at 8:30 AM and adjourned at 5:01 PM on the same day.

**PARTICIPANTS:**

**ACRS**

G. Leitch, Chairman  
M. Bonaca  
T. Kress  
S. Rosen

J. Sieber  
G. Wallis  
J. Barton, Consultant

**NRC Staff**

P. T. Kuo  
S. Lee  
D. Solorio  
J. Yerokun  
M. Khanna  
M. Modes  
H. Ashar  
R. Li  
j. Rajan  
R. Pettis

G. Georgiev  
J. Medoff  
M. Hartzman  
G. Hatchett  
J. Fair  
B. Elliot  
D. Nguyen  
C. Munson  
Z. Fu  
W. Burton

**Exelon**

F. Polaski  
E. Patel  
A. Fulvio

A. Onnou  
J. Phillabaum  
K. Muggleston

There were no written comments or requests for time to make oral statements received from members of the public. A list of meeting attendees is available in the ACRS office files.

### **ACRS SUBCOMMITTEE CHAIRMAN'S INTRODUCTION**

Mr. Graham Leitch, Chairman of Plant License Renewal Subcommittee, convened the meeting and stated that the purpose of the meeting was to review the staff's SER with open items related to the application for license renewal of the operating licenses for Peach Bottom Units 2 and 3. Mr. Leitch then called upon NRC staff to begin.

### **NRC STAFF INTRODUCTION** Mr. P. T. Kuo

Mr. Kuo started his opening remarks by introducing Dr. Sam Lee who is the Chief for the License Renewal section and Mr. David Solorio who is the Senior Project Manager for reviewing Peach Bottom license renewal application (LRA). As a follow-up from the McGuire meeting, Mr. Kuo informed the Committee that the staff has developed a draft inspection procedure to track commitments. Mr. Bonaca, raised a concern with the potential burden on the staff when they will have to verify a large number of licensees' commitments in the future.

### **NRC STAFF OVERVIEW OF THE LICENSE RENEWAL APPLICATION** Mr. David Solorio

Mr. Solorio discussed the background for the LRA and the format and content of the draft SER, dated September 13, 2002. He stated that the staff issued 231 requests for additional information (RAI) compared to over 400 for Hatch. He also noted that there were fifteen open items and sixteen confirmatory items listed in the SER. Many of the open items were informally resolved and the staff was waiting for official documentation by the licensee, which was expected to be submitted in November 2002. The renewed license will be issued with several license conditions.

Mr. Solorio provided a brief overview of the license renewal rules, staff's review process and the NRC inspections that were performed to support the conclusions in the SER. The inspections verified that the scoping and screening were implemented as described in the LRA. One of the inspection findings was related to the fuse clips which the licensee had not originally included within the scope. Mr. Barton commented that the Committee had heard about the fuse clips during previous licensee renewal reviews. Mr. Kuo stated that the NRC uses the staff guidance process to resolve these types of issues.

Mr. Leitch questioned the staff's general impression of the plant's material condition. Mr. Yerokun, noted that the purpose of the inspections was to confirm the scoping and screening, however, during the walk downs the inspectors observed that the plant was being well kept and the licensee was focused on keeping the plant up-to-date material wise.

Mr. Bonaca commented that applicant had not included certain systems in its original submittal and had to make realignments, he questioned licensee's ability to identify components that should be in scope. Mr. Solorio stated that the staff had reasonable assurance that the licensee's scoping was accurate and some realignments were not unusual.

**EXELON'S PRESENTATION:** Mr. Fred Polaski, Exelon

Mr. Polaski presented an overview of the license renewal application for Peach Bottom Atomic Power Station (PBAPS) and reported the status of the draft SER open items and confirmatory actions. Exelon did not prepare the application 100 percent in accordance with the Generic Aging Lessons Learned (GALL) Report, and NUREG-1800 because these were issued in final form after the application was submitted.

Mr. Polaski explained that the scoping methodology used covered all three criterion listed in 10 CFR 54.4. In response to Mr. Leitch's question regarding Unit 1, Mr. Polaski stated that the renewal application has no reliance on any systems from Unit 1 and there were no systems in common between Unit 1 and Units 2 and 3.

Mr. Polaski described that their initial scoping was based on a system and structural basis. He noted that Exelon used the maintenance rule database, UFSAR, actual physical drawings, piping and instrument drawings (P&ID) and the plant information management system as the primary sources of information to identify the systems and structures that were in scope. Information from these sources were used to identify systems and structures for scoping and screening, defining their boundaries, and identifying their functions.

Mr. Polaski described component numbering scheme at the plant, identification of interfaces between systems and Exelon's screening process to determine whether a component is active or passive.

Mr. Polaski explained that the structures are scoped from two viewpoints, buildings or structural commodities. Buildings that support systems with safety-related functions were in scope as well as components that have similar design, material and environments that could be addressed as commodities (e.g. hazard barriers, supports, raceways, and I&C enclosures).

For mechanical scoping Mr. Polaski described two special areas, boundary realignment and additional scoping for 54.4 (a) (2), non safety equipment that could impact safety related equipment. PBAPS has used a system basis for scoping as compared to Hatch which used a function based approach. Both of these approaches yield similar results, except in the system based approach the licensee has to realign in order to place sections of non-safety systems in scope. For realignment, he presented five different cases. For example the licensee has decided to include into scope of licensee renewal the containment penetration piping and isolation valves of a non-safety-related system such as service air system. For 54.4 (a) (2), the licensee included in scope anything that could leak, spray or affect a safety-related equipment but were not initially included in scope.

Many of realignments were brought into scope as a result of RAIs. Mr. Bonaca, stated this approach was confusing in that the application did not include some systems in scope which were later brought into scope. He expressed concern that a comprehensive list of all in scope systems and components does not exist within neither the application nor the SER. Mr. Burton, (NRC staff) responded that the final SER is the best place to get a complete picture of license renewal process and future application should have much less need for realignments.

Mr. Leitch asked Mr. Polaski to describe the relationship between the Conowingo Dam and Peach Bottom. Mr. Polaski, stated that Peach Bottom takes its normal operating water supply from the pond but does not use it as a safety water supply. The site relies on a self-contained emergency cooling tower for decay heat removal in case the pond is not available. The towers are designed to supply cooling for seven days without any makeup water. Therefore, the pond is not in scope but the dam is in scope from the station blackout viewpoint. PBAPS depends on Conowingo for Station Blackout via a submergible electrical cable. Conowingo is in the aging management program (AMP) for blackout considerations. The license for Conowingo will expire before the extended license period for PBAPS and is expected to be renewed.

In response to questions from Mr. Bonaca, Mr. Polaski stated that the traveling screens, refueling storage tank (RWST), and condensate storage tanks (CST) are non-safety related. However, the CST is in scope for Appendix R reasons. Mr. Polaski noted that the RWST is inspected during refueling outages and its results are extrapolated to evaluate the status of the CST. This is possible because these tanks are designed and built the same and are in similar environments and conditions (the fill under the tanks is an engineered fill consisting of sand and gravel). Mr. Fulvio stated that the result of last inspection did not show any indication of degradations. The NRC staff had questioned this approach and was satisfied with licensee's response. With respect to Mr. Rosen's questions, Mr. Fulvio noted that RWST and CST tanks are coated internally and have very similar water chemistry (condensate water).

Mr. Sieber raised the issue of Hilti bolts that are used to anchor equipment to concrete. He questioned whether the licensee had considered changes in composition and chemistry of concrete and inquired about their plans to test these bolts to assure that they will stay in place during a Seismic event or water hammer. Mr. Ashar responded that this was a generic issue, and licensees had inspected and included these bolts as part of their maintenance rule. He also noted that no one had any plans to test these bolts. Mr. Kuo stated that the bolts were designed with four to five times margin of safety, because of uncertainty about seismic response.

With regards to the status of torus, Mr. Polaski stated that the torus is inspected for degradation of the internal surfaces every refueling outage as part of the ISI program. He noted that there has been some degradation of the coating (which was repaired) and degradation (pitting) of the carbon steel shell. Mr. Polaski reported that these degradations are monitored and tracked and he did not believe that they will cause any problems within the life time of those locations.

Mr. Polaski presented a brief overview of the ageing management program at PBAPS and Mr. Patel discussed the results of the Time-Limited Aging Analyses (TLAA). The licensee has used the fluence model the General Electric developed which accounts for the shroud and the jet pumps as they physically exist. Other specific TLAA included reevaluation of reactor vessel corrosion allowance and generic letter 81-11 feed water nozzle cracking for 60 years instead of 40 years.

## **NRC SAFETY EVALUATION REPORT (SER) PRESENTATION**

### **Chapter 2 - Scoping and Screening Methodology: Messrs. R. Pettis and G. Hatchet, NRR**

Mr. Pettis stated that the staff conducted its review and prepared its SER input in accordance with 10 CFR 54.4 and NUREG-1800. To evaluate the scoping and screening methodologies the staff reviewed license renewal application, updated FSARs, design basis documents and conducted on-site audits of engineering reports, procedures, design documentation, and held discussions with Exelon staff. Several RAIs in the area of scoping and screening, realignment, aging management program attributes were submitted to the applicant. In general the staff found the applicant's responses to the RAIs to be acceptable. The staff identified that the applicant's evaluation of the Seismic II/I issue required some additional efforts, which was eventually resolved through the RAI process. Overall the staff concluded that the applicant's methodology and its implementation were adequate and were consistent with the requirements of 10 CFR 54.4 and 10 CFR 54.21(a)(1). The staff identified seven mechanical open items and one structural and component open item.

### **Chapter 3 - Aging Management Review: Ms. Meena Khanna and Mr. Stewart Bailey, NRR**

Mr. Bailey presented an overview of licensee's Aging Management Program and stated that Peach Bottom Atomic Power Station had 17 existing programs, 12 enhanced programs and four new programs. Staff identified two open items, 1) the maintenance rule structural monitoring program for detection of aging effects; and 2) aging management of a diesel-driven fire pump fuel oil flexible hose. The licensee and the staff had reached an agreement on the resolution of these open items.

Ms. Khanna, described the Materials and Chemical Engineering Branch's review of the aging management program. She reported that there were some open items with regards to verification of the effectiveness of certain chemistry programs. There were also four confirmatory action items. These actions were related to closed cooling water chemistry activities, outdoor buried and submerged component inspection activities, heat exchanger inspection activities, and the one-time piping inspection activities. The staff is waiting for docketed response from the licensee on these items.

In response to Mr. Burton's question concerning the condition of Diesel Generator fuel oil storage tank, Mr. Rajan stated that the tank was tested (UT) in 1995 and the thickness was found to be 0.375", which is the same as its original thickness. Mr. Fulvio confirmed this information and added that these tanks are subject to a periodic test every ten years as part of the plant technical specification requirements.

### **Section 3.1 - Reactor Coolant Systems: Barry Elliot, NRR**

Mr. Elliot described the reactor coolant system which consists of the reactor pressure vessel (PRV), the reactor vessel internals, the PRV instrumentation system and the reactor recirculating system. The material used in these systems are low alloy steel, stainless steel, and nickel-based alloys functioning in a BWR reactor water environment.

Mr. Elliot stated that PBAPS referenced fifteen BWR Vessel and Internals Projects (BWRVIP). BWRVIP 78 and 86 have NRC approval for only 40 years. Extension to 60 years is pending but is not expected to be completed before the final SER is prepared. This may result in a license condition. BWRVIP 76 is not yet approved but approval is expected by December 31, 2002. If not approved this may also yield another license condition.

### **Section 3.2 - Engineered Safety Features: Jim Medoff, NRR**

Mr. Medoff stated that the engineered safety features (ESF) for these facilities include the core spray system, residual heat removal system, standby gas treatment system, and the safety injection systems. The materials for most of the components in the ESFs are carbon steel or stainless steel. There are some copper, bronze and aluminum alloy components, and the standby gas treatment system does have some neoprene and rubber components. These material exist within steam wetted gas, treated water, ventilation air, torus water, and lubricating oil environments. The staff identified the applicable aging effects to include corrosion, pitting, loss of heat transfer capability, and cracking. For rubber components the applicant appropriately identified changes in material properties as an applicable effect.

In response to staff's RAIs the licensee provided sufficient technical bases to justify their identification of aging effects in the applications. The staff concluded that the applicant's aging management reviews for the Peach Bottom ESFs were sufficient to identify the effects of aging for those ESF components within the scope of license renewal. The staff did not identify any open items or confirmatory items with regard to the engineered safety features.

Mr. Rosen expressed some concern with regards to inspection of the standby gas treatment system ducting. Mr. Medoff stated that the system temperature is hot enough to preclude aging effects for the system.

### **Section 3.3 - Auxiliary Systems: Mr. Bart Fu**

Mr. Fu stated that the staff reviewed the fuel handling, fuel pool cooling, control rod drive, ventilation, emergency diesel generator, service water, the fire protection and supporting systems. Both internal and external environments were considered. The staff found that the aging management programs were adequate for managing the various aging effects.

The staff did not identify any open items regarding this section.

