

Sarah Rich

---

**From:** Calvin.Taylor@exeloncorp.com  
**Sent:** Tuesday, August 19, 2008 4:25 PM  
**To:** John Richmond  
**Subject:** FW: Final Report for the May 2008 License Renewal FASA  
**Attachments:** FASA Report.doc

-----Original Message-----

**From:** Tamburro, Peter  
**Sent:** Tuesday, August 19, 2008 1:49 PM  
**To:** Rausch, Timothy S; Gallagher, Michael P  
**Cc:** 'Saunderson, Robert W'; Ray, Howie; Peak, Russell R.; Roddey, Thomas; Makar, John B.; Hayden, Joseph; Powell, Tom; Taylor, Calvin C.; Lutz, John; Quintenz, Tom; McAllister, Martin E; Trettel, Timothy P; Sullivan, Michael D.; Vernacchio, Louis F.; Abelev, Igor; Brostow, Walter; Parker, Jacquelyn G; Asarpota, Anil; Gayley, Roger B; Grey III, Charles E; Hand, Michael; Hinchliffe, David W; Jimenez, Jeronimo; Martinez, Ruben; Porras, Brooke; Ricketts, Colin; Sparks, Adam; Trettel, Timothy P; Velez, Laura; Williams, Christian; Arvin, John D  
**Subject:** Final Report for the May 2008 License Renewal FASA

Attached is the Final Report for the Oyster Creek License Renewal Commitment Implementation 2008 FASA.  
SARB/MRC approved (today 8/19/08)  
The entire report is located in Passport - Assignment 00725855 -03

<<FASA Report.doc>>

\*\*\*\*\* This e-mail and any of its attachments may contain Exelon Corporation proprietary information, which is privileged, confidential, or subject to copyright belonging to the Exelon Corporation family of Companies. This e-mail is intended solely for the use of the individual or entity to which it is addressed. If you are not the intended recipient of this e-mail, you are hereby notified that any dissemination, distribution, copying, or action taken in relation to the contents of and attachments to this e-mail is strictly prohibited and may be unlawful. If you have received this e-mail in error, please notify the sender immediately and permanently delete the original and any copy of this e-mail and any printout. Thank You. \*\*\*\*\*

Received: from TWMS01.nrc.gov (148.184.200.145) by R1MS01.nrc.gov  
(148.184.99.10) with Microsoft SMTP Server (TLS) id 8.0.751.0; Tue, 19 Aug  
2008 16:25:33 -0400

Received: from mail2.nrc.gov (148.184.176.43) by TWMS01.nrc.gov  
(148.184.200.145) with Microsoft SMTP Server id 8.0.751.0; Tue, 19 Aug 2008  
16:25:31 -0400

X-Ironport-ID: mail2

X-SBRS: 5.4

X-MID: 20018301

X-IronPort-AV: E=Sophos;i="4.32,237,1217822400";  
d="doc'32?scan'32,208,217,32";a="20018301"

Received: from webmail.exeloncorp.com (HELO exeloncorp.com) ([198.29.191.51])  
by mail2.nrc.gov with ESMTP; 19 Aug 2008 16:25:04 -0400

Received: from ([130.197.106.102]) by cccuniron1.exeloncorp.com with ESMTP id  
5402003.109086302; Tue, 19 Aug 2008 15:24:40 -0500

Received: from CCCMSXCH06.energy.power.corp ([130.197.153.205]) by  
CCCMSCON02.energy.power.corp with Microsoft SMTPSVC(6.0.3790.3959); Tue,  
19

Aug 2008 15:24:53 -0500

X-MimeOLE: Produced By Microsoft Exchange V6.5

Content-Class: urn:content-classes:message

MIME-Version: 1.0

Subject: FW: Final Report for the May 2008 License Renewal FASA

Date: Tue, 19 Aug 2008 15:24:51 -0500

Message-ID:

<CEEAA8F52C444947A9FA014B7341D8A101424F4F@CCCMSXCH06.energy.power.  
corp>

X-MS-Has-Attach: yes

X-MS-TNEF-Correlator:

Thread-Topic: Final Report for the May 2008 License Renewal FASA

Thread-Index: AckCI9sSAkq3TdxREmuchcJngeZ2wAFbH8w

From: <Calvin.Taylor@exeloncorp.com>

To: <John.Richmond@nrc.gov>

Return-Path: Calvin.Taylor@exeloncorp.com

X-OriginalArrivalTime: 19 Aug 2008 20:24:53.0244 (UTC)

FILETIME=[A34613C0:01C90239]

Content-Type: multipart/mixed;

boundary="----\_=\_NextPart\_001\_01C90239.A2094E50"

**FASA SELF-ASSESSMENT REPORT****CROSS-FUNCTIONAL AREA****Oyster Creek Nuclear Generation Station****SELF-ASSESSMENT TITLE:****Oyster Creek License Renewal Commitment Implementation 2008 FASA****ASSIGNMENT #: 00725855-03****SCOPE**

The scope of this FASA is to review the License Renewal work planned at Oyster Creek to determine if all commitments are on track for completion by 3/1/2009 and to determine Oyster Creek's readiness for the October 2008 and February 2009 NRC Inspections. This FASA is being performed in accordance with procedure LS-AA-126-1001 as a pre-NRC inspection FASA as required by LS-AA-1003.

The self-assessment included reviews of the status of existing Passport Assignments and Sub Assignments that track the implementation of the License Renewal Commitments.

**DESCRIPTION**

This FASA was conducted by a team of individuals from the Station License Renewal Hit Team, from the Corporate License Renewal Project Team, and Industry Peers. Team members were assigned specific areas to review. Specific Fundamentals that were utilized included Technical Rigor, Procedure Adherence, Teamwork, Issue Reporting & Resolution, and Self Assessment and Continuous Improvement.

**ASSESSMENT TEAM MEMBER NAMES:**

The FASA team was comprised of the following subject matter experts:

Tom Quintenz - Corporate Oyster Creek License Renewal  
David T Clohecy - Corporate Oyster Creek License Renewal  
John Hufnagel - Corporate Oyster Creek License Renewal  
Frederick W Polaski - Corporate Oyster Creek License Renewal  
Cal Taylor - Oyster Creek Regulatory Assurance  
Marty McAllister - NDE Services,  
Tom Powell - Work Management  
Ronald Leski - Nine Mile Point, Industry Peer  
Robert W. Saunderson III - Nine Mile Point, Industry Peer  
Don Posey - Outage Management  
Pete Tamburro - License Renewal Program Manager and FASA Team Lead

**PRIMARY GOAL OF ASSESSMENT**

Standards Compliance ..... [SC]

SELF ASSESSMENT EXECUTIVE SUMMARY

This self-assessment was performed per LS-AA-126-1001 from 5/12/08 to 5/16/08 in preparation for the Nuclear Regulatory Commission (NRC) License Renewal Inspection, in accordance with inspection manual 71002 "License Renewal Inspection", which is scheduled in October 2008. In addition this FASA reviewed Oyster Creek readiness for the overall NRC Licensor renewal inspection, which will be performed in accordance with inspection manual 71003 "Post-Approval Site Inspection For License Renewal", scheduled for February 2009.

The self-assessment included reviews of the status of existing Passport assignments and sub assignments which track the implementation of License Renewal Commitments. In addition PIMS Work Orders, ARs, and Procedures were reviewed. The review developed an aggregate status of the implementation of License Renewal Commitments at Oyster Creek.

The team found three significant deficiencies related to the Oyster Creek License Renewal Project. These are

- 1) Inadequate Planning: Repetitive Tasks and CM Type Work Orders are not being planned in a timely manner or with sufficient quality to ensure that compliance with the License Renewal commitments are achieved.
- 2) Insufficient Program Owner involvement and ownership of the individual programs. Some Program Owners have not sufficiently taken ownership of their programs. As a result there is the potential that not all Procedure Revisions and PM Revisions will be completed in time to meet the committed date of 3/1/09.
- 3) Documentation for completed Repetitive Tasks and CM Type Work Orders is not rigorous enough to properly demonstrate that the associated commitment have been met. Accurate and complete closeout documentation will be required to adequately demonstrate compliance with the License Renewal commitments to the NRC.

