

ISSUE FROM STATE OF NEW JERSEY  
ON NRC EXIT/MEETING INFORMATION/NOTES

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Outage\NJ&NRC\_PerfectTogetherRev.1.doc

Purpose: To communicate on options and decision related to State of New Jersey concern on gap information (from 71003 inspection at Oyster Creek in October 2008).

Success: Understanding of intricacies of PROS and CONS for four cases of early release of gap information before the inspection report is issued and agreement on decision/action to address the concern.

Agenda:

1. Statement of Problem
2. Background
3. Gap Information
4. AMP Program Adequacy vs. Implementation
5. Analysis on Actions to Address Concern:
  - a. Required Board Notification
  - b. Board Notification for information purposes
  - c. Exit Notes to Public Domain in ADAMS
  - d. Inspection Report to be Issued mid January
  - e. Stay the Course – issue report Jan. 31 about a week earlier than due – offer help to NJ on what is in the public domain
6. Viable Options Considered
7. Recommendation
8. Decision

### Statement of the Problem

A representative of the State of New Jersey indicated on December 23, 2008 after the exit meeting with Amergen on the 71003 inspections the following concerns:

1. State raised concern that there was more information (gap information) conveyed in the exit (related to all of the observations made during the outage) than what had been conveyed in either our PN or board notification (BN) (or the licensee's) back in November. Dr. Lipoti was concerned that these are "relevant and material" to the current licensing proceedings and that parties have a right to know.
2. Further, the State of New Jersey would like to comment on those matters formally, but they apparently are restricted from doing so because of the memorandum of understanding between New Jersey and the NRC staff.

### Background

On December 2, 2008, the NRC staff met in a teleconference to do a dry-run of the exit meeting for December 3. It had already been pre-arranged that Region I 71003 Team Leader and DRS Management would debrief with representatives of the State of New Jersey early on the day of December 3 in order to respond to any questions they may have related to the exit information and notes. The exit meeting with Amergen was scheduled to later in the day on December 3. After the dryrun on December 2, 2008, the Deputy Director of DRS determined that the staff needed to do a further review related to the performance issues and on how the information was to be characterized with or without an assessment of adequacy or effectiveness and this had to be completed before we were ready to discuss the matter with the state or Amergen. A perception perhaps developed at this time, in light of the false startup for the debrief and exit meeting times for the December 3rd, that the matter was more significant, perhaps safety significant, and the agency was struggling with the information.

Consensus building occurred between December 3 and December 19, 2008, and the exit notes were substantially revised to reflect the results of the consensus building. The new insight that occurred was that the staff was restricted from relying on the Final License Renewal SER proposed conditions and commitments due to the final licensing action not occurring. This meant that performance deficiencies or statements about the adequacy or effectiveness of implementation could not be addressed in the report but there was no objection to documenting factual based observations in the exit notes and report. Performance issues related to Part 50 activities (in distinction to Part 54 activities as reflected in the staff Final SER on License Renewal) could be addressed. For the exit, the Deputy Director of DRS took on the role of explaining that regulatory framework at the beginning of the exit meeting. Unfortunately, with all of the information that needed to be processed, the inspector did not have enough information to assess or document performance deficiencies with respect to Part 50 activities (requirements or standards); therefore, an unresolved item was developed and communicated.

Dr. Jill Lipoti of the State of New Jersey and selected members of her staff observed after the exit meeting in a separate call on or about 1000am on December 23, that the staff had information different than what was out in the public domain (two Amergen board notifications, one NRC staff board notification, and PNO 08-12, dated November 18, 2008). In her view this information was important enough that it should be reported to the Commission, the parties to the hearing, and the public and that the State can't comment on these issues publicly because

of the memorandum of understanding. She felt that the information was important because it was relevant to the adequacy of the Aging Management Program for the Drywell (specifically UT and VT frequency currently 4 years vs. potential need for 2 years) and the implementation problems surrounding the commitments is important information for decision makers – Amergen can't seem to get the monitoring of the polybottles right both in 2006 and 2008. She felt that this agreement information coupled with the staff's announced tentative report issuance date on or about February 6-7, 2008 put the state in an awkward position, like a "gag order."

