~~EXEMPTION 5~~
US

BRIEF FOR ORA
OYSTER CREEK COMMITMENT INSPECTION RESUTS
AND RELATED ISSUES

TIME: Monday, December 22, 2008, 1000AM
LOCATION: ORA OFFICE

Purpose:
1. Discuss a summary of the results and as needed the details of any one or all three issues noted on the inspection.
2. Discuss the consensus plan for documentation (special case needed)
3. Discuss consideration of Part 50 vs. Part 54 Activities
4. Discuss plans to address lessons learned and potential Q&As for internal use then industry/NIE interface.

Success:
1. Understanding of matters discussed; responsiveness to questions received.
2. Develop actions for unanswered questions and for other considerations for calibration or mid-course corrections.
3. Understanding of next immediate steps (to January 2009)

Agenda:
1. Summary of the Inspection Results – Details on Selected Issues (refer to attachment 1)

2. Consensus Plan for Documentation (refer to Attachment 1)

3. Discuss consideration of Part 50 vs. Part 54 Activities (conclusions of PN 8-12)
   a. More inspection needed for bases and origin of commitments related to the 3 issues noted
      Coating on reactor cavity walls to prevent water in gap (USAR statement)
      Monitoring and Actions of Trough Drain
         AND Sand Bed Drains per facility instructions and procedures
      Activities related to installation of filtration system that apparently effected coating

4. Discuss plans to address lessons learned and potential Q&As for internal use then industry/NIE interface (refer to attachment 2)

5. Next Immediate Steps:
   a. Debrief with State of New Jersey – PM 12/22/08
   b. Conduct Exit Brief with Amergen (NJ invited) – AM 12/23/08 ≈ 9:00 Am
   c. Issue Report < Feb. 1, 2009, if possible, due Feb 6, 2009
   d. Discuss Lessons Learned with Counterparts – 1/27/09
   e. Team Planning Scheduled for 2 weeks before the OC 71003 Team near the PEO – 2/23/09, inspection start 3/9/09

A – CNSR awareness, communications

Information in this record was deleted in accordance with the Freedom of Information Act.
Exemptions 5
FOIA/PA 2009-0070

Attachment 1 – Exit Notes with Summary

Oyster Creek
License Renewal Commitments Inspection
Exit Meeting - Dec 23, 2008

Introductions
- NRC Region 1
- NRC HQ
- NRC Residents
- AmerGen
- NJ DEP (Observers)

Message/Intro Approach:
(1) "impact of observations on current operability/licensing basis" → immediate safety significance
(2) "what do observations mean in terms of lic. renewal commitments
(3) what do they mean in terms of commitment implementation as tracking today?
(4) what does it mean to you in terms of commitment implementation – URI

Excellent Overall Cooperation from everybody
>>> use of the Certrec Internet Database was quite helpful

Special Thanks
- Pete Tamburro (LR Program Owner)
- Chris Hawkins (NDE Level-III)
- Cal Taylor & Jhansi Kandasamy

Inspection Schedule Slippage
- LR outage schedule slipped due to unexpected issues
  - Some NDE UTs re-scheduled, due to unanticipated physical interference issues
    - Bay 11 Coating Blisters
    - Bay 3 Moisture Barrier Seal Problem
    - Cavity Leakage and Water Intrusion into 4 bays
- As a result, our inspection ran into a 2nd on-site week and a 3rd in-office week

Documentation
Team Report 45 days after the Exit Meeting (early Feb)

– INTRO OF REGULATORY FRAMEWORK: CLB, LR, PROGRAMMATIC IMPLICATIONS

Exec Summary of Inspection Results
- Observed actions to evaluate primary containment structural integrity
- Observed selected activities described in SER Appendix-A, "Commitments for LR"
  Because the Renewed License decision has not ~~been issued~~ been made.
  With respect to proposed SER commitments
  - ~~No assessment of implementation or effectiveness~~ will be documented
  - Factual Based Observations of activities will be documented

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- The conclusions of PNO-1-08-012 remain unchanged
- Reviewed 2 change packages for proposed activities described in SER App-A
  - A summary of the change will be documented
  - No assessment of administrative controls was made
  - No evaluation of technical adequacy was made

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• An Unresolved Item (URI) will be opened to evaluate whether existing current licensing basis commitments were not adequately performed, and to assess the safety significance for any related performance deficiency. The issues for follow-up are strippable coating de-lamination, reactor cavity trough drain monitoring, and sand bed drain monitoring.