These deficiencies appear to be a result of high workloads and competing priorities, which have shifted the stations attention away from License Renewal. These conflicts involved emergent engineering and planning activities associated with: the Spring 2008 maintenance outage (1M16), the fall 2008 refueling outage (1R22) scoping and planning, and the preparation for the INPO E&A Visit.

As a result of these findings a Recovery Plan (Attachment 1) was developed by Engineering Management and approved by the Site Vice Present in late May 2008. Weekly Status Reports are provided to the Site and License Renewal Vice Presidents. As of July 25, 2008 the recovery plan is on track.

The Plan includes a process in which each Program Owner will review associated work orders and procedures to ensure they are properly written to perform the required work. The LRCRB License Renewal Challenge Review Board (LRCRB) will then challenge the Program Owners. An integrated schedule has been developed which tracks every LR work order by workweek. The Project Team and Program Owner will monitor this schedule, review the close outs, and determine if the close outs demonstrate compliance with the commitments.



CREM close outs lacking proper details are communicated with the work group and corrected. The LRRCRB will then challenge these close out reviews.

The specific details of the deficiencies and recommendations are summarized in the Self Assessment Results table and discussed in detail within the body of the FASA.

It should be noted that the Recovery Plan has been in place for approximately 1 1/2 months and the deficiencies identified in this FASA are in the process of being corrected. The status of the Recovery Plan is provided through out this report .

SELF ASSESSMENT RESULTS		
Conclusions	# of	List Each Conclusion With Its Associated AR Number
Plant / Fleet Strengths	0	NA
Performance Improvement Recommendations	1	<p>00779710 ENHANCEMENT TO LICENSE RENEWAL PROJECT PROGRAM OWNERS</p> <p>During the FASA, Peer Reviewers from Nine Mile, Ginna, and Oyster Creek felt that Ownership of the License Renewal Programs could be improved. The peer members felt, based on a recent NRC Audit at Ginna, that the NRC will expect a high degree of Program Manager involvement during audits. Interviews with some Program Owners during the FASA indicate that the Program Owners have many competing priorities and that License Renewal Program tasks have taken a back seat. In addition there are a large number of Annotation only procedure changes and PM changes that have not yet been submitted. In addition there are several new Program Owners who were not involved in the License Submittal and in the development or revision of the programs.</p>
Standards Deficiencies	4	<p>00776151 HARDNESS TESTING REQUIREMENTS MISSING FROM WORK ORDER (LR)</p> <p>Required hardness testing requirements were missing from one work order (C2017682), also not all activities for this work order were annotated with CM-1 and no acceptance criteria is identified in the work order. W/O C2017426 does not contain CM-1 annotation on work order activities and does not contain acceptance criteria provided in the draft work order activity attached to the associated PassPort sub item. Action to develop selective leaching inspection procedure not completed and a work order was found missing required inspection activity.</p> <p>00779627 LESS THAN ADEQUATE QUALITY OF LICENSE RENEWAL 1R22 WO</p> <p>During the FASA about 65 RTs and WOs that are implementing License Renewal Commitments in 1R22 were reviewed. In many cases designated physical work details, as specified in the ARs and associated WOs, do not correspond to the Passport descriptions of the requirements to meet the associated License Renewal commitments. There is a large number of these discrepancies that, if not corrected, could result in failure to meet the License Renewal Commitment</p> <p>00779700 LESS THAN ADEQUATE COMMITMENT. TRACEABILITY OF LR ONLINE RTS</p> <p>During the FASA, 50 RTs and WOs were randomly selected from a total population of 240 Online RTs and WOs that are implementing Oyster Creek License Renewal Commitments. The 50 RTs and WO were reviewed to ensure that the implementing Work Order has been annotated with the commitment and that the committed actions are protected from being changed, omitted, deferred, or rescheduled. Results of the review showed 23 cases where the Active copy of the RT does not adequately</p>

annotate the commitment in the Work Order.

**00779776 LICENSE RENEWAL PM88816M NOT  
CLOSED OUT PROPERLY**

The following issue was identified during Oyster Creek License Renewal Commitment Implementation 2008 FASA (007258550).

During the FASA, close out of Work Orders were reviewed to ensure the completed documents meet License Renewal commitments. The close out of PM88816M, which implements License Renewal Commitments, under work order R2105544 (in the ACTCMP status), does not document that the work met the commitment.

## ATTACHMENT 2 FASA SELF-ASSESSMENT REPORT TEMPLATE

### **OBJECTIVE #1**

**Confirm that current License Renewal Action Items are consistent with formal commitments.**

#### **Objective #1 Reference And Measurement Criteria**

1. All Sub assignments accurately reflect the corresponding commitment. The Oyster Creek License Renewal SER contains the Commitments and Program Evaluations.
2. Five or more unacceptable items will require expansion of the sample population by an additional 100 items.

#### **Objective #1 Methodology**

1. Review LR-AA-2011 and select at least 50 (out of about 740) License Renewal Passport Sub Assignments at random to ensure that the overall program is in compliance with Formal Commitments.
2. Review the Sub Assignments against the applicable Program Basis Document, the GALL Program, and the Oyster Creek License Renewal SER to ensure that committed inspections are being planned and implemented and committed Program enhancements are being implemented
3. Review the Sub Assignments Against Formal Transmitted Commitments
4. Review the Sub Assignments to verify that the work can be performed during the fall 2008 refueling outage (1R22) or Online

#### **Objective #1 Conclusion**

The Principal Reviewers for this Objective were Robert W. Saunderson III and David T Clohecy.

#### Summary

Detailed review of the first 25 sub assignments of 50 showed significant issues with Program Manager Ownership and the progress of License Renewal Program implementation (item 2 above). The expansion criteria of 5 more was exceeded early in the random selection and therefore expansion of the sample population was pursued. The FASA team decided that a prudent course of action was to review a much larger percentage of the sub tasks with respect to program ownerships, implementation, and status. Review of additional sub assignments showed the same results. This review found the following issue:

- 1) Many sub assignments were still waiting to be accepted by Site Program Owners and Assigned Engineers. Over 90 sub assignments to revise procedures had not been acted upon for over one year. (IR 00779710)

*Recovery Plan Status - As of 7/25/08 only 2 Sub Assignments were not accepted by the assignee.*

2) The vast majority of the sub tasks that had been accepted showed no progress in implementing the action. Over 70 sub assignments to revise or create PM's had been issued by a contractor with no Program Owner involvement (IR 00779710).

*Recovery Plan Status - As of 7/7/08, Engineering Management has fully endorsed that License Renewal is a top priority and dedicated 10 hours a week in which all personnel are required to work on only License Renewal Activities. As of 7/25/08 program owners have become involved in License Renewal Programs.*

3) Over 60 new PM's had not yet been created or scheduled. (IR 00779710)

*Recovery Plan Status - As of 7/25/08 all but one of the 1R22 new PM's have been created and planned and all online new PM's are planned and scheduled.*

4) Over 40 existing PM's that required revision had not yet been revised. (IR 00779710)

*Recovery Plan Status - As of 7/25/08 all 1R22 existing PM's have been revised and planned and all online only PM's are revised, planned and scheduled.*

5) For the majority of the new or revised PMs, the quality was less than adequate. (IR 00779627 and IR 00779700)

*Recovery Plan Status - As of 7/25/08 all 1R22 PM's have been reviewed by the Program Owners and challenged by the LRCRB (License Renewal Challenge Review Board) and revised as necessary. In addition all PM's within E6 have been reviewed and revised*

The sub assignments do not appear to be complex or resource intensive to complete, but they are not being actively pursued to closure. The primary issue appears to be that a "default" due date of 12/1/2008 is assigned to all the tasks; as a result, there has not been a sense of urgency to complete these assignments. This could result in missed opportunities for inspection performance and may also create a bow-wave of documentation processing in November 2008.

As a result of these conclusions the FASA Team recommended that the entire population of action items must be reviewed by the Program Owners and challenged by LRCRB (IR 00779627, 00779700, and 00779710). This action has been incorporated in the Recovery Plan (attachment 1).