### **Section 3.4 - Steam and Power Conversion Systems Mr. George Georgiev**

Mr. Georgiev stated that the applicant identified three systems: main steam, main condenser, and the feed water system as being part of the steam and power steam and power conversion systems. The operating environments were identified to be: the reactor coolant, steam, torus grade water, raw water, sheltered environment, wetted gas and dry gas. Aging effects were identified as a loss of material for carbon steel and stainless steel and cracking for stainless steel. The applicant proposed the following aging management programs to manage the aging effects: reactor flow and system chemistry program, the ISI program, the flow-accelerated corrosion program, torus piping inspection program, and torus water chemistry program.

The staff concluded that the aging management effects are correctly identified and the programs are adequate to manage these effects for the extended period of operation. No open items were identified.

### **Section 3.5 - Structures and Components: Messrs. Clifford Munson and Hans Ashar**

Mr. Munson stated that the structures covered by Section 3.5 are the primary containment, drywell, torus, ventilation systems and internal structural steel. The other Class 1 structures include the reactor building, the rad waste building, the turbine building, SBO structure, diesel generator building and yard structures. Section 3.5 also covers component supports, miscellaneous steel, barriers and elastomers, raceways and insulation. The major materials covered in Section 3.5 are concrete, carbon steel, stainless steel, elastomers, bronze, and graphite. The different environments are sheltered air, raw water, fuel pool water, torus water. The aging effects identified for these materials are material loss, cracking, change in material properties, fatigue, and loss of mechanical function.

The staff reviewed the structural components listed in Section 3.5 to determine if the Applicant adequately identified the aging effects for each component. In response to staff's RAI, the Applicant committed to manage cracking, change in material properties and loss of material for above grade concrete components. For below grade concrete components, the applicant provided ground water data that showed that the soil ground water environment is not aggressive.

Mr. Rosen inquired about the scope of the torus inspection. Mr. Polaski informed the subcommittee that the torus water is pure and the torus is coated with Caryl zinc paint. The entire torus was inspected in 1991 and again in 1997 for one unit and 1998 for another unit. Mr. Onnou stated that the torus underwater inspection is done every six years. Mr. Onnou asserted that because of improved water chemistry the rate of degradations had decreased. Based on this rate, Exelon believes that at the end of the renewal period the shell thickness will still be more than the design requirements.

### **Section 3.6 - Electrical, and Instrumentation and Controls: Mr. Duc Nguyen**

Mr. Nruyen reported that certain cables were subject to wetting and experienced water treeing. This was identified as an open item. Many cables have been replaced with moisture resistant cables. However, to resolve this open item, the applicant has agreed to place these cables in their ageing management program consistent with GALL E3 program. The cables will be tested at the end of (this) year and every ten years beginning at year 40. There were two new AMPs added: the non-EQ cable program and the fire safe shut down cable inspection program. The staff identified one confirmatory item related to aging management of fuse clips (holders). The staff considers these items resolved pending Applicant's formal submittal.

### **Chapter 4.0 - Time-Limited Aging Analyses (TLAA): Messrs. John Fair and Barry Elliot**

The staff concluded that the applicant had identified appropriate TLAA's. However, the staff identified two (2) additional TLAA's: metal fatigue and reactor vessel neutron embrittlement.

With regards to metal fatigue, Mr. Fair stated that the applicant monitors a sample of high fatigue usage locations such as the pressure vessel, vessel internals and the coolant loop piping. One area which may exceed the CUF during the current operating time would be the stud bolts. The staff had a confirmatory item on this issue, which was to get two commitments into the FSAR supplement.

For neutron embrittlement, Mr. Elliot stated that the applicant has performed its neutron fluence evaluations using a General Electric methodology which conforms with the guidance in Regulatory Guide 1.190. The pressure-temperature limits are updated with amendment requests to the technical specification in accordance with the Regulatory Guide 1.99, Rev. 2. Both the PT limits and upper shelf energy evaluation are in 10 CFR part 50, Appendix G. Peach Bottom Atomic Power Station demonstrated that for upper shelf analysis they fall within the bounds of BWRVIP-74 for 60 years. The staff was satisfied with this analysis. The staff identified one open item related to the top guide beams which may exceed the threshold limit. The staff is currently evaluating applicants response to this issue.

### **CONCLUDING REMARKS**

After the staff's presentation, Mr. Leitch asked the sub committee members to offer their thoughts and issues regarding the Peach Bottom Atomic Power Station license renewal application. Mr. Rosen, expressed a concern regarding the staff's future resources to complete the large number of license renewal inspections that will be required before all the plants enter renewal period. He also requested a copy of the latest ROP status of PBAPS. Mr. Bonaca stated that he believed the conclusions in the SER were reasonably sound and general. The members agreed that the staff should focus on a consistent approach to system realignments, system based or functional based. The subcommittee believes that a system based approach appear to be more logical. This was deemed to be a generic issue and not a Peach Bottom issue. Finally, Mr. Bonaca commented that it would be more desirable for ACRS to review LRA when the staff has reached 10 (or less) open items.

### **STAFF AND INDUSTRY COMMITMENTS**

1. The staff committed to provide the Committee the current ROP status for PBAPS.
2. The staff committed to provide (on the docket) the stand-by gas treatment system details in response to Mr. Rosen's question concerning inside corrosion from moisture condensation.
3. The staff agreed to investigate age related cracking and chemical composition of concrete under Hilti bolts.

### **SUBCOMMITTEE DECISION**

The Subcommittee decided not to prepare an interim letter regarding this LRA. The Subcommittee Chairman will brief the full Committee on the Peach Bottom LRA at the November 2002 ACRS meeting.

**FOLLOW-UP ACTIONS**

None.

**PRESENTATION SLIDES AND HANDOUTS PROVIDED DURING THE MEETING**

The presentation slides and handouts used during the meeting are available in the ACRS office files and as attachments to the transcript which will be made available in ADAMS.

**BACKGROUND MATERIAL PROVIDED TO THE SUBCOMMITTEE**

1. U. S. Nuclear Regulatory Commission "Safety Evaluation Report with Open Items Related to the License Renewal of PBAPS, Units 2 and 3, dated September 13, 2002.
2. Peach Bottom License Renewal Inspections, dated March 28, 2002.
3. BWR Vessel and Internals Project (BWRVIP-38) report and its associated Safety Evaluations dated (September 16, 1999, July 24, 2000, and March 2001)  
[Propriety]
4. BWR Vessel and Internals Project (BWRVIP-75) report and its associated Safety Evaluation (May 14, 2002)
5. BWR Vessel and Internals Project (BWRVIP-76) report -- No Safety Evaluation
6. BWR Vessel and Internals Project (BWRVIP-78) and (BWRVIP-86) reports and their associated combined Safety Evaluation dated (February 1, 2002)

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NOTE: Additional details of this meeting can be obtained from a transcript of this meeting available in the NRC Public Document Room, One White Flint North, 11555 Rockville Pike, Rockville, MD, (301) 415-7000, downloading or view on the Internet at <http://www.nrc.gov/reading-rm/doc-collections/acrs/> can be purchased from Neal R. Gross and Co., 1323 Rhode Island Avenue, NW, Washington, D.C. 20005, (202) 234-4433 (voice), (202) 387-7330 (fax), [nrgross@nealgross.com](mailto:nrgross@nealgross.com) (e-mail).

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ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
PLANT LICENSE RENEWAL SUBCOMMITTEE MEETING  
PEACH BOTTOM UNITS, 2 & 3  
OCTOBER 30, 2002, ROCKVILLE, MARYLAND

Contact: Tim Kobetz (301-415-8716, tjkl@nrc.gov)  
Ramin Assa (301-415-6885, rra@nrc.gov)

**-PROPOSED SCHEDULE-**

Topics	Presenters	Time
I. Opening Remarks	G. Leitch, ACRS	8:30-8:35 a.m.
II. Staff Introduction	P. T. Kuo, NRR	8:35-8:45 a.m.
III. <b>Overview</b> of the SER with Open Items and Inspections Related to License Renewal of Peach Bottom Units 2 & 3	D. Solorio J. Yerokun M. Modes, RI	8:45-9:30 a.m.
IV. Exelon, Presentation	F. Polaski	9:30-10:15 a.m.
A. Background		
B. License Renewal Application Scoping and Screening Process (IPA)		
C. Aging Effects		
D. Aging Management Programs		
E. Time Limited Aging Analyses		
<b>BREAK</b>		<b>10:15-10:30 a.m.</b>
V. <b>SER Chapter 2:</b> Scoping and Screening of Structures and Components Subject to an Aging Management Review	R. Pettis G. Hatchett M. Razzaque, J. Raval D. Nguyen, D. Frumpkin, D. Cullison	10:30-11:15
VI. <b>SER Chapter 3:</b> Aging Management Programs	S. Bailey M. Khanna J. Rajan, C. Munson, B. Elliot, R. Pettis	11:15-11:45
A. Reactor Coolant System BWRVIP 38 & 75	B. Elliot	11:45-12:15
B. Engineered Safety Features	J. Medoff	12:15-12:30

Please See Back ⇨

**LUNCH****12:30-1:30 p.m.****VI SER Chapter 3: Aging Management Programs**

C. Auxiliary Systems	Z. Fu	1:30-1:45
D. Steam and Power Conversion Systems	G. Georgiev	1:45-2:00
E. Containment, Structures and Component Supports	C. Munson H. Ashar	2:00-2:20
F. Electrical Components	D. Solorio D. Nguyen	2:20-2:50

**BREAK****2:50-3:05 p.m.****VII. SER Chapter 4: Time Limited Aging Analyses**

A. Identification of TLAAs	D. Solorio J. Rajan, R. Li, J. Fair	3:05-3:20
B. Reactor Vessel Neutron Embrittlement, and Reactor Vessel Internals Fatigue and Embrittlement	B. Elliot	3:20-3:50
C. Metal Fatigue	J. Fair	3:50-4:10

**VIII. Subcommittee Discussion**

4:10-4:35p.m.

**IX. Adjourn**

4:35 p.m.

**NOTE:**

- Presentation time should not exceed 50 percent of the total time allocated for specific item. The remaining 50 percent of the time is reserved for discussion.
- 25 copies of the presentation materials to be provided to the Subcommittee

**Status of Peach Bottom Open Items**  
(As provided by the Project Manager on 10/25/02)

**13 of the 15** OIs are expected to be closed.

1. 2.3.2.7.2-1 - Staff didn't agree that demisters, fire spray nozzles, and heating coils should be excluded from an AMR.. Applicant responded that they agreed these components were subject to an AMR. Staff accepted response.
2. 2.3.2.7.2-2 - The applicant needs to indicate that valve bodies include damper housings for the Standby Gas Treatment System (SBGT) dampers. The applicant clarified that the SGTS includes both valve bodies and damper enclosures that are subject to an AMR. The Secondary Containment System includes valve bodies but does not include damper enclosures subject to an AMR. Staff accepted response.
3. 2.3.3.8.2-1 - The filter housings of the HEPA filters were excluded from the LRA Table 2.3.2-8 and the applicant failed to provide justification for this exclusion in its response. The applicant responded that they were installed in a filter plenum which was subject to an AMR. Staff accepted response.
4. 2.3.3.8.2-2 - The staff considers the applicant's response to RAI 2.3.3.8-5 incomplete because the system's safety-related radiation, cooling, and toxic protection functions are required to meet Appendix A to 10 CFR Part 50, GDC 19. The applicant's response, which is 2.5 pages, explained why the design basis of the systems shows they do not have an intended function for license renewal. This additional information was not in the LRA. Staff accepted response.
5. 2.3.3.9.2-1 - The staff believes that these heating coils do fall within the scope of license renewal and are subject to an AMR. The applicant agreed. Staff accepted response.
6. 2.3.3.18.2-1 - However, the staff could not determine from the applicant's response how the SSCs in RAI 2.3.3.18-2 were captured within the scope of license renewal. The applicant clarified which components were included within the scope of license renewal. Staff accepted response.
7. 2.3.3.19.2-1 - NSR equipment w/ potential for spacial interacton w/ SR equipment. The applicant explained further the scope of equipment within the scope of license renewal. Staff accepted response.
8. 2.4.7.2-1 - The applicant should include the water-tight dikes within the scope of license renewal and subject them to an AMR or justify their exclusion. The applicant explained that the part of the UFSAR that the staff was reviewing that lead the staff to believe the dikes were within scope of license renewal was not correct and they plan to revise their UFSAR to correct it. Therefore, the dike is not within the scope of license renewal. Staff reviewing response further, but preliminarily it looks like it will be accepted.

9. 3.0.3.6.2-1 - Therefore, it is the staff's position that the applicant should perform inspections, through either the ISI program or one-time inspections, which are credited for license renewal, to verify the effectiveness of the chemistry program credited for managing the effects of aging. The applicant has committed to one time inspection through ISI or one time piping inspection.

10. 3.0.3.11.2-1 - To be consistent with this commitment made in response to RAI 3.5-1, the applicant needs to clarify that the parameters inspected for the maintenance rule structural monitoring program will be revised to include inspection of the concrete components, which credit this program, for cracking, loss of material, and change in material properties. Applicant provided requested information. Staff accepted response.

11. 3.0.3.16.2-1 - The applicant needs to provide information for the fire fuel and system pump flexible fuel and system hoses comparable to that provided for the EDG flexible hoses. The applicant agreed to inspection of hoses annually. Staff accepted response.

12. 3.1.3.2.1-1 - Related to aging management of bolting, and RCS chemistry effectiveness - various. The applicant provided draft response. The NRC reviewer has found licensee's response acceptable

13. 3.6.1.2.1-1 - Aging management of cables subject to wetting from flooding of conduit The applicant agreed to AMP for cables similar to GALL program X1.E3. Staff accepted response.