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Key Inspection Observations

(1) Proposed SER App-A Item 27, ASME Section XI, Subsection IWE, Part (2)

A strippable coating will be applied to the reactor cavity liner to prevent water intrusion into the gap between the drywell shield wall and the drywell shell during periods when the reactor cavity is flooded.

Strippable Coating De-lamination

- From Oct 29 to Nov 6, the strippable coating limited leakage into the cavity trough drain at < 1 gpm
- On Nov 6, the observed leakage rate in the cavity trough drain took a step change to 4 to 6 gpm
- Water puddles were subsequently identified in 4 sand bed bays
- AmerGen identified several likely or contributing causes
    - A portable water filtration unit was improperly placed in the reactor cavity, which resulted in flow discharged directly on the strippable coating
    - An oil spill into the cavity may have affected the coating integrity
    - No post installation inspection of the coating had been performed
- AmerGen stated follow-up UTs will re-evaluate the drywell shell next outage.

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(2) Proposed SER App-A Item 27, ASME Section XI, Subsection IWE, Part (3)

Reactor cavity seal leakage trough drains and the drywell sand bed region drains will be monitored for leakage. Periodically.

Cavity Trough Drain Line Found Isolated

- On Oct 27, the drain line was isolated to install a tygon hose to allow drain flow to be monitored
- On Oct 28, the reactor cavity was filled
- Drain line flow was monitored frequently during cavity flood-up, and daily thereafter
- On Oct 29, a boroscope examination identified the drain line isolation valve had been left closed
- When the drain line isolation valve was opened, about 3 gallons of water drained out, then the drain flow subsided to about an 1/8 inch stream (< 1 gpm)

Drain Flow Monitoring Plan

- AmerGen stated a calculation determined cavity trough drain flow of less than 60 gpm would not result in trough overflow into the gap between the drywell shield wall and the drywell shell
- AmerGen had a pre-approved Action Plan for monitoring cavity & sand bed drains
- Per Action Plan, if drain flow > 5 gpm, then monitor every 8 hours
- Per Action Plan, if drain flow > 12 gpm, then monitor sand bed poly bottles every 4 hours

- If drain flow > 12 gpm <u>and</u> water found in sand bed poly bottles, then enter & inspection sand beds

<u>Water Found in Sand Bed Bays</u>

- On Nov 6, the strippable coating started to de-laminate
- Trough drain flow took a step change from < 1 gpm to approx 4 to 6 gpm
- Increased monitoring trough drain to 2-hr and sand bed poly bottles to 4-hr (not required by Action Plan)
- On Nov 8, workers inside sand bed bay 11 identified dripping water
- Subsequently, water puddles were identified in 4 sand bed bays
- After cavity was drained, inspected all sand bed bays -- No deficiencies identified
- Sand bed bays were originally scheduled to have been closed by Nov 2
- On Nov 15, after cavity was drained, water was found in sand bed bay 11 poly bottle

(3) Proposed SER App-A Item 27, ASME Section XI, Subsection IWE, Part (3)
Sand bed region drains will be monitored daily during refueling outages.

Sand Bed Drain Poly Bottles Not Connected

- Sand bed drains were remotely monitored by checking poly bottles, attached via tygon tubing to funnels hanging below the drain lines
- The drains were not directly observed
- After the reactor cavity was drained, 2 of the 5 tygon tubes were found disconnected, laying on the floor
- Sand Bed Bay 11 drain poly bottle was empty during each daily check until Nov 15 (cavity was drained on Nov 12), when it was found full (> 4 gallons). Bay 11 was entered, visually inspected, and found dry.

