Nathan Lafferty

From: Richard Barkley, RI
Sent: Tuesday, January 20, 2009 10:53 AM
To: Richard Conte; Darrell Roberts
Cc: Ronald Bellamy; Nancy McNamara; John Richmond; Neil Sheehan; Eugene Dacus; Undine Shoop
Subject: RE: Comm Plan for Oyster Creek License Renewal Inspection
Attachments: OC LRI 2008-07 Final Comm Plan RV-2.doc

Rich,

I believe I adequately addressed your remarks in this latest revision.

Barring any last minute comments from others, I think we are ready to go on Wednesday.

Gene/Undine - Any comments from either of you?

Richard S. Barkley, PE
Technical Communications Assistant, Region I
(610) 337-5065
[(b)(6) (Cell)]

Please consider the environment before printing this e-mail. Thank you.

EX.6

From: Richard Conte
Sent: Saturday, January 17, 2009 11:41 AM
To: Richard Barkley; Darrell Roberts
Cc: Ronald Bellamy; Nancy McNamara; John Richmond; Neil Sheehan
Subject: FW: Comm Plan for Oyster Creek License Renewal Inspection

(b)(5)

EX5

From: Richard Barkley
Sent: Friday, January 16, 2009 6:02 PM

Information in this record was deleted in accordance with the Freedom of Information Act.
Exemptions 5, 6
FOIA/PA 2009-0070

J/57

To: Richard Conte; Neil Sheehan
Subject: Comm Plan for Oyster Creek License Renewal Inspection

Let me know what other edits are necessary or merited.

Richard S. Barkley, PE
Technical Communications Assistant, Region I
(610) 337-5065
(b)(6) (Cell)

EX 6

Please consider the environment before printing this e-mail. Thank you.

Received: from R1CLSTR01.nrc.gov ([148.184.99.7]) by R1MS01.nrc.gov
([148.184.99.10]) with mapi; Tue, 20 Jan 2009 10:53:21 -0500
Content-Type: application/ms-tnef; name="winmail.dat"
Content-Transfer-Encoding: binary
From: Richard Barkley <Richard.Barkley@nrc.gov>
To: Richard Conte <Richard.Conte@nrc.gov>, Darrell Roberts
<Darrell.Roberts@nrc.gov>
CC: Ronald Bellamy <Ronald.Bellamy@nrc.gov>, Nancy McNamara
<Nancy.McNamara@nrc.gov>, John Richmond <John.Richmond@nrc.gov>, Neil
Sheehan
<Neil.Sheehan@nrc.gov>, Eugene Dacus <Eugene.Dacus@nrc.gov>, Undine Shoop
<Undine.Shoop@nrc.gov>
Date: Tue, 20 Jan 2009 10:53:20 -0500
Subject: RE: Comm Plan for Oyster Creek License Renewal Inspection
Thread-Topic: Comm Plan for Oyster Creek License Renewal Inspection
Thread-Index: Acl4LmGWI2kZ/VvDTASGKvxXGoJ5FQAknOowAJWBsCA=
Message-ID:
<2856BC46F6A308418F033D973BB0EE72AA7CBD456A@R1CLSTR01.nrc.gov>
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In-Reply-To: <2856BC46F6A308418F033D973BB0EE72AA7CD41EAB@R1CLSTR01.nrc.gov>
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<2856BC46F6A308418F033D973BB0EE72AA7CBD456A@R1CLSTR01.nrc.gov>
MIME-Version: 1.0

Communications Plan and Notification Sequence Issuance of the License Renewal Commitment Inspection for Oyster Creek Drywell Containment Shell

Goal

To communicate the results of the NRC staff's inspection during the recent refueling outage of Exelon's activities to assess the operability of the drywell primary containment and the implementation of various license renewal commitments for Oyster Creek, with particular focus on the drywell primary containment shell.

Key Messages

1) Region I completed a multi-week inspection of AmerGen's aging management programs associated with the drywell primary containment, including the:

- Containment Metallic Liner Inservice Inspection
- Structures Monitoring Program
- Protective Coating Monitoring and Maintenance Program

The State of New Jersey State Engineers observed portions of the NRC staff review.