With respect to items 1, 3 and 4 (above) in this objective, reviews found that License Renewal Passport Sub Assignments provided by Corporate License Renewal Team to the plant were in compliance with formal commitments and that the work can be performed during the fall 2008 refueling outage (1R22) or Online

## Objective #1 Supporting Analysis

The following are details for each item in this objective.

### Objective 1 item 1

Reviews were performed of the Program Description Documents, GALL Requirements, and the NRC's SER. Procedure and PM change requests had been drafted by Corporate License Renewal Team and provided to the site. The License Renewal SER Appendix A-5 table was reviewed against the individual program passport assignments and sub assignment in assignments.

The passport assignments tasks and sub tasks appear to be consistent with the commitments.

### Objective 1 item 2

In general, License Renewal Commitments will be implemented at Oyster Creek through existing and Enhanced Programs. Enhanced Programs are new features in the way Oyster Creek will perform inspections, surveillances, and PM's. Therefore Enhanced Program require the creation of new PM's or one-time inspections via CM work orders. About 94 new Online and 1R22 PM's are required for Enhanced Programs. The review found that the majority of the new PM's had not yet been created.

*Recovery Plan Status - As of 7/25/08, all but one the 1R22 new PM's have been created and planned and all online new PM's have been planned and scheduled.*

### Objective 1 item 3

The Licenser Renewal SER Appendix A-5 table was reviewed against passport assignments 1 through 74 of Passport IR 00330592. The passport assignments tasks are consistent with the commitments.

### Objective 1 item 4

Review of License Renewal data base show that there are 72 designated work orders for 1R22. These tasks were accurately designated for 1R22 and could not be performed online. There was not enough time to perform a reverse review of the approximate 230 online tasks to determine if they could be done online. Therefore the Recovery Plan will address this issue.

## **OBJECTIVE #2**

**Verify that the 1R22 designated physical work has been scoped into 1R22 and meets 1R22 Outage Milestones in accordance with OU-AA-101.**

### **Objective #2 Reference And Measurement Criteria**

Work is scoped, planned and on track for 1R22 per OU-AA-101 (the "REG DOC CD" field in each AR contains the 1R22 schedule code).

Implementing Documents are annotated consistent with the Passport Action Items and the Oyster Creek License Renewal SER.

### **Objective #2 Methodology**

1. Review all Passport Sub Assignments to ensure that the required work is scoped into 1R22.
2. Review all 1R22 related Passport Sub Assignments to ensure that the required work is being planned and implemented as a part of a WO or PM.
3. Review all 1R22 related 110 Passport Sub Assignments to ensure that the implemented document (WO or PM) has been annotated with the commitment(s).

### **Objective #2 Conclusion**

The Principal Reviewers for this objective was R. Saunderson, Fred Polaski and Don Posey.

Detailed review of all program designated 1R22 License Renewal work orders (attachment 2) that were in the planned status revealed significant issues with the quality of the work orders. The quality of the majority of those work orders that had been created or revised was less than adequate. (IR 00779700)

As a result the FASA team decided that a prudent course of action was for the program owners to review every 1R22 work order and recommend revisions. This action has been incorporated into the Recovery Plan (attachment 1).

### **Objective #2 Supporting Analysis**

#### Objective 2 item 1

All 72 designated 1R22 License Renewal PM and CM Work Orders in the License Renewal database were compared to the Outage Management 1R22 database to verify that they were scoped into 1R22. The review found several instances (4) where the AR's had not included in Outage Managements 1R22 database. The sponsorship of these items, through OSP, was then investigated. It was concluded that these items had been sponsored, however the tracking AR number was either incorrect in the Outage Management database or the License Renewal database. In all cases the discrepancies were corrected and all items are currently in 1R22 scope.

## Objective 2 item 2

During the week of May 12, 2008 not all of 72 1R22 LRA work orders were in the planned status (about 10 were not). However the remaining planned work orders were reviewed for completeness and accuracy of the commitments and whether the work could actually be performed as planned. The quality of the majority of the work orders less than adequate. The following are examples of the problems that were observed:

1. Many Work orders were not properly formatted.
2. Some work orders did not call for scaffolding erection or removal.
3. Some work orders did not call for coating removing and application.
4. In some cases the requests to create PM's were simply copied into the work order activities. The resulting work orders were not complete products that would actually get the work performed. Many of these work orders did not specify work locations or specific components that were to be inspected.

*Recovery Plan Status - As of 7/25/08 all 1R22 work orders have been reviewed by the Program Owners and challenged by the LRORB. Markups of work orders that require correction have been provided to the dedicated Planner and the work orders have been revised. A second review will be performed in August of 2008.*

## Objective 2 item 3

Review all 1R22 related 110 Passport Sub Assignments to ensure that the implementing work orders had been annotated with the commitment(s). It should be noted here that the 110 Passport assignments resulted in 72 RT or CM Work Orders

- 1) Many of the Drywell Inspection related work orders did not accurately annotate the committed Inspections.
- 2) A generic issue was found where many PM's were annotated with designations on the work steps that performed the commitments, typically "CM-1". However the explanation of what "CM-1" meant was documented only on the 'Comment Page' (page 2) of the Library Copy of the PM. This "Comment Page" does not get copied over into the Activity copy of the work order. Since the Activity copy is the copy the craft takes with them to perform the work, the persons in the field are not provided with an explanation of what the "CM-1" means. This may lead to confusion and may lead to missing the required steps.
- 3) In many PM Work Orders the required commitment steps were not annotated contrary to the instructions in the original PM requests. Some work order were annotated with "CM-1" in the left hand margin of the work order. This is then hard to read in the hard copy and could lead to persons missing the importance of the work step.

*Recovery Plan Status - As of 7/25/08 all IR22 work orders have been reviewed by the Program Owners and challenged by the LRCRB. Markups of the work order that require correction have been provided to the dedicated planner and the work orders have been revised. A second review will be performed in August of 2008.*

## **OBJECTIVE #3**

Verify that designated online physical remaining work is in the work management process of sponsorship for cycle 21 in accordance with WC-AA-101.

### **Objective #3 Reference And Measurement Criteria**

#### **Procedure WC-AA-101 ON-LINE WORK CONTROL PROCESS**

- I. NRC Inspection Manual 71002 and 71003

### **Objective #3 Methodology**

- 1) Select at least 50 (out of about 240) online designated License Renewal Passport Sub Assignments at random to ensure work is on track for implementation.
- 2) Review the corresponding WOs or PM's to ensure that the required work is being planned. Review the corresponding WOs or PM's to ensure that the implemented document has been annotated with the commitment.
  - a. Implementing Documents are annotated consistent with the Passport action items
  - b. Online work orders are planned, scheduled and properly tracked for implementation.

### **Objective #3 Conclusion**

The Principal Reviewer for this Objective was Tom Powel.

Detailed review of 50 online work orders chosen at random (attachment 3) revealed significant issues with the quality of the work orders. The majority of those PM's that had been created or revised was less than adequate. It became clear early in the reviews that therefore expansion of the sample population must be pursued. The FASA team decided that a prudent course of action was to review a much larger percentage of the sub tasks with respect to program ownerships, implementation, and status. Review of additional sub assignments showed the same results. (IR 00779710)

As a result the FASA team decided that a prudent course of action was for the program owners to review every online work order and recommend revisions if required. This action has been incorporated into the Recovery Plan (attachment 1).

## Objective #3 Supporting Analysis

Fifty License Renewal Passport Sub Assignments were selected at random. Many sub assignments (over 25) corresponding works order were not yet revised or created. The major reasons for this delay was that the requests for the PM revisions and PM creation were issued late in the work management process (November and December of 2007) and were coincided with and competed with the bulk of planning of the entire population of the 1R22 work orders. In addition since the 1R22 Planning Milestone was not met, the planning for License Renewal took a backseat to the 1R22 Planning Recovery Plan.

Planned work orders were reviewed for completeness, accuracy of the commitments, proper annotation of the commitment, and whether the work could actually be performed as planned. The quality of the vast majority of the work orders was less than adequate. The following are examples of the problems that were observed:

- 1) Many did not accurately annotate the committed Inspections.