14. 3.6.1.2.2-1 - The applicant should provide a technical justification for high range radiation monitor and neutron monitoring instrumentation cables to demonstrate that visual inspection will be effective in detecting damage before current leakage can affect instrument loop accuracy. The applicant agreed to AMP for cables similar to GALL program X1.E2. Staff accepted response.

15. 4.5.2-1 - The staff is concerned that multiple failures of top guide beams are possible when the threshold fluence for IASCC is exceeded. The applicant provided draft response. Waiting for reviewer to review it.

NOTE: The NRC is expecting draft responses via faxes or telephone calls. If the applicant changes something from what they have previously told us the staff will tell the ACRS at the 10/30 briefing. The official deadline for the applicant to respond to OIs and CIs is November 29, 2002 so we probably will not see any formal responses until after the subcommittee meeting has passed.

Project Manager:        Dave Solorio  
                                  301-415-1973

Implementation Act (Pub. L. 103-182) concerning transitional adjustment assistance, hereinafter called (NAFTA-TAA), and in accordance with Section 250(a), Subchapter D, Chapter 2, Title II, of the Trade Act of 1974, as amended (19 U.S.C. 2273), an investigation was initiated on July 2, 2002 in response to a petition filed by a company on behalf of workers at Trus Joist a Weyerhaeuser Business, Engineered Wood Products Operations, Stayton, Oregon.

The petitioner has requested that the petition be withdrawn. Consequently, further investigation in this case would serve no purpose, and the investigation has been terminated.

Signed at Washington, DC, this 8th day of October 2002.

**Richard Church,**

*Certifying Officer, Division of Trade Adjustment Assistance.*

[FR Doc. 02-26749 Filed 10-21-02; 8:45 am]

BILLING CODE 4510-30-P

## DEPARTMENT OF LABOR

### Mine Safety and Health Administration

#### Proposed Information Collection Request Submitted for Public Comment and Recommendations; Preparation and Maintenance of Accurate and Up-to-Date Certified Mine Maps for Surface and Underground Coal Mines; Submittal of Underground Mine Closure Maps; and Notification of MSHA Prior to Opening New Mines or the Reopening of Inactive or Abandoned Mines

**ACTION:** Notice; Extension of public comment period.

**SUMMARY:** The Department of Labor published a notice in the *Federal Register* on August 21, 2002 (67 FR 54233) requesting public comment concerning the proposed extension of the information collection related to the Record of Mine Closure addressed in 30 CFR 75.1204 and 75.1204-1; the inclusion of standards requiring MSHA notification and inspection prior to mining when opening a new mine or reopening an inactive or abandoned mine addressed in 30 CFR 75.373 and 75.1721; and the inclusion of standards requiring underground and surface mine operators to prepare and maintain accurate and up-to-date mine maps addressed in 30 CFR 75.1200, 75.1200-1, 75.1201, 75.1202, 75.1202-1, 75.1203, 75.372, 77.1200, 77.1201, and 77.1202. The comment period for this notice was to close on October 22, 2002.

In response to a request from the public, the comment period has been extended to November 30, 2002.

**DATES:** Submit comments on or before November 30, 2002.

**ADDRESSES:** Send comments to David L. Meyer, Director, Office of Administration and Management, 1100 Wilson Boulevard, Room 2125, Arlington, VA 22209-3939. Commenters are encouraged to send their comments on a computer disk, or via internet e-mail to [Meyer-David@msha.gov](mailto:Meyer-David@msha.gov), along with an original printed copy. Mr. Meyer can be reached at (202) 693-9802 (voice) or (202) 693-9801 (facsimile).

**FOR FURTHER INFORMATION CONTACT:** Jane E. Tarr, Management Analyst, Records Management Group, U.S. Department of Labor, Mine Safety and Health Administration, Room, 1100 Wilson Boulevard, Room 2171, Arlington, VA 22209-3939. Ms. Tarr can be contacted at [Tarr-Jane@msha.gov](mailto:Tarr-Jane@msha.gov) (internet e-mail), (202) 693-9824 (voice), or (202) 693-9801 (facsimile).

Dated in Arlington, Virginia, this 18th day of October, 2002.

**David L. Meyer,**

*Director of Administration and Management.*

[FR Doc. 02-26919 Filed 10-18-02; 10:32 am]

BILLING CODE 4510-43-P

## NATIONAL CREDIT UNION ADMINISTRATION

### Notice of Change in Subject and Time of Meeting

The National Credit Union Administration Board determined that its business required the deletion of the following item from the previously announced closed meeting (*Federal Register*, Vol. 67, No. 199, pp. 63682-63683, October 15, 2002) scheduled for Thursday, October 17, 2002.

1. Administrative Action under Part 702 of NCUA's Rules and Regulations. Closed pursuant to Exemptions (8), (9)(A)(ii) and (9)(B).

The Board voted unanimously that this item be removed from the closed agenda.

The previously announced item were:

1. Administrative Action under Part 702 of NCUA's Rules and Regulations. Closed pursuant to Exemptions (8), (9)(A)(ii) and (9)(B).

2. One (1) Personnel Matter. Closed pursuant to Exemptions (2) and (6).

In addition, the time of the previously announced closed Board meeting was changed from 11:30 a.m. on October 17, 2002 to 9:15 a.m. on the same date.

*For Further Information Contact:*  
Becky Baker, Secretary of the Board,  
Telephone (703) 518-6304.

**Becky Baker,**

*Secretary of the Board.*

[FR Doc. 02-26901 Filed 10-17-02; 4:51 pm]

BILLING CODE 7535-01-M

## NUCLEAR REGULATORY COMMISSION

### \*Advisory Committee on Reactor Safeguards; Meeting of the Subcommittee on Plant License Renewal; Notice of Meeting

The ACRS Subcommittee on Plant License Renewal will hold a meeting on October 30, 2002, Room T-2B3, 11545 Rockville Pike, Rockville, Maryland.

The entire meeting will be open to public attendance.

The agenda for the subject meeting shall be as follows: *Wednesday, October 30, 2002—8:30 a.m. until the conclusion of business.*

The Subcommittee will meet with representatives of the NRC staff and the Exelon Generation Company, LLC, to review the license renewal application for Peach Bottom Atomic Power Station Units 2 and 3, and the associated safety evaluation report with open items. The purpose of this meeting is to gather information, analyze relevant issues and facts, and formulate proposed positions and actions, as appropriate, for deliberation by the full Committee.

Oral statements may be presented by members of the public with the concurrence of the Subcommittee Chairman; written statements will be accepted and made available to the Committee. Persons desiring to make oral statements should notify one of the individuals named below five days prior to the meeting, if possible, so that appropriate arrangements can be made. Electronic recordings will be permitted only during those portions of the meeting that are open to the public.

During the initial portion of the meeting, the Subcommittee, along with any of its consultants who may be present, may exchange preliminary views regarding matters to be considered during the balance of the meeting.

The Subcommittee will then hear presentations by and hold discussions with representatives of the NRC staff, Exelon Generation Company, LLC, and other interested persons regarding this review.

Further information regarding topics to be discussed, whether the meeting has been canceled or rescheduled, and

in the panel's discussions at the discretion of the panel chairman and with the approval of the full-time Federal employee in attendance.

If you need special accommodations due to a disability, please contact the Office of Accessibility, National Endowment for the Arts, 1100 Pennsylvania Avenue, NW, Washington, DC 20506, 202/682-5532, TDY-TDD 202/682-5496, at least seven (7) days prior to the meeting.

Further information with reference to this meeting can be obtained from Ms. Kathy Plowitz-Worden, Office of Guidelines & Panel Operations, National Endowment for the Arts, Washington, DC, 20506, or call 202/682-5691.

Dated: October 22, 2002.

Kathy Plowitz-Worden,

Panel Coordinator, Panel Operations,  
National Endowment for the Arts.

[FR Doc. 02-27321 Filed 10-25-02; 8:45 am]

BILLING CODE 7537-01-P

## NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

### National Endowment for the Arts

#### Combined Arts Advisory Panel; Notice of Change

Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-463), as amended, notice is hereby given that the time of the open session of the Combined Arts Advisory Panel, Music Section (Access and Heritage & Preservation categories) has been changed. This session will be held from 11 a.m. to 12:30 p.m., rather than 2 p.m. to 3:30 p.m., on November 22, 2002, at the Nancy Hanks Center, 1100 Pennsylvania Avenue, NW., Washington, DC, 20506.

Dated: October 22, 2002.

Kathy Plowitz-Worden,

Panel Coordinator, Panel Operations,  
National Endowment for the Arts.

[FR Doc. 02-27322 Filed 10-25-02; 8:45 am]

BILLING CODE 7537-01-P

## NUCLEAR REGULATORY COMMISSION

### Advisory Committee on Reactor Safeguards; Meeting Notice

In accordance with the purposes of sections 29 and 182b. of the Atomic Energy Act (42 U.S.C. 2039, 2232b), the Advisory Committee on Reactor Safeguards (ACRS) will hold a meeting on November 7-9, 2002, in Conference Room T-2B3, 11545 Rockville Pike, Rockville, Maryland. The date of this

meeting was previously published in the *Federal Register* on Monday, November 26, 2001 (66 FR 59034).

#### Thursday, November 7, 2002

8:30 a.m.-8:35 a.m.: Opening Statement by the ACRS Chairman—The ACRS Chairman will make opening remarks regarding the conduct of the meeting.

8:35 a.m.-10 a.m.: *Proposed Resolution of Generic Safety Issue (GSI)-189, "Susceptibility of Ice Condenser and Mark III Containments to Early Failure From Hydrogen Combustion During a Severe Accident"* (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff on the results of their additional analyses and proposed recommendations for resolving GSI-189.

10:15 a.m.-11:45 a.m.: *Early Site Permit Process* (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding Early Site Permit Process.

11:45 a.m.-12:15 p.m.: *Peach Bottom License Renewal Application* (Open)—Report by the Subcommittee Chairman regarding the October 30, 2002 Plant License Renewal Subcommittee meeting on the license renewal application for the Peach Bottom Nuclear Plant Units 2 and 3.

1:15 p.m.-3:15 p.m.: *Westinghouse AP1000 Design* (Open)—The Committee will hear presentations by and hold discussions with representatives of Westinghouse regarding the design features of, and test information on, the AP1000 design. The NRC staff will provide a status report regarding its review schedule.

3:30 p.m.-5 p.m.: *Risk-Informed Improvements to Standard Technical Specifications* (Open)—The Committee will hear presentations by and hold discussions with representatives of the NRC staff regarding staff's progress on risk-informed improvements to Standard Technical Specifications and related matters.

5:15 p.m.-6 p.m.: *Report Regarding Recent Operating Events* (Open)—The Committee will hear a report by the Cognizant ACRS member regarding recent operating events of interest.

6 p.m.-7 p.m.: *Proposed ACRS Reports* (Open)—The Committee will discuss proposed ACRS reports on matters considered during this meeting.

#### Friday, November 8, 2002

8:30 a.m.-8:35 a.m.: *Opening Remarks by the ACRS Chairman* (Open)—The ACRS Chairman will make

opening remarks regarding the conduct of the meeting.

8:35 a.m.-12 Noon: *Organizational and Personnel Matters* (Closed)—The Committee will discuss organizational and personnel matters as well as the potential improvements to internal ACRS policies and procedures.

**Note:** This session will be closed pursuant to 5 U.S.C. 552b(c)(2) and (6) to discuss organizational and personnel matters that relate solely to internal personnel rules and practices of ACRS, and information the release of which would constitute a clearly unwarranted invasion of personal privacy.)

1 p.m.-4 p.m.: *Safeguards and Security Activities* (Closed)—(This session will be held in room T-8E8.) The Committee will hear a report by the cognizant Subcommittee Chairman regarding matters discussed at the October 31, 2002 meeting of the ACRS Subcommittee on Safeguards and Security. In addition, the Committee will discuss the content of a proposed report to the Commission on Safeguards and Security matters.

**Note:** This session will be closed pursuant to 5 U.S.C. 552b(c)(1) to protect national security information.)

4:15 p.m.-5 p.m.: *Future ACRS Activities/Report of the Planning and Procedures Subcommittee* (Open)—The Committee will discuss the recommendations of the Planning and Procedures Subcommittee regarding items proposed for consideration by the full Committee during future meetings. Also, it will hear a report of the Planning and Procedures Subcommittee on matters related to the conduct of ACRS business, including anticipated workload and member assignments.

5 p.m.-5:15 p.m.: *Reconciliation of ACRS Comments and Recommendations* (Open)—The Committee will discuss the responses from the NRC Executive Director for Operations (EDO) to comments and recommendations included in recent ACRS reports and letters. The EDO responses are expected to be made available to the Committee prior to the meeting.

5:30 p.m.-7 p.m.: *Proposed ACRS Reports* (Open)—The Committee will discuss proposed ACRS reports.

#### Saturday, November 9, 2002

8:30 a.m.-10 a.m.: *Proposed ACRS Reports* (Open)—The Committee will discuss proposed ACRS reports.