2) The NRC staff determined AmerGen has provided an adequate basis to conclude the drywell primary containment will remain operable during the period until the next scheduled examination at a refueling outage in 2012.

3) The NRC staff concluded there were no safety significant conditions affecting the drywell steel shell.

4) Since a renewed license has not been issued, the proposed license conditions and associated commitments, made as a part of the license renewal application, are not yet in effect. As a consequence, the report only records the inspectors' observations. Four observations made during this inspection, involving issues entered into Exelon's corrective action program, were listed in the inspection report as an unresolved item. More information is required in order to determine whether the unresolved item conditions are acceptable, or to evaluate if any future enforcement action is necessary if a renewed license is issued.

Time Sequence	ACTION	Responsible Organization/Individual
T= 0 Hour	Inspection report signed by Regional Management	RI – Roberts
T = 0.5 Hour	Call Exelon's VP - License Renewal and Communicate Report Issuance	RI – Roberts
T = 1.5 Hours	Communicate key messages to the New Jersey DEP	RI – McNamara
T = 1.5 Hours	Communicate key messages to Local Officials, if any, as determined by the responsible DRP Branch Chief	RI – Bellamy
T= 1.5 Hours	Communicate key messages to NJ Congressional Offices, particularly Congressman Smith	OCA – Dacus
T= 3 Hours +	Respond to Media Inquiries – see developed Q&As attached	RI – Screnci / Sheehan

Audience / Stakeholders

Exelon (Oyster Creek Nuclear Generating Station)

Senators for New Jersey (Senators Lautenberg & Menendez)

House of Representatives for NJ (Representatives Saxton, Smith, Andrews, Holt, Pallone & Pascrell)

New Jersey Department of Environmental Protection

Selected local officials

Communication Team

Eugene Dacus	Office of Congressional Affairs	301/415-3693
Richard Conte	Chief, Engineering Branch 1, DRS	610/337-5183
Nancy McNamara	State Liaison Officer	610/337-5337
John Richmond	Reactor Inspector	610/337-5220
Ron Bellamy	Chief, Projects Branch 6, DRP	610/337-5200
Diane Screnci	Senior Public Affairs Officer	610/337-5330
Neil Sheehan	Public Affairs Officer	610/337-5331

Drywell Shell Background

In the mid-1980s, GPU Nuclear (the previous licensee) identified corrosion of selected lower portions of the Oyster Creek drywell containment steel shell in the so-called "sand bed" region. Initial licensee actions were not effective in arresting the corrosion. In 1992, all sand was removed from the sand bed region and the accessible exterior surfaces of the drywell shell were cleaned and coated with epoxy. Ultrasonic test (UT) thickness measurements of the drywell shell taken in 1992 and 1996 indicated the corrosion had been effectively arrested. This information was confirmed by UT measurements in 2006 during a refueling outage.

License Renewal Background

AmerGen (now Exelon) submitted a License Renewal Application (LRA) for Oyster Creek on July 22, 2005. The license renewal team inspection occurred in March 2006. Inspection Report 50-219/2006-007 dated September 21, 2006, documented the inspection results. Among many other areas, the LRA addressed the management of aging effects for primary containment, including drywell shell corrosion in the sand bed region.

The Atomic Safety and Licensing Board (ASLB) held a hearing on a contention regarding the frequency of planned drywell shell UT inspections. In December 2007, the ASLB ruled in AmerGen's (Exelon's) favor. Citizens (intervener) appealed this decision to the Commission on January 14, 2008. In May 2008, the Commission requested the ASLB to resolve concerns related to planned 3 dimensional (3-D) finite analysis of the drywell shell. The ASLB held oral arguments on September 18, 2008, and responded in a memorandum to the Commission on October 29, 2008.

Citizens had another appeal to the Commission related to a July 2008 ASLB decision to deny admitting a new contention on metal fatigue and the issue is under Commission review.

Future Actions

NRC Commissioners decide on two ASLB appeals related to renewed license - TBD

Region I will perform a non-outage license renewal inspection – planned for March 9 - 27, 2009.

The current operating license for Oyster Creek expires on April 9, 2009.

Anticipated Questions and Answers

Q1: What prompted this inspection?