On December 23-24, Mr. Roberts addressed the concerns on an immediate bases (after consultation with OGC) by the following: 1) we stand by our decision to include the information we did based on our judgment; 2) we will review any additional options and decide whether further communications are warranted from a public confidence standpoint.

EB1 was assigned an action for developing a plan to address item 2 above. The ORA was briefed on developments up to December 24.

#### Gap Information

Dr. Lipotti did not provide specific information related to the gap information. The region I inspection staff acknowledges that the information is more detailed but, preliminarily, it appears to be minor or not substantially new from what is already reported in three documents that are in the public domain (Amergen BN of Nov. 7, Amergen BN of Nov. 17, NRC Staff BN of Nov. 6, and PN)-2008-012). An additional review was conducted in light of New Jersey's concern.

Issues were tabulated based on the most detailed document as a reference point – The Amergen BN of Nov. 17. In relation to the issue the other two documents are discussed including the exit notes of December 23. Residual information of the exit notes is summarized.

1. For the issues documented in Amergen BN of Nov. 17 Amergen stated that they may be relevant and material to the pending appeal and that the AMP for the drywell shell in the sand bed region remains adequate and the new information does not raise a significant safety issue and that the information provides no basis to reconsider the boards earlier rejection of a contention challenging the adequacy of the AMP.
2. For the issue documented in NRC BN of Nov. 6, NRC staff stated that the information provided as an issue is considered to be of very low safety significance and the BN was considered prudent due to interest in the drywell.
3. For the issues discussed in PNO-1-08-012, NRC staff noted UT measurements of the drywell met acceptance criteria IAW CLB, no identified significant conditions affecting drywell structural integrity, that inspection and identification of conditions in Bay 11 and Bay 3 were acceptable, and that Amergen provided an adequate basis to conclude the drywell primary containment will remain operable during the period until the next scheduled examination, in the 2012 refueling outage. The PNO went on to say that the activities to monitor and mitigate water leakage from the reactor refueling cavity onto the external surface of the drywell shell and into the sandbed region are still under evaluation.
4. Issue No. 1 of Amergen BN of 11/17: Cause of Sand bed Bay 11 Blistered Area
  - a. Considerable detail is given on the chemical makeup of the affected blisters area along with the 6" rust stain found - most likely cause being due to a very small

deposits of soluble salts that remained on the steel surface of the drywell (moisture occurred due to osmosis through coating) – not safety significant due to estimated corrosion rate of 3.4 mils

- b. This expands on the detail provided by Amergen in their BN of Nov. 6.
  - c. NRC BN of Nov. 6 did not have this level of detail since it wasn't known at the time of issuance.
  - d. NRC PNO-1-08-012 did not go into the details of cause and said NRC staff will review AmerGen's apparent cause evaluation after it is completed.
5. Issue No. 2 of Amergen BN of 11/17: Damaged Moisture Seal in Sand Bed Bay 3
- a. Considerable detail is given on finding a wet "goosey" material after the cracked seal was removed for repairs – laboratory analysis found that the material is consistent with an uncured epoxy coating which could have been caused by mis-mixing (i.e., mixing two components in the wrong ratio) or incomplete mixing at the time of application in 1992 – the uncured caulk was evaluated as not having an adverse impact on the integrity of the drywell by AmerGen because the presence of impurities is too low a concentration.
  - b. This expands on the detail provided by AmerGen in their BN of Nov. 6.
  - c. NRC BN of Nov. 6 did not have this information in it.
  - d. NRC PNO-1-08-012 did not go into the details of cause and said they were repaired.
6. Issue No. 3 of AmerGen BN of 11/17: Chips in the Epoxy Coating System in Sand Bed bays 3, 5, and 7.
- a. AmerGen report that they were about the size of a dime most likely due to mechanical damage during inspection and repairs.
  - b. Not in the AmerGen BN of Nov. 6 (most likely not known at the time).
  - c. NRC BN of Nov. 6 did not have this information in it.
  - d. NRC PNO-1-08-012 did not have this information in it.
7. Issue No. 4 of AmerGen BN of 11/17: Water in the Sand Bed Bays 11, 13, 15, and 17.
- a. Cause due to de-lamination of the strippable coating applied to the reactor cavity – gives some additional detail on the leakage not being noted and then water found in bays about 2 days after the de-lamination was reported – in the conclusions section the de-lamination is described as "unexpected" and that they will be investigate the cause.
  - b. Not in the AmerGen BN of Nov. 6 (most likely not known at the time).
  - c. NRC BN of Nov. 6 did not have this information in it.
  - d. NRC PNO-1-08-012 does go into some detail on this describing leak rate as initially < 1 gpm and going to 4-6 gpm in the cavity trough and the water spilling into the gap area leading to the sand bed region – puddles were noted in the bays but bay Nos. were not given.