*Recovery Plan Status - As of 7/25/08, all online orders within E6 been revised (if required) to annotate the commitments. The dedicated Planner is revising work orders as the work order comes into E6.*

- 2) A generic issue was found where many PM's were annotated with designations on the work steps that performed the commitments, typically "CM-1". However the explanation of what "CM-1" meant was documented only on the "Comment Page" (page 2) of the Library Copy of the PM. This "Comment Page" does not get copied over into the Activity copy of the work order. Since the Activity copy is the copy the craft takes when they perform the work, the craft are not provided with an explanation of what the "CM-1" means. This may lead to confusion and may lead to missing the required steps.

*Recovery Plan Status - As of 7/25/08, all online works orders within E6 and all 1R22 work orders are revised to document the explanation of the "CM-1" annotation at the beginning of each work order activity. These revisions are performed to the Library and Activity copy of the PM.*

- 3) In many PM Work Orders the required commitment step were not annotated contrary to the instructions in the original PM requests. Some work orders were annotated with "CM-1" in the left hand margin of the work order. This is hard to read in the hard copy and could lead to person missing the importance of the work step.

*Recovery Plan Status - As of 7/25/08, all online works orders within E6 and all 1R22 work orders have been corrected with the CM-1 in the appropriate location. These revisions are performed to the Library and Activity copy of the PM.*

- 4) Many Work Orders were not properly formatted.

*Recovery Plan Status - As of 7/25/08, all online works orders within E6 and all 1R22 work orders have been corrected with the CM-1 in the appropriate location. These revisions are performed to the Library and Activity copy of the PM.*

- 5) Some work orders did not call for scaffolding erection or removal.

*Recovery Plan Status - As of 7/25/08, all online works orders within E6 and all 1R22 work orders have been corrected. These revisions are performed to the Library and Active copy of the PM.*

- 6) Some work orders did not call for coating removing and application.

*Recovery Plan Status - As of 7/25/08, all online works orders within E6 and all 1R22 work orders have been corrected. These revisions are performed to the Library and Activity copy of the PM.*

- 7) In some cases the requests to create PM's were simply copied into the work order activities. The resulting work orders were not quality products that would actually get the work performed. Many of these work orders did not specify work locations, or specific components that were to be inspected.

*Recovery Plan Status - As of 7/25/08, all online works orders within E6 and all 1R22 work orders have been corrected. These revisions are performed to the Library and Activity copy of the PM.*

#### **OBJECTIVE #4**

Verify that all Drywell Vessel Commitments are being fully implemented.

#### **Objective #4 Reference And Measurement Criteria**

The Oyster Creek License Renewal SER commitments related to Drywell Vessel Commitments shall be met as documented on the SER "A-5" Table.

NRC Inspection Manual 71002 and 71003

#### **Objective #4 Methodology**

- 1) Review all License Renewal Commitments in the SER and current status
- 2) Review Specification OC-IS-328277-004
- 3) Perform one to one verification that all commitments are planned for Online or 1R22 work

**Objective #4 Conclusion**

The Principal Reviewers for this Objective were John Hufnagel and Cal Taylor

Detailed review of 18, 1R22 work orders associated with the Drywell Vessel Inspection Program revealed some issues with the quality of the work orders.

**Objective #4 Supporting Analysis**

The following are details for objective 4 items 1, 2 and 3

OC-IS-328277-004 "Functional Requirements For Drywell Containment Vessel Thickness Examinations", is an Engineering Specification that contains the requirements necessary to perform Drywell Vessel UT Thickness Inspections and Coating Inspections. This specification was revised in late 2007 to document all commitments that were made during the License Renewal processes for inspections for the Drywell Vessel. These commitments were added to the Section XI, IWE Inspection Program and the Coatings Inspection Program.

For this FASA objective, the License Renewal Application A-5 Table (attachment 4) for the Section XI IWE Inspection Program and the Coatings Inspection Program were compared to the requirements of OC-IS-328277-004. The review found that the necessary requirements in the A-5 table were accurately and completely contained in the specification. The commitments in the A-5 table were then compared to all the designated 1R22 Work Orders. The review found that there was a one to one relationship between required work in the PM work orders and the latest commitments.

However some of the planned work orders were less than adequate. The following are examples of the problems that were observed:

- 1) Some did not accurately annotate the committed Inspections.

*Recovery Plan Status - As of 7/25/08, all 1R22 orders been revised (if required) to annotate the commitments.*

- 2) A generic issue was found where many PM's were annotated with designations on the work steps that performed the commitments, typically "CM-1". However the explanation of what "CM-1" meant was documented only on the "Comment Page" (page 2) of the Library Copy of the PM. This "Comment Page" does not get copied over into the Activity copy of the work order. Since the Activity copy is the copy the craft uses when they perform the work, the craft are not provided with an explanation of what the "CM-1" means. This may lead to confusion and may lead to missing the required steps.)

*Recovery Plan Status - As of 7/25/08, all Drywell Inspection Related work orders are revised to document the explanation of the "CM-1" annotation at the beginning of each work order activity. These revisions are performed to the Library and Activity copy of the PM.*

- 3) In some PM Work Orders the required commitment step were not annotated contrary to the instructions in the original PM requests.

*Recovery Plan Status - As of 7/25/08, all Drywell Inspection Related work orders have been revised (if required) to annotate the commitments.*

## **OBJECTIVE #5**

Verify that Action Items in the complete status are rigorously documented, accurate and ready for closeout.

### **Objective #4 Reference And Measurement Criteria**

LS-AA-125, "CORRECTIVE ACTION PROGRAM (CAP) PROCEDURE"  
NRC Inspection Manuals 71002 and 71003

### **Objective #5 Methodology**

1. Select at random at least 50 sub assignments that are in the "complete" status to ensure that the completed action meets the intent of the assignment.
2. Ensure all follow up work is properly referenced in accordance with LS-AA-125
3. Review completed implementing documents to ensure the commitment is properly documented in accordance with LS-AA-125.
4. Review resulting Work Orders, PM's, Procedures, Specifications, and Calculations and ensure they were revised consistent with the Passport action item and the commitment.
5. Review the corresponding completed WOs to ensure that the required work is properly closed out

### **Objective #5 Conclusion**

The Principal Reviewers for this Objective were Tom Quintenz, Ronald Leski, and Robert W. Saunderson III.

The review found a large percentage of closed out Passport sub assignments that were not properly close out. In general these poor close outs would make it difficult to demonstrate compliance to the commitment. It became clear early in the reviews that expansion of the sample population must be pursued. (IR 00779700)

As a result the FASA team decided that a prudent course of action was for the program owners to review every online work order and recommend revisions if required. This Action has been incorporated into the Recovery Plan

### **Objective #5 Supporting Analysis**

A sample of 50 Passport Actions in the "Complete" status was reviewed. Fourteen of 50 had issues that did not meet station expectations. Examples are:

- 1) Nine Sub assignments for the Water Chemistry Program were closed with a statement that it was not the task owner's responsibility to complete the action. No communications were made to License Renewal Lead or individual's supervisor to sort the issue out. This could

have led to nine procedures not being developed or revised for license renewal requirements. These assignments were stasured as "complete"; however, upon closer evaluation the actions were closed as ***"License renewal project is a capital approved project. Project team or OC chemistry should change procedures and charge the project. No action taken, assignment closed."*** In addition the person who closed these items out did not contact the task originator to explain the close out and there was no notification to the responsible Oyster Creek Program Owner or site lead. Therefore the required changes did not get done. IR 774991 was written by Corporate Engineering and the action items were reopened and assigned to plant personnel.

***Recovery Plan Status*** – *the nine assignments were re-opened and assigned to the Site Chemistry Department. As of 7/25/08 these procedure changes are in the review process.*

- 2) One sub assignment intended to develop a new PM **and** to track the physical work was closed without the PM actually being written. The responsible individual closed out actions stating that a request had been written to have the PM's developed. However the development, approval, scheduling and performance of the PM's were not tracked in the sub assignment. This loss of tracking may have led to missing commitments. An extent review of passport sub assignments completed by the same person revealed 36 additional tasks that were closed out in the same manner.