10:15 a.m.-12:15 p.m.: *Annual ACRS Report on the NRC Safety Research Program* (Open)—The cognizant Subcommittee Chairman will report on matters discussed at the November 6, 2002 Safety Research Program

Subcommittee meeting, and the Committee will discuss a draft ACRS report to the Commission on the NRC Safety Research Program.

*12:30 p.m.-1 p.m.: Miscellaneous (Open)*—The Committee will discuss matters related to the conduct of Committee activities and matters and specific issues that were not completed during previous meetings, as time and availability of information permit.

Procedures for the conduct of and participation in ACRS meetings were published in the *Federal Register* on October 11, 2002 (67 FR 63460). In accordance with those procedures, oral or written views may be presented by members of the public, including representatives of the nuclear industry. Electronic recordings will be permitted only during the open portions of the meeting. Persons desiring to make oral statements should notify the Associate Director for Technical Support named below five days before the meeting, if possible, so that appropriate arrangements can be made to allow necessary time during the meeting for such statements. Use of still, motion picture, and television cameras during the meeting may be limited to selected portions of the meeting as determined by the Chairman. Information regarding the time to be set aside for this purpose may be obtained by contacting the Associate Director prior to the meeting. In view of the possibility that the schedule for ACRS meetings may be adjusted by the Chairman as necessary to facilitate the conduct of the meeting, persons planning to attend should check with the Associate Director if such rescheduling would result in major inconvenience.

In accordance with Subsection 10(d) Pub. L. 92-463, I have determined that it is necessary to close portions of this meeting noted above to discuss organizational and personnel matters that relate solely to internal personnel rules and practices of ACRS, and information the release of which would constitute a clearly unwarranted invasion of personal privacy, *per* 5 U.S.C. 552b(c)(2) and (6), and to protect national security information *per* 5 U.S.C. 552b(c)(1).

Further information regarding topics to be discussed, whether the meeting has been canceled or rescheduled, the Chairman's ruling on requests for the opportunity to present oral statements, and the time allotted therefor can be obtained by contacting Dr. Sher Bahadur, Associate Director for Technical Support (301-415-0138), between 7:30 a.m. and 4:15 p.m., ET.

ACRS meeting agenda, meeting transcripts, and letter reports are

available through the NRC Public Document Room at [pdr@nrc.gov](mailto:pdr@nrc.gov), or by calling the PDR at 1-800-397-4209, or from the Publicly Available Records System (PARS) component of NRC's document system (ADAMS) which is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> or <http://www.nrc.gov/reading-rm/doc-collections/> (ACRS & ACNW Mtg schedules/agendas).

Videoteleconferencing service is available for observing open sessions of ACRS meetings. Those wishing to use this service for observing ACRS meetings should contact Mr. Theron Brown, ACRS Audio Visual Technician (301-415-8066), between 7:30 a.m. and 3:45 p.m., ET, at least 10 days before the meeting to ensure the availability of this service. Individuals or organizations requesting this service will be responsible for telephone line charges and for providing the equipment and facilities that they use to establish the videoteleconferencing link. The availability of videoteleconferencing services is not guaranteed.

Dated: October 22, 2002.

**Andrew L. Bates,**

*Advisory Committee Management Officer.*

[FR Doc. 02-27335 Filed 10-25-02; 8:45 am]

BILLING CODE 7590-01-P

## NUCLEAR REGULATORY COMMISSION

### Advisory Committee on Reactor Safeguards Subcommittee Meeting on Thermal-Hydraulic Phenomena (GSI-189); Revised

The starting time for the ACRS Subcommittee meeting on Thermal-Hydraulic Phenomena (GSI-189) scheduled for November 5, 2002, Room T-2B3, 11545 Rockville Pike, Rockville, Maryland has been changed from 8:30 a.m. to 1:30 p.m.

For further information contact: Ms. Maggalean W. Weston (telephone 301-415-3151) between 7:30 a.m. and 5:00 p.m. (EDT).

Dated: October 18, 2002.

**Howard J. Larson,**

*Acting Associate Director for Technical Support, ACRS/ACNW.*

[FR Doc. 02-27336 Filed 10-25-02; 8:45 am]

BILLING CODE 7590-01-P

## SECURITIES AND EXCHANGE COMMISSION

### Sunshine Act Meeting

**FEDERAL REGISTER CITATION OF PREVIOUS ANNOUNCEMENT:** [67 FR 64940, October 22, 2002]

**STATUS:** Open meeting

**PLACE:** 450 Fifth Street, NW., Washington, DC

**ANNOUNCEMENT OF OPEN MEETING:** Open meeting.

The Commission will hold an Open Meeting on Friday, October 25, 2002 at 2:30 p.m., in Room 1C30, the William O. Douglas Room, to consider appointments to the Public Company Accounting Oversight Board.

The Commission (Chairman Pitt, Commissioners Glassman, Goldschmid, Atkins and Campos) determined that no earlier notice thereof was possible.

At times, changes in Commission priorities require alterations in the scheduling of meeting items. For further information and to ascertain what, if any, matters have been added, deleted or postponed, please contact: The Office of the Secretary at (202) 942-7070.

Dated: October 24, 2002.

**Jonathan G. Katz,**

*Secretary.*

[FR Doc. 02-27483 Filed 10-24-02; 12:30 pm]

BILLING CODE 8010-01-J

## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-46702; File No. SR-Amex-2002-47]

### Self-Regulatory Organizations; Order Approving Proposed Rule Change and Amendment Nos. 1 and 2 and Notice of Filing and Order Granting Accelerated Approval of Amendment No. 3 by the American Stock Exchange LLC Relating to Non-Member Fees for Transactions in Nasdaq Securities Traded on an Unlisted Basis

October 22, 2002.

On June 3, 2002, the American Stock Exchange LLC ("Amex" or "Exchange") filed with the Securities and Exchange Commission ("SEC" or "Commission") the proposed rule change pursuant to section 19(b)(1) of the Securities Exchange Act of 1934 ("Act"),<sup>1</sup> and Rule 19b-4 thereunder.<sup>2</sup> Amex filed Amendment No. 1 on June 11, 2002,<sup>3</sup>

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> See letter from William Floyd-Jones, Assistant General Counsel, Amex, to Katherine England, Esq.,

ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
SUBCOMMITTEE MEETING ON PLANT LICENSE RENEWAL

OCTOBER 30, 2002

Date

PLEASE PRINT

ATTENDEES PLEASE SIGN BELOW

<u>NAME</u>	<u>AFFILIATION</u>
Sunil Weerakody	NRC/NAR/DSSA/SPLB
Bob Weisman	NRC/OG/IRP
Robin Dyle	BWRVIP
Jih-Sien Guo	NRC/NRR/DSSA/SPLB
Meena Khanna	NRC/NRR/DE/EMCB
JAMES MEDOFF	NRC/NRR/DE/EMCB
Bart Fu	NRR/DE/EMCB
<del>Wael Dudley</del>	<del>NRR/te</del>
PAUL Gull	NRR/DE/EELB
JOSE CALVO	NRR/EEIB
Andrea Keim	NRR/EMCB
Y.C. (Renue) Li	NRR/EMEB
T.J. Kim	NRR/Projects
↓	
Kim Green	ISL, Inc.
Muhammad Razaque	NRR/SRxB
John S. Ma	NRR/DE/EMEB
MARK HARTZMAN	NRR/DE/EMEB

ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
SUBCOMMITTEE MEETING ON PLANT LICENSE RENEWAL

OCTOBER 30, 2002

Date

PLEASE PRINT

ATTENDEES PLEASE SIGN BELOW

<u>NAME</u>	<u>AFFILIATION</u>
Ahmed Onaou	Exelon / PB License Renewal
Jimmy Phillips	Exelon
FRED POLASKI	EXELON
Kevin Muggleston	Exelon
PAUL W. THOMAS	EXELON
H. David Horton	EXELON
Russ Wells	Constellation
AL FULVID	EXELON
Erach Patel	Exelon
RICHARD E CIEMIEWICZ	EXELON
Dave Flyte	PPL Susquehanna, LLC
BERNARD VAN SANT	OPPD
Thomas Matthews	OMAHA Public Power District
BUB PETTIS	
Jane M. Grant	PPL Susquehanna
Dennis Dyckman	PA DEP / BRP
BEN GITNICKS	ISL, INC
Ray Auluck	NRC
Naeem Iqbal	NRC
J. H. Karal	NRC / DSSA / SPLB

ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
SUBCOMMITTEE MEETING ON PLANT LICENSE RENEWAL

OCTOBER 30, 2002

Date

NRC STAFF PLEASE SIGN BELOW  
PLEASE PRINT

<u>NAME</u>	<u>NRC ORGANIZATION</u>
DAVID COLLISON	NRA/DXA/SPLB
Winston Liu	NRR/DRIP/RLEP
Bill Bateman	NRR/DE/EMCB
S. K. MITRA	NRR/DRIP/RLEP
NOEL DUDLEY	NRR/DRIP/RLEP
WM BURTON	NRR/DRIP/RLEP
BARRY ELLIOT	NRR/DE/EMCB
CORNELIUS HOLDEN	NRR/DE/EMCB
Hank Asher	NRR/DE/EMCB
DIANE JACKSON	NRR/DSSA/SPLB
Daniel Frumkin	NRR/DSSA/SPLB
GEORGE B. GEORGIEV	NRR/DE/EMCB
J Cushing	NRR/DRIP/RLEP
G. Galletti	NRR/DIPM/IEHB
W. H. KOO	NRR/DE/EMCB
V. Rayan	NRR/DE/EMCB
Matthew A. Mitchell	NRR/DE/EMCB
Bill Rogers	NRR/DIPM/IEHB
Alvin Henry	NRR/DRIP/RLEP
Louise Lund	NRR/DE/EMCB
TERENCE CHAN	NRR/DE/EMCB
EDWARD ANDRUSZKIEWICZ	NRR/DE/EMCB

ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
SUBCOMMITTEE MEETING ON PLANT LICENSE RENEWAL

OCTOBER 30, 2002

Date

NRC STAFF PLEASE SIGN BELOW  
PLEASE PRINT

<u>NAME</u>	<u>NRC ORGANIZATION</u>
DUC NGUYEN	NRC/NRR/DE/EEIB
Greg Hetchett	NRC/NRR/DSSA/SPLB
RAJ ANAND	NRC/NRR/DRIP/RLEP
Jimi Yerokun	NRR/DRIP
SAM LEE	NRR/DRIP/RLEP
JIM STENISHA	NRR/DE/EMEB
Region S. Kang	NRR/DRIP/WBIP
Bob Petrus	NRR/DIAPM
David L. Solerio	NRR/DRIP
P T Kuo	NRR/DRIP/RLEP
Hai-Bob Wang	NRR/DRIP/RLEP
Stephanie Coffin	NRR/DE/EMCB
Michael Modes	Region I
Cliff Munson	NRR/DE/EMEB
John Fair	NRR/DE/EMEB
Stewart Bailey	NRR/DE/EMEB
MARTIN MURPHY	NRR/DE/EMCB
Carolyn Lauron	NRR/DE/EMCB
Kimberly Corp	NRR/DRIP/RLEP
Chay-Yang Li	NRR/DSSA/SPLB
JIM LAZEVNICK	NRR/DE/EEIB

REQUEST FOR COURT REPORTING SERVICE

NRC

DATE OF REQUEST

10/21/2002

REQUESTING OFFICE

REQUESTER

ACRS

BARBARA JO WHITE

TIME OF REQUEST

8:20am

NAME AND TYPE OF PROCEEDING

PLANT LICENSE RENEWAL SUBCOMMITTEE MEETING

DOCKET NUMBER(S)

LOCATION OF PROCEEDING

ROOM T-2B3, 11545 ROCKVILLE PIKE,  
ROCKVILLE, MD

CONTACT(S) AND TELEPHONE NUMBER(S)

BARBARA JO WHITE (301-415-7130), E-MAIL:  
BJW2@NRC.GOV

CHAIRMAN / MEMBERS

N/A

DATE(S) OF PROCEEDING

WEDNESDAY, OCTOBER 30, 2002

TIME(S) OF PROCEEDING (FROM - TO)

8:30 A.M. UNTIL 5:00 P.M.

ADDITIONAL INFORMATION

TIMOTHY KOBETZ - CONTACT @ THE MEETING. 2-COPIES OF HANDOUTS SHOULD BE GIVEN TO COURT REPORTER (1-ORIGINAL COPY +1-COPY)

TRANSCRIPTS

- ORIGINAL
- COPIES 1  LAST DAY: \_\_\_\_\_
- E-MAIL  AUTHORIZED FOR SALE
- NOTARY REQUESTED  NOT AUTHORIZED FOR SALE
- DO NOT BIND EXHIBITS  L - SECRET
- PROVIDE PC FLOPPY DISKETTE  Q - CLEARED
- BEGIN PAGINATION ON 1

DELIVERY

- DAILY
- 3-DAY
- 7-DAY

FUNDING

- REACTOR
- MATERIALS
- HLW
- NON-HLW
- MGMT & SUPPORT

DELIVER TO

- ASLBP - CALL 415-7408/7550  
11545 ROCKVILLE PIKE  
3RD FLOOR, T-3 F25  
ROCKVILLE, MARYLAND
- MARKED IN A SEALED ADDRESSEE ONLY ENVELOPE WITH TAPES AND/OR NOTES FOR:
- SECY  
11555 ROCKVILLE PIKE  
LOBBY - CALL 415-1969  
ROCKVILLE, MARYLAND

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PREPARED BY (Print) NAME:	DATE	REQUEST GIVEN TO REPORTING COMPANY DATE:	CONFIRMATION TIME:
TITLE:			

BY PROJECT OFFICERS:

NAME	DATE	NAME	DATE

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		TIME

TO: GRAHAM LEITCH, CHAIRMAN  
PLANT LICENSING RENEWAL SUBCOMMITTEE

FROM: JOHN J. BARTON, ACRS CONSULTANT

SUBJECT: REPORT OF MY REVIEW ON THE LICENSE  
RENEWAL APPLICATION AND SAFETY  
EVALUATION REPORT, (WITH OPEN ITEMS),  
FOR THE PEACH BOTTOM ATOMIC POWER  
STATION, UNITS 2 AND 3

IN GENERAL I BELIEVE THAT THE MORE  
RECENT LICENSE RENEWAL APPLICATIONS ARE  
BETTER PREPARED, BETTER ORGANIZED FROM A  
REVIEW STAND POINT, AND HAVE LESS MAJOR  
DISPUTED ISSUES OUTSTANDING AT THIS STAGE  
OF THE RENEWAL PROCESS.