What is not in the public domain from the exit notes or about which we would be concerned if NJ were to address in a public letter before the report is out? That which is not color coded in Rev. 10A of the exit notes (a separate file). In summary the gap information from the exit notes is:

1. Issue No. 1 of Amergen BN of 11/17: Cause of Sand bed Bay 11 Blistered Area
  - a. Size of blisters in terms of inches of diameter
  - b. NDE Level of review

- c. Bay 9 coating problems and fact that 2006 VT inspection did not identify these coating problems.
2. Issue No. 2 of AmerGen BN of 11/17: Damaged Moisture Seal in Sand Bed Bay 3
    - a. Surface cracks in this bay floor or 6 other sand bed bays
    - b. 2006 VT not identifying seal cracks between the floor and drywell in any of the sand bed bays
  3. Issue No. 3 of AmerGen BN of 11/17: Chips in the Epoxy Coating System in Sand Bed bays 3, 5, and 7.
    - a. Nothing in exit notes – found in AmerGen BN
  4. Issue No. 4 of AmerGen BN of 11/17: Water in the Sand Bed Bays 11, 13, 15, and 17.
    - a. AmerGen's characterization of cause of strippable coating de-lamination.
    - b. Increase monitoring frequency
  5. Others:
    - a. Part 50 vs. Part 54 infrastructure information and the need for an unresolved item with respect to monitoring drain activity along with the effectiveness of the strippable coating.
    - b. All details on cavity trough drain line found isolated or poly bottles being disconnected - the issue of water getting into the gap area where it is not wanted is well known in the public domain.
    - c. Details of drain flow monitoring plan and design flow for water to not spill into gap - the issue of water getting into the gap area where it is not wanted is well known in the public domain.