***Recovery Plan Status*** – *The 37 assignments are being tracked by Program Owners and will be verified to meet commitments. The LRCRB will then also review these close outs.*

- 3) One sub assignment to revise a procedure was closed stating that revision was not needed because the procedure had been superceded by another procedure. This second procedure was not documented in the closeout out. This leads to a dead end in tracking the commitment.

***Recovery Plan Status*** – *The new procedure was identified (CY-AA-120-420) and is now tracked per sub assignment (00330592.02.03).*

- 4) Several actions were closed by stating that they would be tracked by other actions. Although the closeouts properly cross-referenced the open items the open items did not cross-reference the closed out items. This makes it harder to track all commitments.

***Recovery Plan Status*** – *The open items will be updated with proper cross-references by the responsible Program Owner and verified by the Project Team. (00779710 06)*

- 5) One passport sub assignment tracked the development of a Selective Leaching Inspection Procedure. The assignment was later closed out based on a stated decision to incorporate selective leaching inspection instructions into the associated work orders. This seemed like an acceptable decision since there are only four required one-time inspections. However, based on review of the four selective leaching work orders it was found that one work order was missing the instruction to perform the required hardness testing and the work orders did

not contain any acceptance criteria even though acceptance criteria was provided in attachments to the associated passport item.

*Recovery Plan Status* – This work order has since been corrected (00776151 05). In addition all program work orders have been review to determine the extent of this discrepancy.

## **OBJECTIVE #6**

Verify that License Renewal Enhanced Programs are fully implemented at Oyster Creek.

### **Objective #6 Reference And Measurement Criteria**

LS-AA-125, "CORRECTIVE ACTION PROGRAM (CAP) PROCEDURE" NRC Inspection Manuals 71002 and 71003

### **Objective #6 Methodology**

- 1) Select at random at least 5 Programs that contain enhancements.
- 2) Interview the Program Owner to assess their understanding of the program and committed actions. Assess their depth of understanding for necessary actions should aging mechanism be detected
- 3) Interview the Program Owner's Supervisor to assess their understanding of the enhanced programs.
- 4) Interview Planners and Work Week Mangers on how LR commitments are being implemented.

### **Objective #6 Conclusion**

This objective was not completed since only four Programs were reviewed. The FASA team found it difficult to schedule time with Program Owners and their supervisors. Some of the Program Owners were quickly interviewed to find out their level of engagement, LR importance, and ownership. During the interviews, most of the Program Owners talked about "competing priorities" and that LR tasks took a back seat. Also the 12/1/08 due dates for their passport items allowed them to defer work for other work.

Several Program Owners are new Engineers and were not working at Oyster Creek when the Programs were formally transferred from the Corporate License Renewal team to the site team. In addition several programs were reassigned from one site owner to another without and complete turnovers.

II. Based on the lack of progress in implementing the programs and the unavailability Planners due to plant priorities, (i. e. recovery from missing the 1R22 Planning Milestone). The FASA Team decided not to interview Planners. (IR 779710)

As a result the FASA team recommended that a Senior Review Team should review the implementation of all programs. This feature has been incorporated into the Recovery Plan

*Recovery Plan Status* - As of 7/25/08, all 1R22 work orders have been reviewed by the Program Owners and challenged by the LRCRB. Markups of the work order that require correction have been provided to the dedicated planner and the work orders have been revised. A second review will be performed in August of 2008. All online work orders will receive a similar review by the end of August 2008.

## Objective #6 Supporting Analysis

A summary of the four programs that were reviewed follows:

### Fuel Oil Chemistry Program

For the Fuel Oil Chemistry Program a review of the enhancements to the program was performed. The wording of the enhancements was the same in Section 2.4 "Summary of Enhancements to NUREG 1800" of the PBD, A.5 Commitment Table - Item #22 in the SER and in Section 3.0.3.2.19 of the SER. It was then confirmed that the enhancement was properly referenced and implemented via the passport assignment and the procedure/PM mark-up and/or request.

### One Time Inspection Program

For the One Time Inspection Program a review was performed of the description of the program and the committed inspections. Because it is a new program there are no enhancements. The wording of the program description was review to assure it was the same in Section 2.1 "Description" of the PBD, A.5 Commitment Table - Item #24 in the SER and Section 3.0.3.2.21 of the SER. Additionally, the inspections in PP-09 "Inspection Sample Basis for the One-Time Inspection Aging Management Program" were verified lined up with the previous 3 documents. Finally, it was confirmed the inspections were properly referenced and implemented via the passport assignment and the procedure/PM mark-up and/or request.

### Fire Protection and Fire Water Programs

This review verified that commitments and enhancements in the SER and application were incorporated in the passport. Passport assignments were verified to contain procedure revisions (where applicable) and the work orders to reflect the inspections. Based on the review performed on the Fire Water and Fire Protection Systems, no deficiencies were noted in the passport assignment. The review showed that very little progress had been made in change program procedure and PM's.

### Structural Monitoring

The enhancements contained in the SER have been properly and fully translated to the draft implementing documents. One recommended improvement concerns inspection of components on Reactor Building Elevation -19'. The sump liners on Elevation -19' of the Reactor Building (1-6 and 1-7) are considered in scope and to be inspected per ER-OC-450, Attachment 6. Although it would be assumed the sump liner would be inspected as part of this elevation inspection, it is recommended, since this inspection may require special resources to implement, the inspection may be better implemented with a new PM. It could also be combined with an existing sump cleaning recurring task, if one exists at the correct frequency. The other sump liner within the scope of License Renewal requiring a structures monitoring inspection is the Drywell Sump liner. It will be inspected in accordance with a recurring task per Passport 330592.31.15.

## **OBJECTIVE #7**

Verify that the UFSAR Markups resulting from Configuration Changes accurately reflects License Renewal Commitments.

### **Objective #7 Reference And Measurement Criteria**

LS-AA-125, "CORRECTIVE ACTION PROGRAM (CAP) PROCEDURE"  
NRC Inspection Manual 71003

### **Objective #7 Methodology**

Review posting against UFSAR versus the Oyster Creek License Renewal SER

### **Objective #7 Conclusion**

Based on the poor findings (in objectives 1, 2, 3, 4, 5, 6, and 9) that illustrated that the License Renewal Program has not been sufficiently implemented, a decision was made the by the FASA Team Lead not review this objective. As a result a follow up review will be performed prior to the February 2009 NRC Audit (00779776 assignment 05).

### **Objective #7 Supporting Analysis**

Not Applicable

## OBJECTIVE #8

Verify that all License Conditions are on track for implementation

### Objective #8 Reference And Measurement Criteria

LS-AA-125, "CORRECTIVE ACTION PROGRAM (CAP) PROCEDURE" NRC Inspection Manual 71003

### Objective #8 Methodology

- 1) Compile the list of License Conditions
- 2) Review passport assignments to ensure implementation License Conditions is on track and will be in place by 3/1/09.
- 3) Interview the responsible Engineer to ensure they are fully aware of the importance of meeting the requirements.

### Objective #8 Conclusion

The Principal Reviewers for this Objective was Pete Tamburro

The review found all License Conditions for Licenser Renewal (a total of eight items) are on track except one described below.

The exception is the License Condition that states Oyster Creek will perform committed inspection prior to the Period of Extended Operations. This FASA is intended to determine if we are on track to meet this License Condition. This FASA has found three major related deficiencies: Inadequate Planning, Insufficient Program Ownership, and poor Work Order close outs. Therefore satisfying this License Condition is in jeopardy.

### Objective #8 Supporting Analysis

#### Reactor Vessel Integrated Surveillance Program

*"All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of American Society for Testing and Materials (ASTM) E 185-82 to the extent practicable for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion. Any changes to storage requirements must be approved by the NRC, as required by 10 CFR Part 50, Appendix H".*

**Status** – This item is on track. All necessary procedure changes have been made

"The Licensee shall perform full scope inspections (as defined in Appendix A of the license renewal safety evaluation report; dated March 20, 2007 and summarized in the UFSAR) of the drywell sand bed region every other refueling outage beginning in the refueling outage prior to the period of extended operations".

