

John Richmond

From: Calvin.Taylor@exeloncorp.com
Sent: Wednesday, October 15, 2008 3:58 PM
To: John Richmond
Subject: A.5 commitment table for OC - latest rev
Attachments: Final SER NUREG 1875 ML0708906370.pdf

<<Final SER NUREG 1875 ML0708906370>>

John, I talked to John Hufnagel and we sent letters in 2006 and 2007 regarding any newly identified SCCs--there were none. He is forwarding the letters to me.

I'll post them along with this document on the Certrec webpage under document requests.
Cal

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c/33

Received: from TWMS01.nrc.gov (148.184.200.145) by R1MS01.nrc.gov
(148.184.99.10) with Microsoft SMTP Server (TLS) id 8.1.291.1; Wed, 15 Oct
2008 15:58:31 -0400
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Received: from ([130.197.106.20]) by cccuniron1.exeloncorp.com with ESMTP id
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Oct 2008 14:57:46 -0500
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Subject: A.5 commitment table for OC - latest rev
Date: Wed, 15 Oct 2008 14:57:45 -0500
Message-ID:
<CEEAA8F52C444947A9FA014B7341D8A101425259@CCCMSXCH06.energy.power.corp>
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X-MS-TNEF-Correlator:
Thread-Topic: A.5 commitment table for OC - latest rev
Thread-Index: AckvAEqAmVeqrPT4TkOCVcSpnoiG8g==
From: <Calvin.Taylor@exeloncorp.com>
To: <john.richmond@nrc.gov>
Return-Path: Calvin.Taylor@exeloncorp.com
X-OriginalArrivalTime: 15 Oct 2008 19:57:46.0002 (UTC) FILETIME=[4AE86720:01C92F00]
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A.5 License Renewal Commitment List

ITEM NUMBER	COMMITMENT	UFSAR SUPPLEMENT LOCATION (LRA APP. A)	ENHANCEMENT OR IMPLEMENTATION SCHEDULE	SOURCE
1) ASME Section XI Inservice Inspection, Subsections IWB, IWC, and IWD	Existing program is credited. For the isolation condensers this program also includes enhancement activities identified in NUREG-1801, "Generic Aging Lessons Learned (GALL) Report," lines IV.C1-5 and IV.C1-6. These enhancement activities consist of: 1. Temperature and radioactivity monitoring of the shell-side (cooling) water, which will be implemented prior to the period of extended operation. 2. Eddy current testing of the tubes, with inspection (VT or UT) of the tubesheet and channel head, which will be performed during the first ten years of the extended period of operation.	A.1.1	Prior to the period of extended operation	Section B.1.1
2) Water Chemistry	Existing program is credited.	A.1.2	Ongoing	Section B.1.2
3) Reactor Head Closure Studs	Existing program is credited.	A.1.3	Ongoing	Section B.1.3
4) BWR Vessel ID Attachment Welds	Existing program is credited.	A.1.4	Ongoing	Section B.1.4
5) BWR Feedwater Nozzle	Existing program is credited. The Oyster Creek Feedwater Nozzle aging management program will be enhanced to implement the recommendations of the BWR Owners Group Licensing Topical Report General Electric (GE) NE-523-A71-0594-A, Revision 1.	A.1.5	Prior to the period of extended operation	Section B.1.5
6) BWR Control Rod Drive Return Line Nozzle	Existing program is credited.	A.1.6	Ongoing	Section B.1.6

Updated through AmerGen Letter RA-08-008 (January 14, 2008)

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7) BWR Stress Corrosion Cracking	Existing program is credited. The program will be enhanced to add the following requirement to the Line Specifications for all applicable license renewal systems: "All new and replacement SS materials be low-carbon grades of SS with carbon content limited to 0.035 wt. % maximum and ferrite content limited to 7.5% minimum."	A.1.7	Prior to the period of extended operation	Section B.1.7
8) BWR Penetrations	Existing program is credited.	A.1.8	Ongoing	Section B.1.8
9) BWR Vessel Internals	Existing program is credited. The program will be enhanced to include: <ol style="list-style-type: none"> 1. Inspection of the steam dryer in accordance with BWRVIP-139. 2. Inspection of the top guide as recommended in NUREG-1801. 3. Rolling of the CRD stub tubes as a permanent repair, once the NRC approves the ASME code case (Code Case N-730). If Code Case N-730 is not approved, Oyster Creek will develop a permanent ASME code repair plan. This permanent ASME code repair could be performed in accordance with BWRVIP-58-A, which has been approved by the NRC, or an alternate ASME code repair plan that would be submitted for prior NRC approval. If it is determined that the repair plan needs prior NRC approval, Oyster Creek will submit the repair plan two years before entering the period of extended operation. After the implementation of 	A.1.9	Prior to the period of extended operation	Section B.1.9

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	<p>an approved permanent roll repair, if there is a leak in a CRD stub tube, Oyster Creek will weld repair any leaking CRD stub tubes during the extended period of operation by implementing a permanent NRC approved ASME Code repair for leaking stub tubes that cannot be made leak tight using a roll expansion method, prior to restarting the plant.</p> <ol style="list-style-type: none"> 4. Oyster Creek will revise its Reactor internals program to also manage the aging effect of loss of material due to the aging mechanisms of pitting and crevice corrosion for Reactor Internals. 5. Oyster Creek will comply with all the applicable requirements that will be specified in the staff's final safety evaluations (SEs) of the BWRVIP-76 and BWRVIP-104 reports, and that it will complete all the license renewal action items in the final SE applicable to Oyster Creek, when they are issued. 6. The Reactor Internals program will be enhanced to include inspection for loss of material for the feedwater sparger, steam separator, RPV surveillance capsule holders and baffle plate. 7. The Reactor Internals Program will be enhanced to include and document the condition of the CRD and Feedwater Nozzle thermal sleeves to ensure future inspections look for thermal sleeve bypass flow. 8. AmerGen/Exelon is committed to following BWRVIP guidelines <ul style="list-style-type: none"> • Oyster Creek will inform the (NRC) staff of any 			