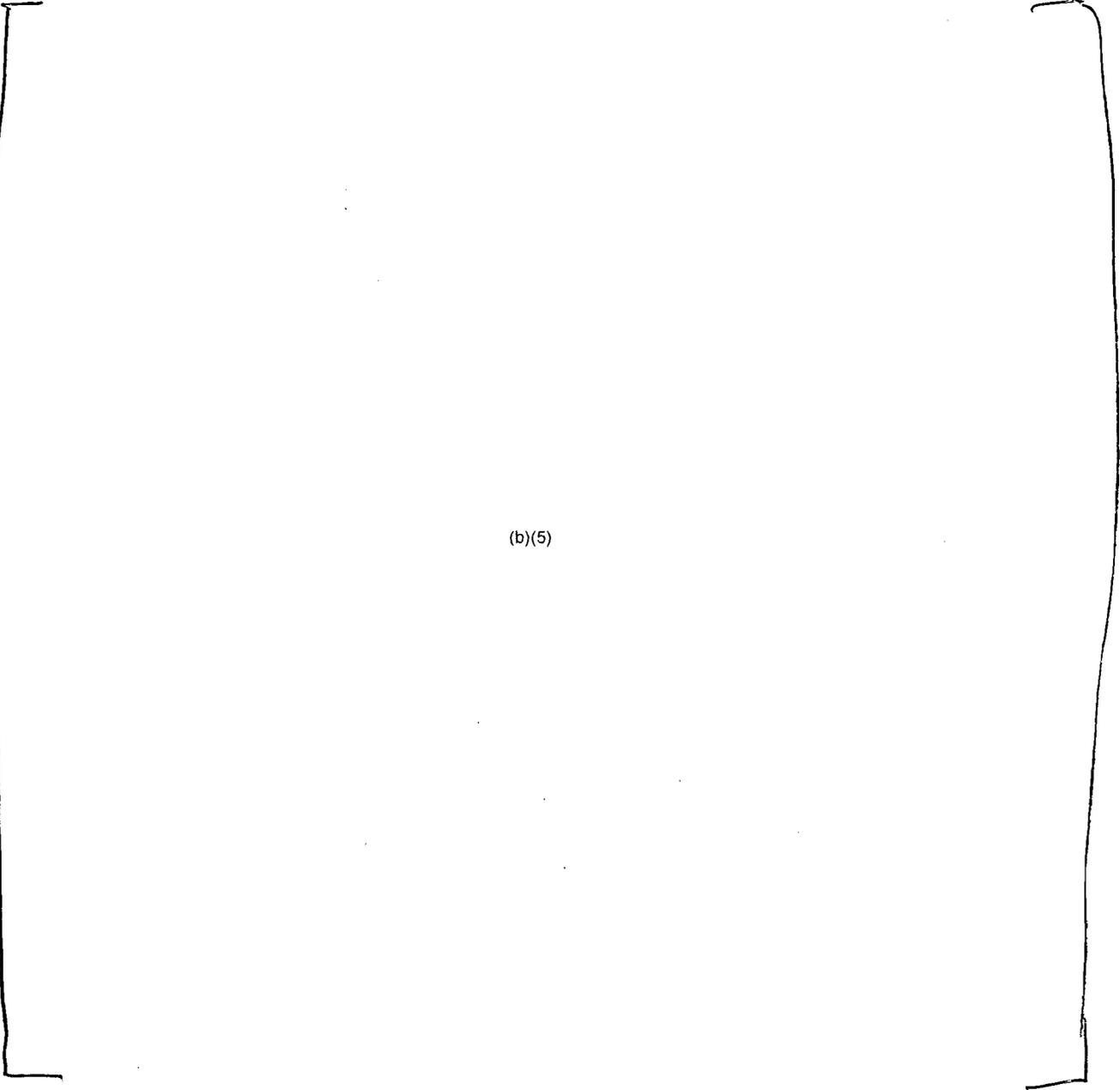
Based on all of the information noted above, the Aging Management Program (AMP) for the drywell as embodied in Commitment No. 27 of the Staff's final SER remains adequate. The lead-in for Commitment No 27 states that the drywell and torus will be monitored in accordance with ASME Code section XI, Subsection IWE with various additional enhancements. There are 21 subsections of enhancements listed, three of which had noted implementation issues. As best we know currently, the commitment tracking process was used in order to implement commitments in the AMP such as producing work instructions to apply the strippable coating and monitor the noted cavity trough and sand bed drains.