**Status** – This item was reviewed as part of objective 4 above and is on track. The required inspection are currently scoped and scheduled into the outage

### Drywell Trenches

*"The Licensee shall monitor the drywell trenches (as defined in Appendix A of the license renewal safety evaluation report; dated March 20, 2007) every refueling outage to identify and eliminate the sources of water and receive NRC approval prior to restoring the trenches to their original design configuration."*

**Status** – This item was reviewed as part of objective 4 above and is on track. The required inspection are currently scoped and scheduled into the outage

### Engineering Study of Refueling Cavity Liner

*"The Licensee shall perform an engineering study prior to the period of extended operation to identify options to eliminate or reduce the leakage in the OCGS refueling cavity liner"*

**Status** – This item was reviewed as part of objective 4 above and is on track. Several options that were been presented to PRC have been selected as the primary options. Estimates of the options are being developed

### Three Dimensional Finite-Element Analysis of Drywell Shell

*"The Licensee shall perform a 3-D (dimensional) finite-element analysis of the drywell shell and provide to the NRC staff a summary of the results prior to entering the period of extended operation."*

**Status** – This item was reviewed as part of objective 4 above and is on is on track. The completed calculations are expected to be complete by mid September.

### UFSAR Supplement Changes

*"The UFSAR supplement, as revised, submitted pursuant to 10 CFR54.21(d), shall be included in the next scheduled update to the UFSAR required by the 10 CFR 50.71(e)(4) following the issuance of this renewed operating license. Until that update is complete, AmerGen may make changes to the programs and activities described in the supplement without prior Commission approval, provided that AmerGen evaluates such changes pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section."*

**Status** – This is on track. A draft of the UFSAR supplement is ready. Implementation will be performed once the License is received and we approach the period of extended operation.

## License Renewal Commitments

*“The UFSAR supplement, as revised, describes certain future activities to be completed prior to and during the period of extended operation. AmerGen shall complete these activities in accordance with Appendix A of NUREG-1875, “Safety Evaluation Report Related to the License Renewal of Oyster Creek Generating Station”, dated March 2007, and shall notify the NRC in writing when implementation of those activities required prior to the period of extended operation are complete and can be verified by NRC inspection.”*

**Status:** This License Condition simply states that Oyster Creek will perform the activities that Oyster Creek committed during the License Renewal Process (as documented in the NRC SER). This FASA was intended to determine if we are on track to meet this License Condition. This FASA has found three major deficiencies. These are

- 1) Inadequate Planning: Repetitive Tasks and CM Type Work Orders are not being planned in a timely manner or with sufficient quality to ensure that compliance with the License Renewal commitments are achieved.
- 2) Insufficient Program Owner involvement and ownership of the individual programs: Some Program Owners have not sufficiently taken ownership of their programs. As a result there is the potential that not all Procedure Revisions and PM Revisions will be completed in time to meet the committed date of 3/1/09.
- 3) Completed Repetitive Tasks and CM Type Work Orders are not being rigorous closed out. Accurate and complete closeout documentation will be required to adequately demonstrate compliance with the License Renewal commitments.

A Recovery Plan has been put in place to ensure this License Condition is satisfied.

## Biological Opinion

Within thirty days from the issuance date of the renewed license, AmerGen shall comply with the terms and conditions of the Incidental Take Statement in the Biological Opinion in effect or as subsequently issued by the National Marine Fisheries Service regarding operation of OCNGS.

**Status** – This is on track.

**OBJECTIVE #9**

Verify that the Structural Monitoring Program is on track to implement all commitments

**Objective #9 Reference And Measurement Criteria**

LS-AA-125, "CORRECTIVE ACTION PROGRAM (CAP) PROCEDURE"

NRC Inspection RC Inspection Manual 71003

**Objective #9 Methodology**

- 1) Select at random at least 20 sub assignments related to the Structural Monitoring Program.
- 2) Review the Sub Assignments against the applicable Program Basis Document, the GALL Program, and the Oyster Creek License Renewal SER to ensure that committed inspections are being planned and implemented.
- 3) Verify the committed Program enhancements are being implemented.
- 4) Review the Sub Assignments Against Formal Transmitted Commitments

**Objective #9 Conclusion**

The Principal Reviewers for this Objective were Tom Quintenz

**Summary**

The Structural Monitoring Program is implemented at Oyster Creek by procedure ER-OC-450, "Structures Monitoring Program". The procedure has been developed based on industry standards and lessons learned from programs at other Exelon Plants. The License Renewal "A-5" table lists commitments for performing structural monitoring inspections in accordance with this procedure. The procedure requires 57 inspections of plant structures and components on regular frequencies (typically two or four years). It was decided, that although engineers perform the inspections, they would be implemented by PIMS repetitive tasks. This would ensure that all the inspections would be scheduled at the required frequencies and ensure that they would not be missed. In addition support craft could be coordinated. Finally, a summary of the inspections could be entered into the work order close out documentation. To support generation of these PM's, the Corporate License Renewal Team generated draft PM requests and provided them (as embedded documents in the passport assignment) to the Program Owner. The intent had been that the Program Owner would review and verify each draft request and then submit them to Work Control so that the PM could be created. The draft request in Passport provided guidance for the inspection of the structures in accordance with the governing procedure ER-OC-450, "Structures Monitoring Program".

The review found that in some cases recurring task were missing some elements contained in ER-OC-450.

Review of at least 20 PM's against the Passport Assignments (attachment 5) found instances of lack of completeness in the PM and lack of annotation. Follow up review of additional PM during the Recovery Phase in June and July found more examples where PM's were not proper formatted or annotated. (IRs 00779627 and 00779700)

## Objective #9 Supporting Analysis

The enhancements contained in the SER have been properly translated fully to the draft implementing documents. One recommended improvement concerns inspection of components on Reactor Building Elevation -19'. The sump liners on Elevation -19' of the Reactor Building (1-6 and 1-7) are considered in scope and to be inspected per ER-OC-450, Attachment 6. Although it would be assumed the sump liner would be inspected as part of this elevation inspection, it is recommended, since this inspection may require special resources to implement, the inspection may be better implemented with a new PM. It could also be combined with an existing sump cleaning recurring task, if one exists at the correct frequency. The other sump liner within the scope of License Renewal requiring a structures monitoring inspection is the Drywell Sump liner. It will be inspected in accordance with a recurring task per Passport 330592.31.15.

During the review completion documentation for the Structure Monitoring of Reactor Building 95'-Reactor Cavity Shield Wall, it was discovered cracking on the shield wall did not meet the acceptance criteria provided in ER-OC-450. As a result an engineering evaluation would be required. Improved documentation is needed to reference any previous evaluation in the inspection report, or an IR needs to be written to provide an engineering evaluation.

Follow up review (after the FASA) of Structural Monitoring Program Report 153-004 dated 9/24/07 shows that this crack was classified as "Acceptable with Deficiencies". ER-OC-450 attachment 3 page 1 allows for that three classification for structural conditions: "Unacceptable" (requires an IR), "Acceptable with Deficiencies" (IR's should be considered) and "Acceptable" (IR not required). Discussion with the Structural Monitoring Program Engineer indicates that an IR was considered during the inspection in 1997 and determined not to be necessary. This is entirely within the procedure requirements. The report does a poor job documenting the decision not to issue an IR.

No structures monitoring report could be found for the Seal Well. Other reports for 2007 were found, and none by title indicated it had been completed. A review of the completed outside Reactor Building inspection was reviewed to determine if it may have been performed during that inspection, but it was not. Based on the visibility of this structure and it being characterized as in "distress" by the NRC during the 2006 License Renewal Region 1 Inspection, it would be thought that such an inspection would have been on an accelerated basis, and conducted at an increased frequency. In addition, during interviews with personnel it is understood there is some question as to whether the Seal Well internal inspection will be conducted during the 1R22 Outage. For reference the SER in Section 3.5.2.2.2 provides the following: "The staff determined that the applicant's approach to aging management for the freshwater pump-house and the service water seal well is appropriate. The applicant will perform a baseline inspection prior to the period of extended operation and evaluate the results of the inspections to determine if there is a need to inspect the structures more frequently than every 4 years." The structures monitoring inspection of the Seal Well is required to be performed prior to the period of extended operation.