I DO NOTE THAT SEVERAL OPEN ITEMS IN  
THIS APPLICATION ARE THE SAME AS OTHER  
APPLICATIONS THAT I HAVE REVIEWED. AN  
EXAMPLE IS THE ISSUE REGARDING WHETHER  
HEPA FILTER HOUSINGS, FAN HOUSINGS, DAMPER  
HOUSINGS, AND HEATING STEAM COILS WITHIN  
VENTILATION SYSTEM FAN HOUSINGS ARE SUBJECT  
TO AN AMR. THERE NEEDS TO BE SOME

RESOLUTION TO THESE ISSUES ONCE AND FOR ALL, SO THEY DO NOT HAVE TO BECOME OPEN ITEMS FOR EVERY APPLICANT. WHY ARE WE WASTING OUR TIME ON THIS FOR EVERY APPLICATION?

I HAVE REVIEWED EACH OPEN ITEM THE STAFF HAS IDENTIFIED IN THE SAFETY EVALUATION REPORT AND GIVE THE STAFF CREDIT FOR RAISING SOME VERY GOOD ISSUES THAT THE APPLICANT DID NOT ADEQUATELY ADDRESS.

SPECIFIC COMMENTS AND QUESTIONS FROM MY REVIEW OF THE LICENSE RENEWAL APPLICATION AND THE SAFETY EVALUATION REPORT FOLLOW.

I. SCOPING ISSUES, SECTION 2 OF THE LRA

- MECHANICAL SYSTEM SCOPING, PGS. 2-20, 2-22. RADWASTE SYSTEM AND RADWASTE VENTILATION -

WHY AREN'T THESE SYSTEMS IN SCOPE WHEN THE FAILURE OF THESE SYSTEMS HAS THE POTENTIAL FOR RADIOLOGICAL RELEASES?

## SCOPING ISSUES, CONT'D.

- ELECTRICAL AND INSTRUMENTATION & CONTROL SYSTEM SCOPING, TABLE 2.2-3 PG 2-25.

ELECTRICAL HEAT TRACING SYSTEM IS LISTED AS NOT IN SCOPE. QUESTION: DOES THE FAILURE OF THIS SYSTEM IMPACT THE OPERABILITY OF ANY SAFETY RELATED EQUIPMENT?

- SCOPING AND SCREENING RESULTS: ELECTRICAL AND INSTRUMENTATION & CONTROLS; (SECTION 2.5)

THE APPLICANT STATES THAT MOISTURE IS NOT AN AGING EFFECT REQUIRING MANAGEMENT AT PEACH BOTTOM, PG. 2-133, THIS IS BASED ON A PROGRAM THE APPLICANT INITIATED IN 1995 TO REPLACE CABLES WITH A BETTER INSULATED CABLE MATERIAL, EXPERIENCE WITH "WATER TREERING" WOULD SUGGEST THAT NOT ENOUGH TIME HAS ELAPSED TO MAKE SUCH A DEFINITIVE STATEMENT.

THE STAFF HAS IDENTIFIED THIS AS AN OPEN ITEM, 3.6.1.2.1-1 WHICH I SUPPORT,

## SCOPING ISSUES CONT'D,

- SCOPING AND SCREENING RESULTS, SECTION 2.5.3 STATION BLACKOUT SYSTEM - PG. 2-140  
 WHAT POINT IS THE APPLICANT MAKING BY STATING THAT THE WOODEN POLE TAKEOFF TOWER FOR THE TRANSMISSION LINE FROM SUSQUEHANNA SUBSTATION HAS BEEN ANALYZED TO BE ABLE TO WITHSTAND THE SEVERE WEATHER ASSOCIATED WITH THE SBO EVENT?  
 THE APPLICANT DOES HAVE AN AGING MANAGEMENT PROGRAM AS DESCRIBED IN APPENDIX "A" TO THE LRA.

## 2. AGING MANAGEMENT REVIEW RESULTS:

I REVIEWED THE AGING MANAGEMENT PROGRAMS FOR THE FOLLOWING:

- 3.2 AGING MANAGEMENT OF ENGINEERED SAFETY FEATURES SYSTEMS
- 3.3 AGING MANAGEMENT OF AUXILIARY SYSTEMS
- 3.4 AGING MANAGEMENT OF STEAM AND POWER CONVERSION SYSTEMS

EXCEPT FOR THE FOLLOWING ITEMS, I BELIEVE THE APPLICANT HAS PROPERLY IDENTIFIED BOTH THE AGING EFFECTS AND AGING MANAGEMENT ACTIVITIES FOR EACH COMPONENT.

- TABLE 3.3-4, PG 3-68 OF THE LICENSE RENEWAL APPLICATION - STBY LIQUID CONTROL SYS. - THE APPLICANT LISTS VESSELS AS A COMPONENT GROUP, INCLUDED ARE ACCUMULATORS AND SOLUTION TANK. THE MATERIALS OF CONSTRUCTION ARE CARBON STEEL AND STAINLESS STEEL IN A BORIC ACID ENVIRONMENT, YET THERE IS NO AGING EFFECT OR AGING MANAGEMENT ACTIVITY. EXPLAIN ?

- TABLE 3.3-16, PG 3-111 OF THE LRA. AGING MANAGEMENT REVIEW RESULTS FOR COMPONENT GROUPS FOR EMERGENCY DIESEL GENERATOR

THE COMPONENT GROUP IS VESSEL- THE ITEM IS THE FUEL OIL STORAGE TANK. THIS IS A BURIED CARBON STEEL TANK. THE ONLY AGING MANAGEMENT ACTIVITY PROPOSED IS FUEL OIL QUALITY TESTING. THIS DOES NOT SEEM REASONABLE THAT YOU COULD

EXPECT A BURIED TANK TO LAST 60 PLUS YEARS WITHOUT SERIOUS CORROSION OR LEAKAGE. I WOULD EXPECT AT LEAST A ONE TIME (BEFORE EXTENDED OPERATION) INSPECTION OF THE TANK.

- TABLE 3.4.2, PG. 3-120 OF THE LRA AGING MANAGEMENT REVIEW OF THE MAIN CONDENSER. THE MAIN CONDENSER PARTS LISTED IN THE TABLE INDICATES NO AGING MANAGEMENT ACTIVITY.

ON PAGE 3-201 OF THE SAFETY EVALUATION REPORT THE STAFF STATES THAT THERE IS NO NEED FOR AN AGING MANAGEMENT PROGRAM TO MANAGE THE AGING EFFECTS FOR THE MAIN CONDENSER.

THIS IS ASSUMED TO BE THE CASE BECAUSE THE MATERIALS OF CONSTRUCTION AT PEACH BOTTOM ARE THE SAME AS ~~THE~~ AT SOME OTHER PLANTS, AND THAT THE MAIN CONDENSER INTEGRITY IS CONTINUOUSLY CONFIRMED DURING NORMAL PLANT OPERATION. (YOU COULD SAY THAT ABOUT ANY PLANT SYSTEM - THAT IS THAT ITS INTEGRITY IS CONTINUOUSLY MONITORED AND CONFIRMED DURING

NORMAL OPERATION).

I WOULD HAVE EXPECTED THAT THERE WOULD BE AGING EFFECTS ON VARIOUS CONDENSER STRUCTURAL COMPONENTS THAT SEE SOME SEVERE OPERATING STRESSES ESPECIALLY DURING PLANT TRANSIENTS. WHY WOULDN'T THESE INTERNAL PARTS BE SUBJECTED TO SOME AGING EFFECTS?

- SECTION 3.3.5 OF THE SER - HIGH PRESSURE SERVICE WATER SYSTEM - PAGE 3-161, OUTDOOR BURIED PIPING AND SUBMERGED COMPONENTS.

THE AGING MANAGEMENT PROGRAM FOR THESE SUBMERGED COMPONENTS IS DESCRIBED ON PAGE B-57 OF APPENDIX "B" OF THE LRA. THE APPLICANT NOTES IN APPENDIX "B" THAT A VOLUMETRIC INSPECTION OF THE BOTTOM OF THE REFUELING WATER STORAGE TANK (RWST), WOULD BE REPRESENTATIVE OF THE CONDITION OF THE UNDERSIDE OF THE CONDENSATE STORAGE TANKS (CST).

WHY AREN'T THE CST'S INSPECTED? WHAT IS DIFFERENT IN THE CONSTRUCTION THAT WOULD NOT PERMIT INSPECTION OF

THE UNDERSIDE OF THESE TANKS? COULD A DIFFERENCE IN CONSTRUCTION MAKE A DIFFERENCE IN THE CONDITION OF THE TANK BOTTOMS?

WHY NOT PERFORM A ONE-TIME INTERNALS INSPECTION, (PLATE THICKNESS), PRIOR TO EXTENDED OPERATIONS?

### 3. STRUCTURES - DRYWELL AGING MANAGEMENT ACTIVITIES

APPENDIX "B" OF THE LRA

#### B.1.9 - PRIMARY CONTAINMENT IN SERVICE INSPECTION PROGRAM

THE PROGRAM LOOKS AT LOSS OF SEALING FOR THE MOISTURE BARRIER INSIDE THE DRYWELL AT THE JUNCTURE OF THE CONTAINMENT WALL AND THE CONCRETE FLOOR. THERE IS NO MENTION OF INSPECTING FOR LEAKAGE ON THE OUTSIDE SURFACE OF THE DRYWELL. HOW DOES THE APPLICANT ENSURE THERE IS NO LEAKAGE FROM THE REFUEL FLOOR AREA THAT HAS FOUND ITS WAY OUTSIDE THE

DRYWELL AND IS CAUSING CORROSION AT THE BOTTOM OF THE LIGHT BULB STRUCTURE? THIS LEAKAGE PATH HAS OCCURRED AT ANOTHER PLANT WITH A MARK-I CONTAINMENT.

HAVING A SOLUTION ACCEPTABLE TO THE STAFF AND ACRS OF THE ABOVE MENTIONED ISSUES/QUESTIONS, AND AN ACCEPTABLE RESOLUTION TO ALL THE EXISTING OPEN ITEMS, I SEE NO REASON NOT TO GRANT AN EXTENDED OPERATING LICENSE TO THIS APPLICANT.

John J. Burton  
10/29/02

# Peach Bottom Atomic Power Station

Advisory Committee on Reactor  
Safeguards Plant License Renewal  
Subcommittee Meeting

October 30, 2002

# Participants

*Dissect* →

- William Bohlke – Senior VP, Nuclear Services
- Fred Polaski – Manager, License Renewal
- Erach Patel – Technical Lead, Peach Bottom LRA

## Purpose of Meeting

- Provide an overview of the license renewal application for Peach Bottom Atomic Power Station
- Report the status of the Draft Safety Evaluation Report Open Items and Confirmatory Actions

# Background

- Application preparation began in March 1999
- Hatch Application submitted in February 2000
- Peach Bottom Application submitted July 2, 2001
- July 2001 final versions of guidance documents (NUREGs-1800 and 1801) received after Peach Bottom Application submitted

# LRA Format

- Section 1: Administrative Information
  - \*Section 2: Scoping and Screening Results
  - \*Section 3: Aging Management Review Results
  - \*Section 4: Time-Limited Aging Analyses
  - Appendix A: UFSAR Supplement
  - \*Appendix B: Aging Management Activities
  - Appendix E: Environmental Information
- \* Sections to be discussed today.