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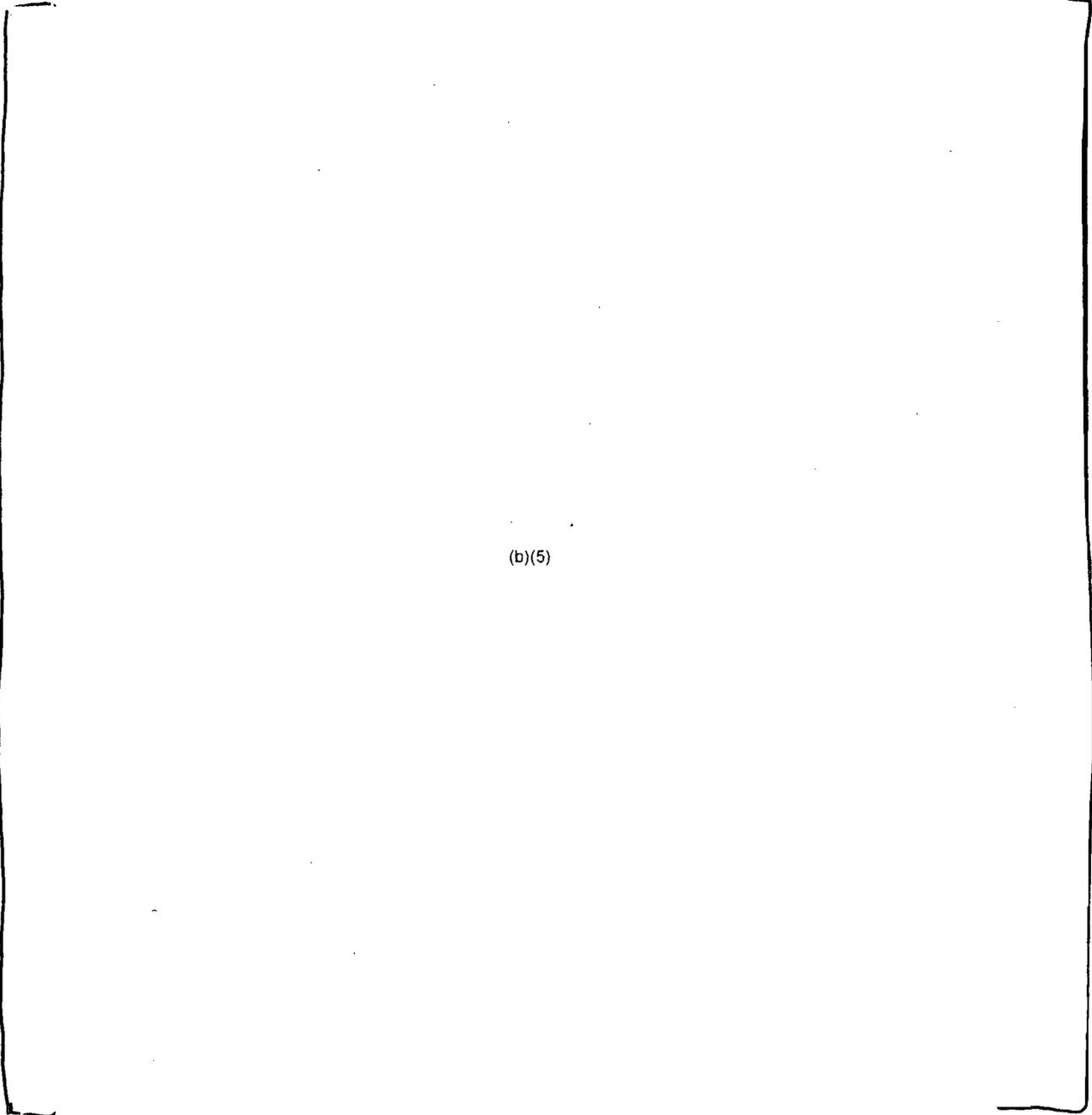
Aging Management Program Adequacy vs. Implementation

The GALL lists ten key criteria for an AMP. They are listed here for convenience: 1) Scope of Program; 2) Preventive Actions; 3) Parameters monitored; 4) Detection of Aging Effects; 5) Monitoring and Trending; 6) Acceptance Criteria; 7) Corrective Actions; 8) Confirmation Process; 9) Administrative Controls; and, 10) Operating Experience. Applicants, as an alternative, can produce another methodologies acceptable to staff; but, as far as we know, all, including Amergen for Oyster Creek, adopted the ten criteria. The appropriate elements for this discussion related to implementation are No. 4 on Detection of Aging Effects and No. 7 on Corrective Actions. For element No. 4 the goal is the detection of aging effects before there is a loss of any structure or component function and for element No. 7, the goal is corrective action that include root cause determination and prevention of recurrence.



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Raj



Analysis on Potential Actions to Address Concern:

In addressing the gap issue the following situations would need to be addressed in releasing the information as contained in the exit notes:



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Viable Options:

In a conference call for December 29, 2008, EB 1 BC lead a discussion of the pros and cons of each of the four areas above.

Recommendations:

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Decision/Final Action:

TBD.