The Program Basis Document provides a convenient table to determine the implementing document for each structure. It is believed, since the PBD was not intended to be maintained current with the procedures and implementing documents after initial implementation, such a matrix would be beneficial to the Structures Program Owner, and any subsequent owners, should be included in the Structures Monitoring Procedure, ER-

OC-450. A schedule of completed and planned inspections would provide benefit to the understanding of the status of the program implementation at any time. This has proved beneficial for other programs (e.g. ISI, FAC)

## INTEGRATED SELF ASSESSMENT ANALYSIS

The team assessed the existing License Renewal Project at Oyster Creek to determine if commitments are on track for completion by the period of extended operation on 3/1/2009, and to determine Oyster Creek's readiness for the NRC inspections scheduled for the October 2008 outage. In addition this FASA reviewed Oyster Creek readiness for the overall NRC License Renewal inspections scheduled for February 2009. Several adverse trends or gaps were identified:

- 1) **Inadequate Planning:** Some Repetitive Tasks and CM Type Work Orders are not being planned in a timely manner or with sufficient quality to ensure that compliance with the License Renewal commitments are achieved.
- 2) **Insufficient Program Owner involvement and ownership of the individual programs:** Some Program Owners have not sufficiently taken ownership of their programs. As a result there is the potential that not all Procedure Revisions and PM Revisions will be completed in time to meet the committed date of 3/1/09.
- 3) **Completed Repetitive Tasks and CM Type Work Orders** are not being rigorously closed out. Accurate and complete closeout documentation is required to adequately demonstrate compliance with the License Renewal commitments.

These deficiencies or gaps appear to be a result of emergent planning activities associated with emergent planning activities associated with the Spring 2008 Maintenance Outage (1M16) and the Fall 2008 Refueling Outage (1R22) scoping issues in conjunction with the preparation for the INPO E&A Visit.

The above gaps were compared against the current License Renewal Hit Team Charter and associated roles and responsibilities. The following additional actions have been established and incorporate into a recovery plan to supplementation of the current HIT team and actions already in place.

### **Inadequate Planning**

#### **Actions to close GAP**

- 1) Assign a full time dedicated Project Manager to the License Renewal Team.

**Status** – A full Time Project Manger joined the team in early June.

- 2) Assign a full time dedicated planner to the License Renewal team to rework work package planning in a timely manner.

**Status** – A dedicated planner began work on this project in early June. To date the Planner has revised (at least once) and improved all 1R22 work orders and the majority of all online work orders scheduled up to March 1, 2009.

- 3) All 1R22 and online recurring tasks (RT's) and work orders (WO) shall be reviewed by the Program Owners. The Program owner will review the Work Orders to ensure that they are completely consistent with the commitment. The Program Owner will markup the inadequate Work Orders and provided them to the Planner. The Planner will revise each Work Order. The Program Owner will then organize all of the Planned RT's and WOs, as well as all applicable calculations, specifications and procedures into a Program Proof Book.

**Status** – As of 7/25/08 all 1R22 work orders have been reviewed by the Program Owners and challenged by the LRCRB. Markups of the work orders that required correction have been provided to the dedicated Planner and the work orders have been revised. A second review will be performed in August of 2008. All online work orders shall receive similar reviews prior to E-6. These reviews will be completed by the end of August.

- 4) Develop a License Renewal Program Challenge Review Board (LRCRB) to challenge the quality and rigor of each program Proof Books at different stages of readiness. The first priority will be to review all 1R22 Related Programs activities and then online Program activities.

**Status** – The License Renewal Program Challenge Review Board (LRCRB) was formed in early June and has met at least twice a week June and July. The Board has challenged all 1R22 related work orders and about 30% of the online work orders. The challenge of the remaining of the work orders is expected to be completed by the end of August.

## Inadequate Program Ownership

### Actions to close GAP

- 1) Create a centralized war room to track the progress of this recovery effort and maintain through 1R22 implementation.

**Status** – *A war room has been designated and will be manned starting August 1 2008.*

- 2) A large number of Procedures and RT's still require revision. The License Renewal Hit Team will be augmented by a full time Project Manager, a dedicated Planner, and two summer Engineering Interns. These individuals will be responsible for assisting the program owners, planners and procedure writers with completing the remaining approximate 100 Procedures, and the 150 recurring tasks that still require revision. All tasks will then be scheduled and tracked by the Project Manager.

**Status** – A dedicated Planner and Project Manager as well as three interns began working on the project in early June. As of 7/25/08 the Planner has revised (at least once) and improved all 1R22 work orders and the majority of all online work orders scheduled up to March 1, 2009. The interns have facilitated the approval of 51 procedure changes. The remaining procedures (49) are in the review cycle and will be approved in time to meet the License Condition.

- 3) The program owners will review all work orders associated with their program commitments and verify their accuracy and readiness for implementation.

**Status** – *The License Renewal Program Challenge Review Board (LRCRB) was formed in early June and has met at least twice per week. The Board has challenged all 1R22 related work orders and about 30% of the online work orders. The remaining of the work orders are expected to be complete by the end of August.*

- 5) Provide refresher orientation training that was previously given in 3Q07 and additional work group specific (EPRI) training to the Program Owners.

**Status** – Scheduled for later this Fall (779710-03)

- 6) Dedicate at a minimum, 1 day every two weeks of the Program Owners' time to work solely on License Renewal. The Program Owner will then be accountable for all calculations, procedures, RT, and Work Orders credited to Program. More time may be needed for certain programs as specified by the LRCRB.

**Status** – *As of July 7, 2008 all Engineer Personnel are dedicating 2 hours per day to work solely on License Renewal*

- 7) The Program Owners will also perform closeout reviews of all completed procedures, planned RT's and Work Orders. Completed copies of the Work Orders will be inserted into the program proof books.

**Status** – *As of July 7, 2008 all Engineer Personnel are dedicating 2 hours per day to work solely on License Renewal*

- 8) Periodic status updates, as scheduled by the Project Manager, will be provided to Lead License Renewal Engineer and challenged by the LRCRB.

**Status** – *Updates are provided at every LRCRB meeting, which meets at least twice a week, and at HIT Team meeting, which meets an additional once a week.*

## **Inadequate Work Closeout Documentation**

### **Actions to close GAP:**

- 1) Training will be given to personnel who close out Recurring Tasks (RT's) and CM Work Orders on the expectations and importance of rigorously completing closeout documentation.

**Status** – *Stand downs were completed with all Program Owners AND Maintenance and Shaw Management to communicate the importance of rigorously completing closeout documentation. The Project Manager has developed an integrated schedule for Licenser Renewal Related Task.*

This schedule is update every week. The close documentation of completed work from each week is reviewed and determined if the work is adequately documented and demonstrate compliance with the commitments. Rejected close outs are fed back to the craft for resolution.

- 2) The Project Manager will develop a work breakdown structure (WBS) and schedule for each program including all procedures, RT's and Work Orders associated with that program.

*Status – WBS have been created for all programs and proof books are under development*

- 3) This WBS will be used by the LRCRB to periodically challenge and assess the progress of the plan.

*Status – The LRCRB meets at least twice a week to challenge program proof books. To date all 1R22 work orders have been reviewed and about 30% of online work orders.*

A process has been implemented in which each Program Owner will review associated work orders and procedures to ensure they are properly written to perform the required work. The LRCRB will then challenge these reviews. These challenges were completed by the end of June for 1R22 work orders, and will be complete by the end of August for online work orders. High priority is given to online work orders within E6.

An integrated schedule has been developed which tracks every LR work order by workweek. The Project Team and Program Owner monitors this schedule, reviews the close outs, and determines if the close outs demonstrate compliance with the commitments. In adequate close outs will be corrected. The LRCRB will then challenge these close out reviews.

- 4) All schedule changes must be reviewed and approved by the Lead License Renewal Engineer.