A1: This was a scheduled inspection, in accordance with the license renewal process, and used NRC Inspection Procedure 71003, "Post-Approval Site Inspection for License Renewal." The inspection is intended to ensure proper implementation of license renewal conditions and associated regulatory commitment activities, which occur during the refueling outage just prior to the period of extended operation. NRC inspectors focus on equipment which would be inaccessible during reactor operation, such as the drywell. Representatives of the State of New Jersey observed elements of this inspection.

Q2: How do the inspection results affect the license renewal process?

A2: Normally for a renewed license, they confirm proper implementation of conditions and commitments made by the licensee during the course of the application review and approval process, as documented in the NRC staff's safety evaluation report (SER).

Q3: Why is the reactor safe to operate given the observations made by the NRC during the inspection?

A3: There were no identified significant conditions affecting the drywell primary containment structural integrity.

Q4: What do the issues identified during the inspection mean for license renewal?

A4: The issues found were identified through the implementation of several aging management programs which were in place to manage the effects of aging in the sand bed region of the drywell shell.

Q5: When will the drywell coating in the sand bed region of the drywell shell be inspected again?

A5: The next visual inspection of the coating in the sand bed region of the drywell shell is scheduled for every other refueling outage, or four years from now. Exelon reports that this frequency will be reviewed and evaluated as a result of observing several drywell coating blisters during the recent inspection.

Q6: What has the NRC done in response to these observations?

A6: The NRC Region I staff closely followed Exelon's investigation, including performing an independent inspection of the drywell coating blisters and observation of the removal of the blisters. The Region I staff was also in contact with the State of New Jersey and the NRC Headquarters staff. A follow-up inspection is planned for March 2009.

Q7: The inspection report says there was a challenge to keep water out of the sand bed region. What can you say about that?

A7: On November 7, 2008, AmerGen reported an apparent de-lamination of the strippable coating applied to the liner of the reactor refueling cavity; this was visually evident over the ensuing weekend. Water subsequently overflowed the reactor cavity drain trough (which is designed to collect small amounts of water that may leak from the reactor cavity seal during refueling) and into the sand bed region (i.e., evidence of moisture was observed in several sand bed bays). There was also increased cavity trough drain leakage estimated at 4 to 6 gallons per minute.

After the reactor cavity was drained, there was a final inspection of all 10 sand bed bays, and no adverse effects were identified. AmerGen/Exelon confirmed there was a substantial margin in the drywell shell thickness in the upper drywell elevations where some water may have impinged on the uncoated drywell shell surface.

Q8: Will the UT data collected during this outage regarding the drywell liner be used as an input for the 3-D finite element analysis AmerGen must perform prior to entering a period of license renewal?

A8: During this outage, AmerGen is taking ultrasonic thickness (UT) measurements of the drywell shell in numerous locations, as required by license renewal commitments. AmerGen has stated that those UT data values will be used as inputs for the 3-D analysis. The 3-D analysis will confirm margins reflected in the current licensing basis, but is it is not required to replace the current licensing basis calculations.

Q9: Why doesn't this report look like a normal inspection report issued in accordance with ROP guidance (IMC 0612)?

Because an appeal of a licensing board decision about the Oyster Creek application for a renewed license is pending before the Commission, a renewed license has not been issued and the proposed license conditions and associated regulation commitments, made as a part of the license renewal application, are not yet in effect. As a consequence, the report only records the inspectors' observations.

By way of background, the NRC's Reactor Oversight Process mid-cycle letter of September 2, 2008 (ML082470569) informed Exelon that the NRC would be conducting two license renewal inspections prior to the period of extended operation. The NRC conducted the first inspection using the guidance of Inspection Procedure (IP) 71003 "Post-Approval Site Inspection for License Renewal" as a prudent measure to observe Oyster Creek license renewal activities during the last planned refueling outage prior to entering the period of extended operation. The inspection examined important license renewal activities conforming to the Commission's rules and regulations. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. This inspection focused on the inservice inspection of the drywell containment.