(4) Proposed SER App-A Item 27, ASME Section XI, Subsection IWE, Part (4)
Perform visual inspections of epoxy coating on the drywell external surfaces in the sand bed bays

- Directly observed conditions of the drywell shell epoxy coating in selected sand bed bays
- Observed AmerGen's activities to evaluate the epoxy coating

Sand Bed Bay 11 Blisters

- Observed activities to evaluate and repair blisters found in Bay 11
    - 1 small 1/4 inch broken blister identified, with a 6" rust stain
    - 3 smaller unbroken blisters were identified by the NRC, during initial investigation
    - All 4 blisters were within a 1-2 inches square area, and all were evaluated and fixed
- As an extent of condition, 4 bays re-inspected by a different NDE level-II inspector, nothing found
- AmerGen estimated corrosion of ~ 3 mils had occurred over about a 16 year period

>>> also identified and fixed a area that appeared to NOT have the 3rd epoxy coating

2006 Inspection Did Not Identify the Rust Stain

- In follow-up, AmerGen reviewed a 2006 video and identified the same 6" rust stain in the 2006 video
- During 2006 coatings inspection, no deficiencies were identified

(5) Proposed SER App-A Item 27, ASME Section XI, Subsection IWE, Part (12)
The external drywell shell moisture barrier seal, between the shell and the sand bed floor, will be inspected when the epoxy coating is inspected.

- Directly observed conditions of the drywell shell moisture barrier in selected sand bed bays
- Observed AmerGen's activities to evaluate the moisture barrier
- AmerGen identified deficiencies in 7 of the 10 sand bed bays, including
    - Surface cracks
    - Partial separation of the seal from the shell, or the floor
- AmerGen determined the moisture barrier function was not impaired, because no cracks or separation fully penetrated the seal. All deficiencies were repaired.

Sand Bed Bay 3 Seal Crack and Rust Stain

- Observed activities to evaluate and repair the moisture barrier seal in Bay 3
- The seal had rust stains on the surface, below the identified crack
- When the seal was excavated, some drywell shell surface corrosion was identified
- Seal crack and surface rust were repaired
- Laboratory analysis determined there was inadequate epoxy cure, an original 1992 installation issue

2006 Inspection Did Not Identify Any Seal Cracks
- During 2006 seal inspections, no deficiencies were identified

(6) Proposed SER App-A Item 27, ASME Section XI, Subsection IWE
Drywell In-service Inspection - Ultrasonic Thickness Measurements

- Observed AmerGen perform drywell shell UT thickness measurements
- Observed AmerGen evaluate the UT data (2000 separate UT readings)
- AmerGen determined that all of the UT data satisfied acceptance criteria, based on current licensing basis design requirements, for the thickness of the steel plate
- AmerGen did not identify any significant conditions affecting the drywell shell structural integrity
- AmerGen did not identify any on-going corrosion or corrosion trend, based on the UT examinations
- AmerGen did not identify any statistically significant deviations from 2006 UT data values

No Noteworthy Observations

Protective Coating Monitoring and Maintenance Program
- D/W Interior Service Level I Coating

Electrical Cables and Connections
- Drywell Cable Inspections

Inaccessible Medium Voltage Cables
- Cable Test - as part of the Doble Test on Auxiliary Transformer (bank 4)

Buried Piping
- ESW Pipe Replacement and Tie-in

Structures Monitoring Program
- Intake tunnel and expansion joints

One-Time Inspection Program
- Isolation Condenser Inspection and UT below the water line

Periodic Inspection Program
- Condensate System expansion joint inspection
- Fire barrier inspection inside a switchgear

Metal Fatigue Program

- No changes to the high cumulative usage factor components list

ANY QUESTIONS for US

Attachment 2 -

OYSTER CREEK COMMITMENT INSPECTION
Per IP 71003 – App. C MC 2515, Infrequent Procedures
LESSONS LEARNED AND KEY PROCEDURE ISSUES DEVELOPED
(As of 12/18/08)

DISCUSSION:

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consensus in this area by developing and implementing an action plan. From the review a number of lessons were learned and there is a need to address a number of procedure issues.

LESSONS LEARNED (LL):

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(b)(5)

R_{x5}

[(b)(5)] R+5

INSPECTION PROCEDURE ISSUES:

The questionable areas surrounding the results of the OC commitments inspection were listed below. Consideration should be given to obtaining additional stakeholder input in the form of OE, for views on commitments and deviations, and DRIS, for views on assessment of commitments.