# Scoping and Screening

- 10CFR54.4(a) Scoping Criteria
  - Criterion (1) Safety-Related (SR) SSC
  - Criterion (2) Non-Safety-Related (NSR) SSC whose Failure could Prevent Accomplishment of Safety Function
  - Criterion (3) Regulated Events
    - fire protection
    - environmental qualification
    - pressurized thermal shock
    - anticipated transients without scram
    - station blackout

# Scoping and Screening Data Sources

- Systems and Structures Identified
  - Plant Information Management System (PIMS)
  - Maintenance Rule Database
  - UFSAR (Structures)
- Systems and Structures Boundaries Defined
  - Piping & Instrumentation Drawings
  - Component Record List (CRL)
  - Physical Drawings (Structures)
  - Boundary Realignment
  - Boundary Drawings Created
- System and Structure Functions Identified
  - UFSAR
  - Design Baseline Documents

## Scoping and Screening: Mechanical

- Scoped on system basis
- Boundaries determined by traditional component numbering
- Confirmed interfaces between systems
- Some boundary realignments required
- Screening used CRL data and NEI 95-10 for active/passive

## Scoping and Screening: Structural

- Scoped structures as buildings or structural commodities
- Structures support system safety-related intended functions
- Structural commodities
  - Similar design, materials, environments
  - Commodities include component supports, hazard barriers and elastomers, miscellaneous steel, electrical and I & C enclosures and raceways, and insulation

# Scoping and Screening: Electrical

- Scoped on system basis
- Passive electrical/I&C components screened on a plant-level basis as commodities
  - Spaces Approach
  - Commodities
    - Cables
    - Connectors, Splices, and Terminal Blocks (Fuse Clips)
    - Switchyard bus, High-voltage insulators, Phase bus, and Transmission conductors

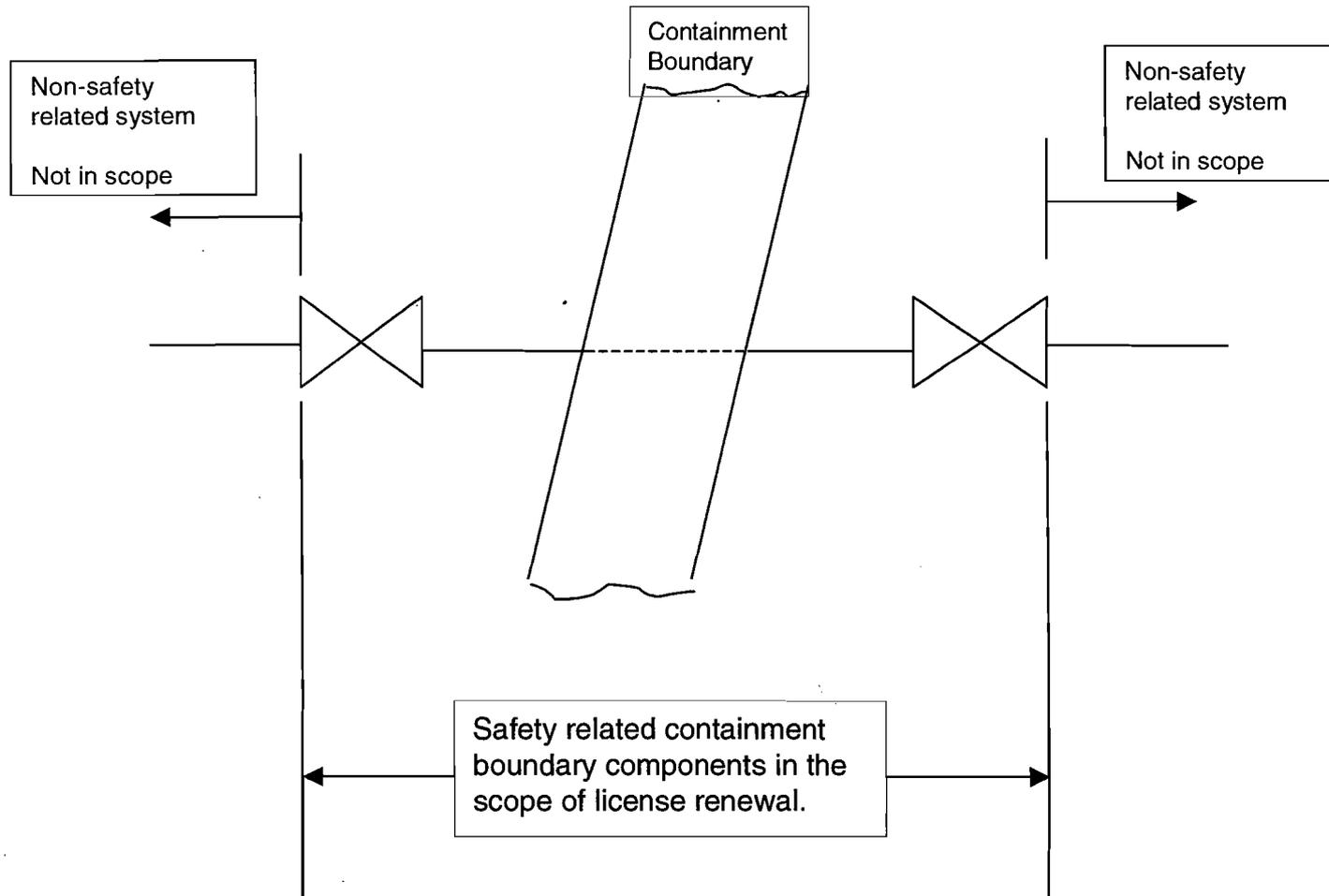
# Two Mechanical Scoping Areas of Special Emphasis

- Boundary Realignment
- Scoping for 10CFR54.4(a)(2): Non-safety-related equipment that could impact safety-related equipment

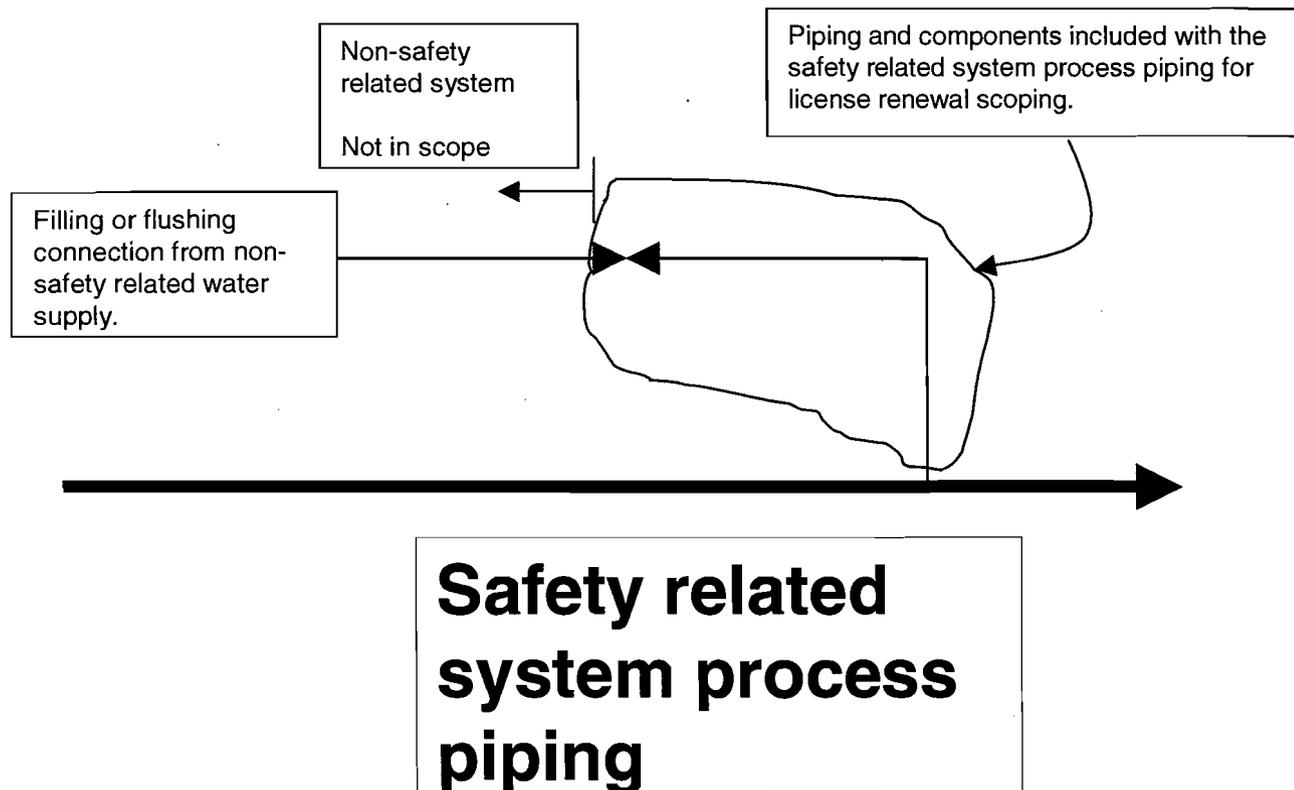
# Boundary Realignment

- Case 1 Components associated with Containment Penetration
- Case 2 Interfaces between In-scope and Out-of-scope mechanical systems
- Case 3 Interfaces between In-scope electrical and Out-of scope mechanical systems
- Case 4 Components shared between In-scope and Out-of-scope systems
- Case 5 Components required to support specific intended functions

### Case 1 – Containment Penetration



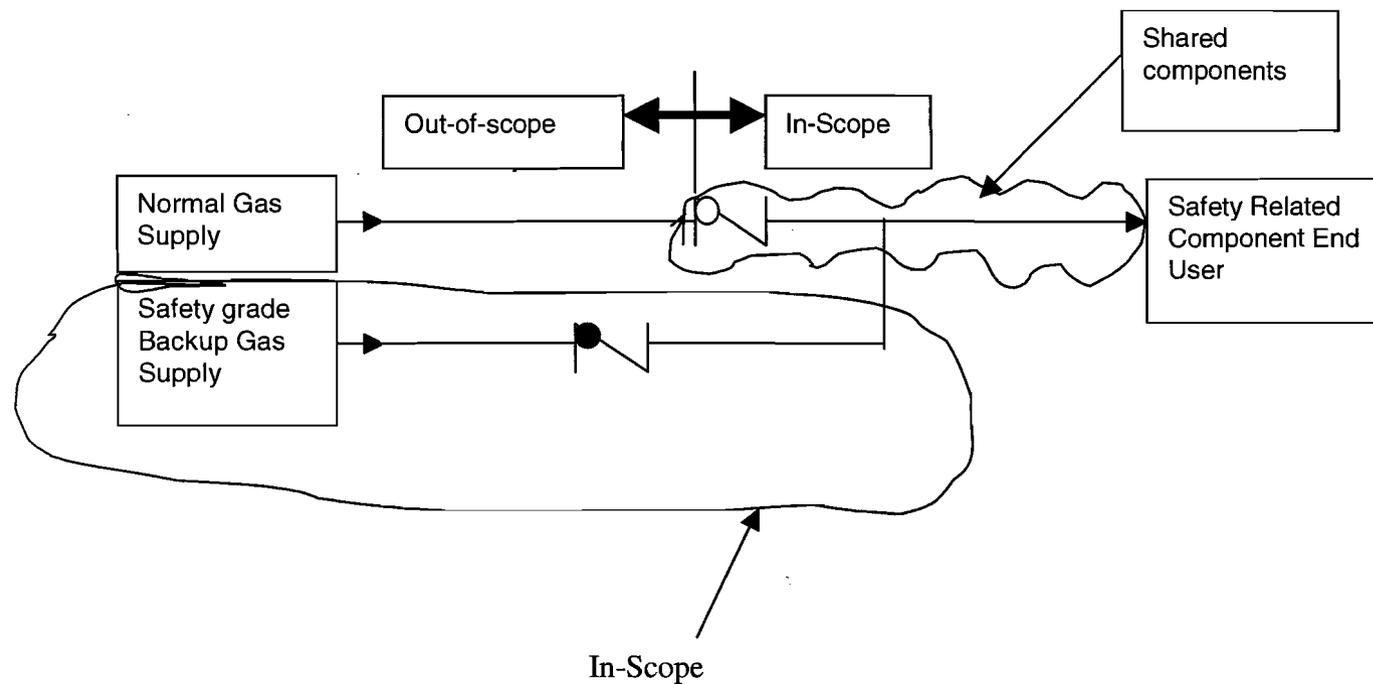
### Case 2 – Interfaces Between In-Scope and Out-of-Scope Mechanical Systems



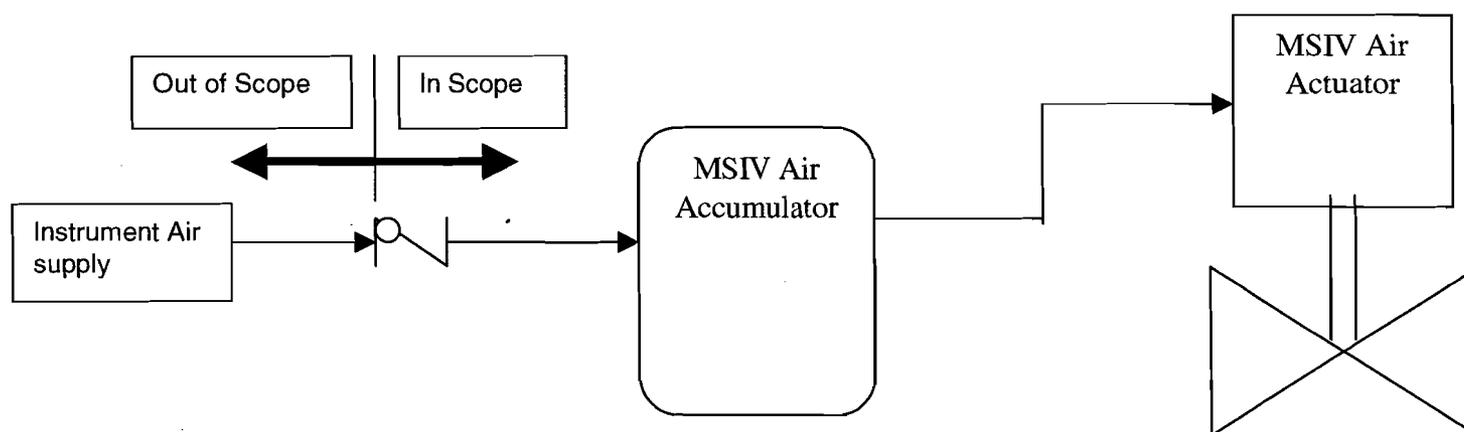
## **Case 3 – Interfaces Between In-scope Electrical and Out-of-scope Mechanical Systems**

- The CRL often identifies electrical isolation devices such as fuses and circuit breakers as belonging to the mechanical system that they feed.
- This situation is problematic for license renewal when the mechanical system is out-of-scope and the electrical system is in-scope.
- The safety related function of these electrical isolation devices is to protect the power source.
- These electrical isolation devices were realigned to the in-scope electrical system.