Q10: What is the safety significance of the follow-up issues noted? The issues noted in the unresolved item are:

1. [(b)(5)] of the strippable coating applied to the liner of the refueling cavity to eliminate water leakage;
2. [(b)(5)] to monitor the entire length of former sand bed drain lines, visible from the torus room, and the subsequent discovery that two drain lines were not directly attached to the portion of the drain line exiting the concrete shield wall below the former sand bed;
3. The discovery by boroscopic examination that the reactor vessel refueling cavity trough drain line valve was in the closed position during a portion of time while the drain flow was being monitored and the refuel cavity was flooded; and,
4. Four blisters on the epoxy coating in one sand bed bay were identified, the root cause of which remains to be finalized. A 2006 video recording appeared to indicate that one of the blisters existed at that time, but was not identified during Exelon's 2006 visual inspection.

A10: Based on the results of the NRC's inspection, the NRC determined there were no safety significant conditions affecting current operations.

As noted in the details of report (sections 2, 3.1, 3.2, 3.3, and 3.4), a few current license basis issues were observed that may require licensee corrective action. Because the issues may be associated with performance deficiencies, an Unresolved Item (URI) is being opened for NRC follow-up. The NRC will review the available information to determine if any performance deficiency exists, along with its significance.

Q11: Doesn't this report show that the aging management program for the drywell is inadequate given the problems noted by Exelon and the NRC?

A11: The NRC determined that Exelon provided an adequate basis to conclude the drywell primary containment will remain operable throughout the period to the next scheduled examination during the 2012 refueling outage. This was based on the NRC's evaluation of the drywell shell ultrasonic test (UT) thickness measurements, direct observation of drywell shell conditions both inside the drywell, including the floor trenches, and outside the drywell, in the sand bed regions, condition and integrity of the drywell shell epoxy coating, and condition of the drywell shell moisture barrier seals.

During the next site visit, the NRC will follow-up on Exelon's evaluation and the repair of four small blisters in sand bed bay 11. Exelon stated that some blistering was expected, and would be identified during routine visual examinations. The NRC staff will review Exelon's root cause evaluation after it is completed.

The drywell shell epoxy coating and the moisture barrier seal, both in the sand bed region, are barrier systems used to protect the drywell from corrosion. The problems identified and corrected with these barriers had a minimal impact on the drywell steel shell. The projected shell corrosion rate remains very small, as confirmed by the NRC staff review of Exelon's technical evaluations of the 2008 UT data. The upper areas of the drywell have exhibited limited corrosion since water in that area quickly drains away or evaporates (unlike the former sand bed region which trapped moisture against the steel shell), even though these areas have been wetted in the past (and during this outage).

Q12: Describe what is normally done on a 71003 and how was this inspection at Oyster Creek different?

A12: IP 71003 consists of a number of site visits to determine the status of license renewal commitment implementation and overall readiness of the licensee to enter the period of extended operations. This was done at the Ginna facility in 2008, a plant that will enter into its period of extended operation in September of this year. However for Ginna, NRC staff observed those license conditions and associated regulatory commitments at that time since the plant was in the last outage before the start of extended period of operation, and thus provided an opportunity for such close inspections.

At the time of the Ginna review, the license had been renewed. For Oyster Creek, the license has not been renewed, and the proposed license conditions and associated regulatory commitments are not in effect yet. However, the inspection was conducted as a prudent measure to observe the implementation of license renewal activities, given the opportunity presented by the ongoing outage, in the event the renewal is granted.

Q13: Is this the final license renewal commitment inspection? Will the licensee enter the period of extended operations without any further NRC review and attention?

A13: The resident inspectors continue to conduct daily reviews of plant conditions and as aging management issues arise from the licensee monitoring of aging effects, region-based experts will be available to assist.

Those same region-based experts will be involved in the next site inspection in March 2009. The NRC will follow-up on Exelon's evaluation and the repair of four small blisters in sand bed bay 11. Exelon stated that some blistering was expected, and would be identified during routine visual examinations. The NRC staff will review Exelon's root cause evaluation after it is completed, along with the above noted unresolved item.

Q14: When will the Commission rule on the issue in appeal and who issues the renewed Operating license?

A14: The completion of the Commission's review is indeterminate to the staff at this time. Normally, the Director of NRR is the licensing authority for license renewal; however, there may be special direction from the Commission in this case when it decides on the issue on appeal.