1. Is IP 71003 an ROP tool (2515 and reference to 0612) or is it a part of a licensing action (2516).

2. If 71003 is a 2516 tool, then what is the related documentation process to be used?

3. If 71003 is a 2516 tool, then what is the related assessment process to be used?

4. Isn't the real purpose of doing the 71003 before the PEO in order for the agency to assess a licensee's readiness for the Period of Extended Operations (PEO). If true, then why isn't it listed as an objective with guidance on how to do the assessment, quantitative (tasks done and remain tasks or actions open along with schedule) vs. qualitative (assessing procedure adequacy).

5. If IP 71003 is an ROP tool, does the standard objective statement "to verify implementation" (section 01.01) mean to very adequate or proper implementation for which performance deficiencies can be formulated.

6. With respect to 4, and, if it is true that adequacy is to be verified (on a sampling basis) or we are to verify that the AMP has been implemented (section 02.a (1)), then to what level of detail is this to be done?

   NOTE: When the majority of 71003 is to be completed shortly before the period of extended operations, very little is in effect nor are there requirements for Aging Management Program (AMP) implementing procedures to be implemented until after the PEO.

   a. Is having the procedure issued without a reasonable NRC review for adequacy sufficient to say the commitment was met or the program is ready to be implemented?
   b. If a. is not true, then how much of a sample and review for adequacy of implementing procedures is enough to say the program is ready to implemented?
   c. On a team leader's status check, is it ok for more than 30% of the implementing procedures for any one program to be in some form of review and approval in order for the team to conclude the AMP is ready for the PEO? If 30% is not the right number then what is?
   d. Should all the new programs being reviewed to the standard determined above?
   e. How many modified programs need to be reviewed?

7. With respect to 4, and, if the answer is to NOT verify adequacy or proper implementation, then how does one reconcile that situation with sections 03.01.b 1 and 03.01.b.3?
    a. 03.01.b.1 says to review supporting documentation to determine if the licensee has taken appropriate actions, including corrective action, to satisfy a particular license condition or commitment. Appropriate technical expertise should be sought if needed.
    b. 03.01.b.3 says to evaluate those commitments not met for NRC enforcement action using MC 0308 Reactor Oversight Process Basis Document and IMC 0609 significance Determination Process (implied is the use of 0612 which makes 0308 and 0609 jell including deviations from standards). The premise for evaluation and assessment is the determination that something was inadequately done.

8. With respect to 6.b above, section 03.01.b.3 implies that even commitments listed in the SER are enforceable. Its this true?

9. Also with respect to 7, how do we reconcile the marked difference between two types of standard license conditions for future activities noted between Ginna and NMP licenses. One says to implement the future activities of the USAR update required by another standard license condition (we don't expect the SER commitments to be listed in the updated USAR among all such licensees); the other says to implement the future activities as listed in the applicable NUREG SER (clearly enforceable if not done on time, adequately, or if not properly changed).

10. Does the following question need to be addressed by the 71003 team; and, if so, why isn't it an objective of the procedure: Were the commitments implemented such that there is REASONABLE ASSURANCE the affects of aging are managed?
    a. Is this too high a level as an objective of the IP 71003?
    b. Is the more important question for the 71003 team as follows: Is the licensee ready for the period of extended operations.

11. Is it true that there is no standard in license renewal rule called "adequate" or "inadequate"?

12. Is there a difference between NRC's treatment of regulatory commitments made as a part of Part 50 correspondence vs. Part 54 correspondence? Can you formulate performance deficiencies on failure to meet commitments if they are not enforceable?