*Status – Ongoing*

- 5) The Program Owner will review all close out documentation prior to the work orders being taken to complete and document final closure in the appropriate passport assignment tracking the commitment.

*Status – Ongoing*

- 6) The Program Owners are responsible for certifying that readiness of each proof book upon completion of all commitments and performing final closeout documentation of their passport actions.

*Status – Ongoing*



## FASA SELF-ASSESSMENT REPORT

### **Additional Analysis**

**Include in the Aggregate Summary Any Nuclear Safety, Industrial Safety, Technical Human Performance, Human Performance, Organizational, Training, Behavioral, Site-Wide or Fleet-Wide Issues Identified During the Execution and Analysis of this FASA:**

**YES OR NO**

AA1. Nuclear Safety: **NO**

a. Basis for Conclusion: *Describe the Analysis That Supports The Conclusion for this Area*

**Answer**

None of the discrepancies that were found indicate degradation of Plant Systems, Structures or Components. The noted deficiencies are: Inadequate Planning, Insufficient Program Ownership, and poor Work Order close out

AA2. Industrial Safety: **NO**

a. Basis for Conclusion: *Describe the Analysis That Supports The Conclusion for this Area*

**Answer**

None of the discrepancies that were found indicate degradations of Exelon's Industrial Safety Programs

AA3. Technical Human Performance: **Yes**

a. Basis for Conclusion: *Describe the Analysis That Supports The Conclusion for this Area*

**Answer**

Deficiencies found include: poor planning packages, poor PIMS and Passport Assignment close outs, and poor documentation of completed work.

AA4. Human Performance: **NO**

a. Basis for Conclusion: *Describe the Analysis That Supports The Conclusion for this Area*

**Answer**

No issues were identified with in which fieldwork was performed incorrectly.

AA5. Organizational Performance Gaps: **Yes**

a. Basis for Conclusion: *Describe the Analysis That Supports The Conclusion for this Area*

**Answer**

These deficiencies or gaps appear to be a result of high workloads and competing priorities, which have shifted the stations attention away from License Renewal Related Activities. These conflicts involved emergent planning activities associated with the Spring 2008 maintenance outage (1M16) and 1R22 scoping issues in conjunction with the preparation for the INPO E&A Visit.

AA6. Training Performance Gaps: **Yes**

a. Basis for Conclusion: *Describe the Analysis That Supports The Conclusion for this Area*

**Answer**

Some deficiencies were lack of training for Program Owner and lack of craft training with respect to commitment annotation.

AA7. Behavioral Performance Gaps: **No**

a. Basis for Conclusion: *Describe the Analysis That Supports The Conclusion for this Area*

**Answer**

There was no evidence that Program Owners, Management Personnel, Craft Personnel, and Project Team Members were not adhering to the Fundamentals.

AA8. Site-Wide or Fleet-Wide Issues: **No**

a. Basis for Conclusion: *Describe the Analysis That Supports The Conclusion for this Area*

**Answer**

Since Oyster Creek is in a unique situation. We will be the first Exelon Plant to enter the Period of Extended Operations. The License Renewal Process was implemented in a compressed scheduled, and Oyster Creek has received significant and strong intervener opposition. It was therefore concluded that these issues do not currently exist at other Exelon Plants. However, some of the lessons learned from this FASA may be used at other plants to avoid the similar issues.

AA9. Other: **NO**

a. Basis for Conclusion: *Describe the Analysis That Supports The Conclusion for any other identified area*

**Assessment Documentation**

**List Any Documents Reviewed During Assessment, Including Titles and Reference Numbers:**

NUREG-1875, "Safety Evaluation Report Related to the License Renewal of Oyster Creek Generating Station", dated March 2007

III. NRC Inspection Manual 71002 "Site Inspection for License Renewal"

NRC Inspection Manual 71003, "Post - Approval Site Inspection for License Renewal"

NUREG 1800"

550149 LOCAL UT READINGS AT ELEVATION 71' BELOW ACCEPTANCE CRITERIA

546932 SEPARATION OF EPOXY COATING AT DW SHIELD WALL IN SANDBED

547236 DEBRIS LOCATED IN BAYS 7 AND 11 SANDBED DRAIN LINES

546915 SMALL LEAKAGE IN THE REACTOR CAVITY TROUGH DRAIN LINE

547397 ELIMINATE THE SANDBED ACCESS TUNNEL SAND BAGS

546693 INCONSISTENT ACCEPTANCE CRITERIA IN DRYWELL INSPECTION SPECIFICATION

547025 TROUGH DRAIN UNDER REACTOR PEDESTAL IS NOT SLOPED CORRECTLY

545422 AS FOUND CONDITION OF DRYWELL LINER TRENCHES

550437 CONCRETE VOID FOUND IN TROUGH ADJACENT TO DRYWELL SUMP

00776151 HARDNESS TESTING REQUIREMENTS MISSING FROM WORK ORDER (LR)

00779627 LESS THAN ADEQUATE QUALITY OF LICENSE RENEWAL 1R22 WO

00779700 LESS THAN ADEQUATE COMMITMENT TRACEABILITY OF LR ONLINE RTS

00779710 ENHANCEMENT TO LICENSE RENEWAL PROJECT 6 PROGRAM OWNERS

00761152 WO ACTIVITY C2015999-01 CANNOT BE PERFORMED AS WRITTEN.

00764518 FOUR LICENSE RENEWAL WORK ORDERS HOOKED AT E5

00779776 LICENSE RENEWAL PM88816M NOT CLOSED OUT PROPERLY

00779710 ENHANCEMENT TO LICENSE RENEWAL PROJECT PROGRAM OWNERS



00755915 C2017037 WAS HOOKED AT E5 DUE TO INADEQUATE PLANNING

00760635 LESS THAN ADEQUATE ATTENDANCE - LIC RENEWAL HIT TEAM MEETING

LS-AA-125, "CORRECTIVE ACTION PROGRAM (CAP) PROCEDURE"

LS-AA-126-1001 "Focused Area Self-Assessments"

ER-OC-450, "Structural Monitoring Program"

LS-AA-1003, "NRC Inspection Preparation and Response"

Procedure WC-AA-101 ON-LINE WORK CONTROL PROCESS

IV.

V. Specification IS-328227-004, "Functional Requirements for Drywell Containment Vessel Thickness Measurements"

Submitted by: Pete O. Tamburro / July 30, 2008  
FASA Lead Date



ATTACHMENT 2
FASA SELF-ASSESSMENT REPORT TEMPLATE

Manager Report Approval Quality Check List

Yes or No

- FR1. All report sections, including Additional Analysis, completed by the approved plan due date? Yes.
FR2. Are report conclusions properly categorized? Yes
FR3. Does report list by title and number the documents reviewed during this FASA? Yes
FR4. Are individual IRs and/or RECs documented for each individual conclusion? Yes
FR5. Does the FASA report analysis properly support the FASA report conclusions? Yes
FR6. Was a site-wide issue identified in the additional analysis section of this report? No
FR7. Was a fleet-wide issue identified in the additional analysis section of this report? No
FR8. Was the original due date for the FASA report changed? Yes
FR9. Is a FASA Results Measurement Review (FRMR) assignment requested by management? No
FR10. Is a SARB or MRC required/requested to review or approve the report? Yes

Due Date of FASA Results Measurement Review (FRMR) assignment: N/A

Ensure PASSPORT assignments are created for FRMR and/or SARB activities per LS-AA-126-1001.

Approved by: Thomas G. Roddey / July 30, 2008
FASA Sponsoring Manager Date

Attachments

Attachments

- Attachment 1 - License Renewal Recovery Plan
Attachment 2 - License Renewal Related 1R22 Work Orders
Attachment 3 - Random Review of Online License Renewal Related Work Orders
Attachment 4 - License Renewal A.5 Master Commitment List
Attachment 5 - Random License Renewal Related Structural Monitoring Review
Attachment 6 - Integrated Schedule of all License Renewal Related Work Orders



Attachment 1



Attachment 2



Attachment 3



Attachment 4



Attachment 5



Attachment 6