### Case 4 – Components Shared Between In-scope and Out-of-scope Systems



### Case 5 – Components Required to Support Specific Intended Functions



## 10CFR54.4(a)(2)

- NRC Guidance on Scoping of Seismic II/I Piping Systems Issued on December 3, 2001
- NRC Issued RAI to PBAPS on Seismic II/I Piping Systems and Other NSR SSCs on January 23, 2002
- NRC Issued RAI to PBAPS on Seismic II/I Piping for Auxiliary Systems on February 6, 2002
- NRC Guidance on Identification and Treatment of Structures, Systems, and Components Which Meet 10CFR54.4(a)(2) Issued on March 15, 2002

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## Exelon RAI Response Regarding 10CFR54.4(a)(2) NSR to SR Interactions

- RAI response submitted on May 21, 2002
- Systems containing a fluid other than air or gas, irrespective of pressure and temperature, within spatial proximity of safety-related equipment was brought within scope.

*Non Safety Related*      *Safety Related*  
↓

## NSR to SR Scoping Results

- Systems with expanded boundaries
  - Reactor Pressure Vessel Instrumentation
  - Reactor Recirculation System
  - Core Spray System
  - Residual Heat Removal System
  - Fuel Pool Cooling and Cleanup System
  - Control Rod Drive System
  - Emergency Service Water System
  - Radiation Monitoring System

*Lots of  
Discussion..*

## NSR to SR Scoping Results

- Systems added
  - Service Water System
  - Reactor Building Closed Cooling Water System
  - Reactor Water Cleanup System
  - Chilled Water System
  - Water Treatment System
  - Plant Equipment and Floor Drain System
  - Process Sampling System
  - Auxiliary Steam System
  - Condensate Transfer
  - Refueling Water Storage and Transfer
  - Torus Water Cleanup System
  - Post Accident Sampling System

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## Section 3: Aging Management Review Results

- Aging Effects Determination
  - Component Materials
  - Component Environments
  - Operating Experience
  - Industry “tools” (documented by EPRI)

### 3.2.2 Core Spray System

Table 3.2-2 Aging Management Review Results for Component Groups in the Core Spray System

Component Group	Component Intended Function	Environment	Materials of Construction	Aging Effect	Aging Management Activity
Casting and Forging <ul style="list-style-type: none"> <li>Valve Bodies</li> <li>Pump Casings</li> </ul>	<ul style="list-style-type: none"> <li>Pressure Boundary</li> </ul>	Sheltered	Stainless Steel, Carbon Steel	None	<ul style="list-style-type: none"> <li>Not Applicable</li> </ul>
Piping <ul style="list-style-type: none"> <li>Pipe</li> <li>Tubing</li> </ul>	<ul style="list-style-type: none"> <li>Pressure Boundary</li> </ul>	Sheltered	Stainless Steel, Carbon Steel	None	<ul style="list-style-type: none"> <li>Not Applicable</li> </ul>
Piping <ul style="list-style-type: none"> <li>Pipe</li> <li>Tubing</li> </ul>	<ul style="list-style-type: none"> <li>Pressure Boundary</li> </ul>	Torus Grade Water	Stainless Steel	Cracking	<ul style="list-style-type: none"> <li>Torus Water Chemistry (B.1.5)*</li> </ul>
Piping Specialties <ul style="list-style-type: none"> <li>Restricting Orifice</li> </ul>	<ul style="list-style-type: none"> <li>Pressure Boundary</li> <li>Throttle</li> </ul>	Reactor Coolant	Stainless Steel	Cracking	<ul style="list-style-type: none"> <li>RCS Chemistry (B.1.2) **</li> <li>ISI Program (B.1.8) ***</li> </ul>

\* SER Section 3.0.3.5

\*\* SER Section 3.0.3.2

\*\*\*SER Section 3.0.3.6

# Appendix B: Aging Management Activities

- Existing – 29 activities
- New – 5 activities
- TLAA – 2 activities
- One-Time Inspection Activities
  - Torus piping
  - SLCS
  - Aux Steam
  - Radiation Monitoring
  - Plant Equipment and Floor Drain
  - RPV Instrumentation
  - Reactor Recirculation
  - Service Water
  - Fuel Pool Cooling

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# Aging Management Activity Implementation

- Activities that were included in the LRA were incorporated through procedure/program changes that identify commitments.
- Additional activities identified in RAI and SER open item responses are planned to be incorporated through procedure/program changes in 2003.

## TLAAs

- RPV Embrittlement
- Metal Fatigue
- Environmental Qualification
- Containment Fatigue
- Plant Specific
  - Reactor Vessel Corrosion Allowance
  - GL 81-11 BWR Feedwater Nozzle Cracking
  - ISI-Reportable Indications for Unit 3 Main Steam Elbow
  - High Energy Line Break
  - Crane Load Cycle Limit

## Future Actions

- Formally Respond to 15 Open Items by November 29, 2002
- Formally Respond to 18 Confirmatory Items, including updated UFSAR Supplement by November 29, 2002
- LRA update to reflect Current Licensing Basis changes that materially affect LRA content by December 2002
- Region I Final Inspection to close out open items week of December 9, 2002

# **Peach Bottom License Renewal SER With Open Items**

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NRR Staff Presentation to the ACRS  
October 30, 2002  
David L. Solorio  
Office of Nuclear Reactor Regulation

# Agenda

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- Opening Remarks.....G. Leitch
- Staff Introduction.....P. Kuo
- Overview.....D. Solorio
- Applicant Presentation.....W. Bohlke  
.....F. Polaski
- Scoping Screening.....R. Pettis  
.....G. Hatchett
- Aging Management Programs.....S. Bailey  
.....M. Khanna
- Reactor Coolant System.....B. Elliot
- Engineered Safety Features.....J. Medoff

# Agenda (continued)

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- Auxiliary Systems.....B. Fu
- Steam & Power Conversion Systems...G.Gerogiev
- Containment, Structures and Component Supports.....C. Munson
- Electrical .....D. Solorio  
.....D. Nguyen
- TLAAAs.....D. Solorio  
B. Elliot  
J. Fair

# Background

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- Exelon submitted LRA on 7/2/01
- Peach Bottom Unit 2 (BWR/4, Mark1, 3458MWt) license expires August 8, 2013
- Unit 3 (BWR/4, Mark 1, 3458MWt) license expires July 2, 2014
- RAIs (231) issued through 3/12/02
- RAI responses received 5/22/02
- SER with open/confirmatory items issued 9/13/02
- Response due - 11/29/02

# License Renewal Rule

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## Principles of License Renewal

- **The current licensing basis is adequate**  
the regulatory process is adequate to ensure that the licensing basis for all currently operating plants provides and maintains an acceptable level of safety with exception of the detrimental effects of aging...
- **The current licensing basis carries forward**  
the plant-specific licensing basis must be maintained during the renewal term in the same manner and to the same extent as during the original licensing term

# Staff's Review

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## Process

- **Methodology evaluation and audit**

- ▶ Provide reasonable assurance that the process identifies structures and components subject to aging management review (AMR) pursuant to 54.21(a)(1)

- **Scoping**

- ▶ Evaluate systems, structures, and components within the scope of license renewal

- **Screening**

- ▶ Evaluate which passive, long-lived structures are subject to aging management

# Staff's Review

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Process (continued)

- Aging management

- ▶ Evaluate identification of aging effects and management of aging effect to ensure relevant equipment intended functions in accordance with the CLB are maintained during period of extended operation

- TLAAs

- ▶ Evaluate applicant's methods to determine how analyses with time-limited assumptions will be extended/managed for the period of extend operation

- Inspections

- ▶ Scoping and aging management (MC2516, IP71002)

# Inspections

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## ■ Scoping and Screening

- ▶ 4/23/02 (2 weeks)
- ▶ Objective: to confirm that the applicant included systems, structures and components required by the license renewal rule
- ▶ Notable findings - scoping of residual heat removal and containment spray subsystems, and scoping of fuse clips

# **Inspections (continued)**

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## ■ Aging Management

- ▶ 8/9/02 (2 weeks)
- ▶ Objective: to confirm that existing AMPs are effective and to examine the applicant's plans for enhancing certain existing programs and establishing new ones
- ▶ Notable findings - cables susceptible to cyclic wetting

## ■ Closeout (12/9/02)

- ▶ Close followup items, annual update, SER OI/CI support

# Staff Review

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## Guidance

- ▶ 10 CFR Part 54
- ▶ Standard Review Plan for License Renewal  
NUREG-1800 and Regulatory Guide 1.188
- ▶ Interim staff guidance
- ▶ Generic Aging Lessons Learned Report  
NUREG-1801 (compilation of operating  
experience)
- ▶ License renewal inspection program
- ▶ NRR office letter 805 (style guides)
- ▶ Branch technical positions

# Safety Evaluation Report

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## Format

- Chapter 1: Introduction & open/confirmatory items
- ✓ ■ Chapter 2: Scoping and screening
- ✓ ■ Chapter 3: Aging management review results
- ✓ ■ Chapter 4: Time-limited aging analyses
- Chapter 5: ACRS recommendation - tbd
- Chapter 6: Conclusions

# Open & Confirmatory Items

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## Categories

- Scoping/Screening - 8 OIs, no CIs
- Aging management review - 6 OIs, 11 CIs
- TLAA - 1 OIs, 5 CIs
- Potential license conditions - 3
  - ▶ UFSAR Update
  - ▶ Aging management program activities
  - ▶ Integrated surveillance program

# Applicant Presentation

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- Mr. William Bohlke, Senior Vice-President of Nuclear Services
- Mr. Fred Polaski, Project Manager
- Peach Bottom License Renewal Application
- Exelon Corporation

# **Chapter 2: Scoping & Screening**

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## Scoping Methodology Review

- Desktop review
- Onsite Audit December 10-14, 2001
- Requests for additional information
- Findings and conclusions

# Chapter 2: Scoping & Screening

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## Staff Review Process

- Updated final safety analysis report
- Piping and instrument diagrams
- License conditions
- Interim staff guidance
- Focus on out-of-scope systems, structures, and components

# **Chapter 2: Scoping and Screening**

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## **Staff Review Process**

- **System Boundary Realignment**
  - ▶ Used to simplify system scoping and screening
  - ▶ 5 Cases where boundary realignment were exercised
    - Components associated with containment penetration
    - Interfaces of mechanical systems
    - Interface of electrical and mechanical systems
    - Systems with shared components
    - Components supporting intended functions

# Chapter 2: Scoping & Screening

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## Results

- Mechanical - 7 OIs
  - ▶ Ventilation systems, cranes, non-safety-related SSC interactions with safety-related
- Structures and component supports - 1 OI
  - ▶ Water-tight dikes
- Electrical - no OI
- Open item resolution

# Chapter 3: Aging Management Review

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## Aging Management Programs (AMPs) - Section 3.0

- Standard Review Plan for License Renewal, NUREG-1800
- Ten attributes of each AMP evaluated
  - ▶ Scope, preventive actions, parameters monitored or inspected, detection of aging effects, monitoring and trending, acceptance criteria, and operating experience
  - ▶ Corrective actions, confirmation process, administrative controls evaluated separately (Section 3.0.4)

# Chapter 3: Aging Management Review

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## Aging Management Programs - Section 3.0 (continued)

### ■ AMPs

- ▶ Appendix B of LRA
- ▶ 17 Existing programs
  - 1 AMP was deleted through course of review
- ▶ 12 Enhanced programs
- ▶ 4 New programs
  - 2 AMPs (one-time inspections) were added through course of review

# Chapter 3: Aging Management Review

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## Aging Management Programs - Section 3.0 (continued)

- Existing programs (EMEB)
  - ▶ Inservice inspection (ISI) program
  - ▶ Primary containment ISI program
  - ▶ Primary containment leakage rate testing program
  - ▶ Inservice testing (IST) program
  - ▶ Crane inspection activities
  - ▶ Conowingo hydroelectric plant (Dam) AMP
  - ▶ Maintenance rule structural monitoring program

# Chapter 3: Aging Management Review

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## Aging Management Programs - Section 3.0 (continued)