13. How do we determine failures to implement license renewal commitments in light of the endorsed definitions and above noted standards? The agency endorsed reference is:

> NEI 99-04 (endorsed by RIS 2000-17, dated September 21, 2000):
> "A Regulatory Commitment means an explicit statement to take a specific action agreed to, or volunteered by, a licensee and submitted in writing on the docket to the NRC. Licensees frequently commmunicate their intent to take certain actions to restore compliance with Obligations, to define a certain method of meeting Obligations, to correct or preclude the recurrence of adverse conditions, or to make improvements to the plant or plant processes. A Regulatory Commitment is an intentional undertaking by a licensee to (1) restore compliance with regulatory requirements, or (2) complete a specific action to address an NRC issue or concern (e.g., generic letter, bulletin, order, etc.). With respect to corrective actions identified in a NOV response or LER, the specific method(s) used by licensee to restore compliance with an obligation are not normally considered a Regualatory Commitment. The regulatory commitment in this instance is the promise to restore compliance with the violated obligation."
>
> This is not to be confused with a license condition or other requirment which is officially defined as an "obligation" as follows:
>
> "Obligation refers to any condition or action that is a legally binding requirement imposed on licensees through applicable rules, regulations, orders and licenses (including technical specifications and license conditions).

These conditions (also referred to as regulatory requirements) generally require formal NRC approval as part of the change-control process. Also included in the category of obligations are those regulations and license conditions that define change-control processes and reporting requirements for licensing basis documents such as the updated FSAR, quality assurance program, emergency plan, security plan, fire protection program, etc."

NOTE: Nothing in the above reference addresses whether the commitments were relied on or made within the current licensing bases but they may be in effect by the very nature of the commitment at the time of the 71003 team just before the PEO.

14. What types of minor performance deficiencies should be document in the interest of public trust? With respect to Licensee identified vs. NRC identified/self revealing, this practice would appear to be contrary to MC 0612?

    a. Is there agreement that a commitment is a standard for which any licensee had reasonable control?

    b. Can we call them performance deficiencies with or without a renewed license?

    IMC 0612 Section 03, Defintiions, for Performance Deficiency states:
    "An issue that is the result of a licensee not meeting a requirement or standard where the cause was reasonably within the licensee's ability to foresee and correct, and that should have been prevented. A performance deficiency can exit if a licensee fails to meet a self-imposed standard or a standard required by regulation." ... it goes on to discuss that cross cutting aspects in and of themselves are not performance deficiencies... mostly causal attribute information.

    NOTE: Nothing in the above reference addresses whether the commitments were relied on or made within the current licensing bases

    c. Why document these issues if they are minor?

    IMC 0612 Section 05 as an exception in a box:
    EXCEPTION: "A minor violation or finding may be documented when it is necessary to close a licensee event report or to close an unresolved item, or if related to an issue of agency wide concern (e.g., in documenting the results of a temporary instruction). If it is necessary to document a minor violation, then it is done in accordance with the guidance contained in the Enforcement Manual."

15. If a license is not renewed and IP 71003 is conducted, how can you formulate performance deficiencies since the licensing action has not been taken on these commitments?

    a. Should we be only discussing factual based observations without context of meeting or not meeting the commitment and with no assessment of significance – how would this look and how receptive would the public be to the issue being written up without context, assessment, or action by NRC staff?
    b. How can we proclaim a finding if we are still deciding over wording in an SER listing of commitments – Should we not be waiting for a renewed license and waiting until they enter the period of extended operation before you can proclaim it a "finding".
    c. Until we know what is acceptable, should the issue be written as Unresolved – see definition of URI in MC 0612 (information needed in order to determine acceptability, violation or deviation)?

    IMC 0612 Section 03 definitions for an Unresolved Item:
    "An issue about which more information is required to determine if it is acceptable, if it is a finding., or if it constitutes a deviation or violation. Such a matter may require additional information from the licensee or cannot be resolved without additional guidance or clarification/interpretation of the existing guidance (e.g., performance indication reporting guidance.

16. Don't the resident inspectors and region based inspectors implementing the ROP at a plant with a renewed license and into the period of extended operations need special training and procedures in order to guide them through problems noted during the course of ROP implementation?

17. Should a TI be developed in order to keep track of time for future budgeting use, and provide that guidance commensurate with a reasonable amount of training (guidance would include when other ROP activities can be replaced by a review of aging managing issues both from a planned or reactive effort)?

18. Based on the results of 17, should a separate procedure (7100X) be developed for the IMC 2515 Program (App. C) or as a 2515 other planned activity? Impact on Budget?

19. Others based on consensus building ???