- **Enhanced programs (EMEB)**
  - ▶ Ventilation system inspection and testing activities
  - ▶ Emergency diesel generator inspection activities
  - ▶ Door inspection activities
  - ▶ Fire protection activities
  - ▶ HPCI and RCIC turbine inspection activities
  - ▶ Susquehanna substation wooden pole inspection activity
- **New programs (EMEB)**
  - ▶ Torus Piping Inspection Activities (one-time inspection)

# Chapter 3: Aging Management Review

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## Aging Management Programs - Section 3.0 (continued)

### ■ Open items

- ▶ Maintenance rule structural monitoring program
  - Detection of aging and acceptance criteria for structures/components brought into scope
  - Resolved
- ▶ Fire protection activities
  - Aging management of diesel driven fire pump fuel oil flexible hose
  - Resolved

# Chapter 3: Aging Management Review

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## Aging Management Programs - Section 3.0 (continued)

### ■ Confirmatory items

- ▶ Maintenance rule structural monitoring program
  - Clarification that additional structures brought into scope are covered by this program
- ▶ HPCI and RCIC turbine inspection activities
  - Confirm material/environment of flexible hose

### ■ Items of interest

- ▶ Door inspection activities - applicant added internal doors
- ▶ Fire protection activities - applicant adopted volumetric examination of stagnant piping for wall thickness and loss of material (consistent with ISG-4)

# Chapter 3: Aging Management Review

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## Aging Management Programs - Section 3.0 (continued)

- Existing programs (EMCB)
  - ▶ Flow-accelerated corrosion program
  - ▶ Closed cooling water chemistry program
  - ▶ Demineralized water and CST chemistry activities\*
  - ▶ Torus water chemistry activities
  - ▶ Fuel pool chemistry activities

# Chapter 3: Aging Management Review

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## Aging Management Programs - Section 3.0 (continued)

- **Enhanced programs (EMCB)**
  - ▶ Lubricating and fuel oil quality testing activities
  - ▶ Boraflex management activities
  - ▶ Outdoor, buried, and submerged component inspection activities
  - ▶ GL 89-13 activities (Service Water System Problems Affecting Safety-Related Equipment)
  - ▶ Heat exchanger inspection activities
- **New program (EMCB)**
  - ▶ One-time piping inspection activities (modification to original LRA, one-time inspection)

# Chapter 3: Aging Management Review

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## Aging Management Programs - Section 3.0 (continued)

### ■ Open items

- ▶ Verification of the effectiveness of the following chemistry programs through inspection activity:
  - Reactor coolant system chemistry activities
  - Condensate storage tank chemistry activities
  - Torus water chemistry activities

### ■ Confirmatory items

- ▶ Closed cooling water chemistry activities
  - Acceptance criterion parameters for the chlorides and fluorides (<10 ppm)

# Chapter 3: Aging Management Review

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## Aging Management Programs - Section 3.0 (continued)

- **Confirmatory items (continued)**
  - ▶ **Outdoor, buried, and submerged component inspection activities - frequency of inspections**
    - Emergency cooling water pumps every 10 years
    - Refueling water storage tanks every 4 years
  - ▶ **Heat exchanger inspection activities**
    - Acceptance criteria
    - Percentage of heat exchangers to be visually inspected (100%)

# Chapter 3: Aging Management Review

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## Aging Management Programs - Section 3.0 (continued)

- Confirmatory items (continued)
  - ▶ One-time inspection activity
    - Schedule of one-time inspection (between years 30-40 - before end of plant life)

# Chapter 3: Aging Management Review

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## Aging Management Programs - Section 3.0 (continued)

### ■ Items of interest

- ▶ The standby liquid control system surveillance activities program was deleted
- ▶ Condensate storage tank chemistry activities was replaced by the demineralized water and condensate storage tank chemistry activities
- ▶ One-time piping inspection activities program was added to:
  - Verify integrity of piping
  - Confirm absence of identified aging effects

# Chapter 3: Aging Management Review

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Review Process for Sections 3.1 through 3.6

- Focus on materials, environments, and aging effects
- All applicable aging effects identified
- Aging management programs adequate
- Reasonable assurance that intended functions will be maintained consistent with the CLB

# Chapter 3: Aging Management Review

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Results - Section 3.1, Reactor Coolant System

- Reactor pressure vessel (RPV), internals, RPV instrument system, and reactor recirculation system
- Materials, environment, and aging effects
  - ▶ Low alloy steels, stainless steel, low nickel alloys
  - ▶ 70 °F - 533 °F, 1055psia
  - ▶ Cracking due to stress corrosion cracking and cyclic loading, cumulative fatigue, loss of fracture toughness from neutron embrittlement and thermal embrittlement

# Chapter 3: Aging Management Review

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Results - Section 3.1, Reactor Coolant System

- Applicable aging effects identified
- RCS Programs
  - ▶ RCS chemistry program (Section 3.0.3.2)
  - ▶ ISI program (Section 3.0.3.6)
  - ▶ Reactor pressure vessel and internals ISI program (Section 3.0.3.9)
    - BWRVIP 38/75
    - BWRVIP 76/78/86

# Chapter 3: Aging Management Review

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Results - Section 3.1, Reactor Coolant System (continued)

- RCS Programs (continued)
  - ▶ Reactor materials surveillance program (3.0.3.21)
  - ▶ Fatigue management activities (Section 4.3)
- AMPs adequate with exception of open item
- Open item
  - ▶ Bolting and instrument piping aging management

# Chapter 3: Aging Management Review

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## Technical Basis for Revisions to Generic Letter 88-01 Inspection Schedules (BWRVIP-75)

- ▶ Scope and aging effect: Cracking of BWR piping (4 inches or larger nominal diameter and temperature above 200 °F) resulting from intergranular stress corrosion cracking (IGSCC)
- ▶ Materials: Austenitic stainless steel, Alloy 182 weld metal, and Alloy 600 base metal
- ▶ Inspection frequency and sample size is dependent upon materials susceptibility to IGSCC, mitigation measures, inspection history, and performance of welds
- ▶ Topical report open items - none

# Chapter 3: Aging Management Review

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## BWR Shroud Support and Inspection Flaw Evaluation Guidelines (BWRVIP-38)

- ▶ Scope and aging effect: Cracking of shroud supports (structure below core shroud to RPV inside surface) resulting from IGSCC
- ▶ Materials: Alloy 600 base metal, Alloy 182/82 weld metal, and type 304 stainless steel for BWR-2s
- ▶ Provides a basis for baseline inspections, re-inspections, and structural evaluation
- ▶ Topical report open items - schedule for implementing inspection program for lower plenum

# Chapter 3: Aging Management Review

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## BWR Core Shroud Inspection and Flaw Evaluation Guidelines (BWRVIP-76)

- ▶ Comprehensive report, combining guidelines in BWRVIP-01 (inspection of circumferential welds), BWRVIP-07 (re-inspection of circumferential welds) and BWRVIP-63 (inspection of vertical welds)
- ▶ Review of BWRVIP-01 and BWRVIP-07 is complete
- ▶ Expect to complete review of BWRVIP-63 and BWRVIP-76 by December 31, 2002

# Chapter 3: Aging Management Review

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## BWR Integrated Surveillance Program (BWRVIP-78 and BWRVIP-86)

- ▶ Provide technical basis and implementation plan for 40 year surveillance program
- ▶ Complete for 40 years and being revised for 60 years
- ▶ Expect to complete review of 60 year program in 2003
- ▶ License condition included to implement either the integrated surveillance program or a plant-specific program prior to entering the license renewal period

# Chapter 3: Aging Management Review

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Results - Section 3.2, Engineered Safety Feature Systems

- High pressure coolant injection system
- Core spray system
- Primary containment isolation system
- Reactor core isolation cooling system
- Residual heat removal system
- Containment atmosphere control and dilution system
- Standby gas treatment system
- Secondary containment system

# Chapter 3: Aging Management Review

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Results - Section 3.2, Engineered Safety Feature Systems (continued)

- ▶ **Materials, environment, and aging effects**
  - Carbon, galvanized carbon, and stainless steels; cast iron; aluminum; copper, bronze, and brass alloys; various; loss of material, cracking, heat transfer reduction, and flow blockage
- ▶ **Applicable aging effects identified**
- ▶ **ESF Programs**
  - HPCI and RCIC turbine inspection
  - High pressure service water radioactivity monitoring
- ▶ **AMPs adequate**
- ▶ **Open items - none**

# Chapter 3: Aging Management Review

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Results - Section 3.3, Auxiliary Systems

- Fuel handling, fuel pool cooling and cleanup
- Control rod drive system
- Ventilation systems (various)
- Emergency diesel generator
- Fire protection system
- Instrument gas (various)
- Service water
- Cooling water

# Chapter 3: Aging Management Review

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Results - Section 3.3, Auxiliary Systems (continued)

- **Materials**
  - ▶ Carbon steel, galvanized steel, stainless steel, cast iron, aluminum, copper, bronze, brass
- **Environment**
  - ▶ Sheltered, ventilated, outdoor, wetted and dry gases, various fluid systems (borated water, reactor coolant, raw water, lube oil)
- **Aging effects**
  - ▶ loss of material, cracking, heat transfer reduction, flow blockage

# Chapter 3: Aging Management Review

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Results - Section 3.3, Auxiliary Systems (continued)

- Applicable aging effects identified
- Aging management programs
  - ▶ Outdoor, buried, and submerged component inspection
  - ▶ Generic Letter 89-13 activities
  - ▶ Fire protection activities
  - ▶ Closed cooling water chemistry
  - ▶ Emergency diesel generator inspection
- AMPs adequate pending resolution of open item (Section 3.0.3.6)
- Open items - none

# Chapter 3: Aging Management Review

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Results - Section 3.4, Steam & Power Conversion Systems

- Main steam, main condenser, feedwater
- Materials, environment, and aging effects
  - ▶ Carbon steel, stainless steel, brass, copper, and titanium
  - ▶ Reactor coolant, steam, torus grade water, raw water, sheltered environment, wetted gas, dry gas
  - ▶ Loss of material, and cracking
- Applicable aging effects identified

# Chapter 3: Aging Management Review

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Results - Section 3.4, Steam & Power Conversion Systems (continued)

- AMPs (none specific to Section 3.4)
  - ▶ RCS chemistry program, ISI program, flow accelerated corrosion program, torus piping inspection program, torus water chemistry program
- AMPs adequate
- Open items - none

# Chapter 3: Aging Management Review

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Results - Section 3.5, Structures & Component Supports

- Containment structure, other Class 1 structures, component supports, misc steel, barriers and elastomers, raceways, and insulation
- Materials, environment, and aging effects
  - ▶ Concrete, carbon steel, stainless steel, elastomers, bronze, and graphite
  - ▶ Sheltered air, buried, outdoor, and water
  - ▶ Loss of material, cracking, change in material properties

# Chapter 3: Aging Management Review

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Results - Section 3.5, Structures & Component Supports (continued)

- AMPs (none specific to Section 3.5)
  - ▶ Primary containment ISI program, primary containment leakage rate testing program, maintenance rule structure monitoring program, torus water chemistry program boroflex management activities program, fuel pool chemistry program, door inspection activity, fire protection activities
- AMPs adequate with exception of open item
- Open item
  - ▶ Structural monitoring program (Section 3.0.3.11)

# Chapter 3: Aging Management Review

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Results - Section 3.6, Electrical & Instrumentation Controls

- Cables, connections (connectors, splices, terminal blocks)
- Station Blackout
- Materials, environment, and aging effects
  - ▶ Insulation material, aluminum, porcelain
  - ▶ Heat, radiation, moisture
  - ▶ Loss of material properties and water treeing
- Applicable aging effects identified
- Electrical AMPs
  - ▶ Non-EQ accessible cables

# Chapter 3: Aging Management Review

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Results - Section 3.6, Electrical & Instrumentation Controls (continued)

- **Electrical AMPs (continued)**

- ▶ Fire safe shutdown cable inspection program
- ▶ Conowingo hydroelectric plant aging management program
- ▶ Wooden pole inspection

- **AMPs adequate with exception of open items**

- **Open items**

- ▶ Buried cables in duckbanks with potential to be wetted, low voltage cables for neutron monitoring and high range radiation monitoring, fuse holders (confirmatory item)

# Chapter 4: Time-Limited Aging Analyses (TLAAs)

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Results - Section 4.1, Identification of TLAAs

- TLAAs
  - ▶ Reactor vessel neutron embrittlement
  - ▶ Metal fatigue
- Identified two additional TLAAs
  - ▶ Pipe break locations
  - ▶ Crane cycles
  - ▶ Open Items - none

# Chapter 4: TLAAAs

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Results - Sections 4.2 & 4.5, Reactor Vessel Neutron Embrittlement, Reactor Vessel Fatigue and Embrittlement

- Upper shelf energy
- Pressure-temperature limits
- Reactor vessel circumferential weld
- Reactor vessel weld failure probability
- Core shroud and top guide
- Open item
  - ▶ Top guide beams (Section 4.5)

# Chapter 4: TLAAs

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Results - Section 4.3, Metal Fatigue

- Fatigue management program
- Evaluation of environmental fatigue
- Open items - none
- License condition
  - ▶ Management of fatigue with inspection program

# Concluding Remarks

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## Next Steps

- ACRS full committee presentation - 11/7/02
- Focus on resolution of open and confirmatory items
  - ▶ 1 of 15 OIs remain to be resolved
  - ▶ Formal responses due 11/29/02
- Issue final SER 3/25/03