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Accelerated Corrosion				
12) Bolting Integrity	Existing program is credited. Program site implementing documents will be enhanced to include reference to EPRI TR-104213, Bolted Joint Maintenance & Application Guide, December 1995.	A.1.12	Prior to the period of extended operation	Section B.1.12
13) Open-Cycle Cooling Water System	Existing program is credited. The program will be enhanced as follows. Volumetric inspections, for piping that has been replaced, will be included at a minimum of 4 aboveground locations every 4 years. Inspection of heat exchangers will specify examination for loss of material due to general, pitting, crevice, galvanic and microbiologically influenced corrosion in the RBCCW, TBCCW and Containment Spray preventative maintenance tasks.	A.1.13	Prior to the period of extended operation	Section B.1.13
14) Closed-Cycle Cooling Water System	Existing program is credited.	A.1.14	Ongoing	Section B.1.14
15) Boraflex Monitoring	Existing program is credited.	A.1.15	Ongoing	Section B.1.15
16) Inspection of Overhead Heavy Load and Light Load (Related to Refueling) Handling Systems	Existing program is credited. The scope of the program will be increased to include additional hoists that have been identified as a potential Seismic II/I concern and are in scope for 10CFR54.4(a)(2). The program will also be enhanced to include inspections for rail wear, and loss of material due to corrosion, of cranes and hoists structural components, including the	A.1.16	Prior to the period of extended operation	Section B.1.16

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	<p>decision to not fully implement a BWRVIP guidelines approved by the staff within 45 days of the report</p> <ul style="list-style-type: none"> • Oyster Creek will notify the staff if changes are made to the RPV and its internals' programs that affect the implementation of the BWRVIP report. • Oyster Creek will submit any deviation from the existing flaw evaluation guidelines that are specified in the BWRVIP report. 			
10) Thermal Aging and Neutron Irradiation Embrittlement of Cast Austenitic Stainless Steel (CASS)	<p>Program is new. The program will include a component specific evaluation of the loss of fracture toughness in accordance with the criteria specified in NUREG-1801, XI.M13. At least one year prior to the period of extended operation, the following information will be submitted to the NRC: 1) the type and composition of CASS reactor internal components within the scope of license renewal; and 2) the results of evaluations performed to determine susceptibility to thermal aging and neutron irradiation embrittlement. For those components where loss of fracture toughness may affect the intended function of the component, a supplemental inspection will be performed. This inspection will ensure the integrity of the CASS components exposed to the high temperature and neutron fluence present in the reactor environment.</p>	A.1.10	Prior to the period of extended operation	Section B.1.10
11) Flow-	Existing program is credited.	A.1.11	Ongoing	Section B.1.11

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	bridge, the trolley, bolting, lifting devices, and the rail system.			
17) Compressed Air Monitoring	Existing program is credited.	A.1.17	Ongoing	Section B.1.17
18) BWR Reactor Water Cleanup System	Existing program is credited. Based on Generic Letter 89-10 containment isolation valve upgrades/enhancements, an effective Hydrogen Water Chemistry program, and the complete lack of cracking found during any of the RWCU piping weld inspections performed under Generic Letter 88-01, all inspection requirements for the portion of the RWCU System outboard of the second containment isolation valves have been eliminated.	A.1.18	Ongoing	Section B.1.18
19) Fire Protection	Existing program is credited. The program will be enhanced to include: <ol style="list-style-type: none"> 1. Specific fuel supply inspection criteria for fire pumps during tests. 2. Inspection of external surfaces of the halon and carbon dioxide fire suppression systems. 3. Additional inspection criteria for degradation of fire barrier walls, ceilings, and floors. 4. Clearance inspection of in-scope fire doors every two years. 	A.1.19	Prior to the period of extended operation	Section B.1.19
20) Fire Water System	Existing program is credited. The program will be enhanced to include: <ol style="list-style-type: none"> 1. Sprinkler head testing in accordance with NFPA 25, "Inspection, Testing and Maintenance of Water-Based Fire Protection Systems." Samples will be 	A.1.20	Prior to the period of extended operation	Section B.1.20

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	<p>submitted to a testing laboratory prior to being in service 50 years. This testing will be repeated at intervals not exceeding 10 years.</p> <ol style="list-style-type: none"> 2. Water sampling for the presence of MIC at an interval not to exceed 5 years. 3. Periodic non-intrusive wall thickness measurements of selected portions of the fire water system at an interval not to exceed every 10 years. 4. Visual inspection of the redundant fire water storage tank heater during tank internal inspections. 			
21) Aboveground Outdoor Tanks	<p>Program is new. The program will manage the corrosion of outdoor carbon steel and aluminum tanks. The program credits the application of paint, sealant, and coatings as a corrosion preventive measure and performs periodic visual inspections to monitor degradation of the paint, sealant, and coatings and any resulting metal degradation of carbon steel or of the unpainted aluminum tank. Bottom UTs are performed on tank bottoms supported by soil or concrete.</p>	A.1.21	Prior to the period of extended operation	Section B.1.21
22) Fuel Oil Chemistry	<p>Existing program is credited. The program will be enhanced to include:</p> <ol style="list-style-type: none"> 1. Routine analysis for particulate contamination using modified ASTM D 2276-00 Method A on fuel oil samples from the Emergency Diesel Generator Fuel Storage Tank, the Fire Pond Diesel Fuel 	A.1.22	Prior to the period of extended operation	Section B.1.22

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	<p>Tanks, and the Main Fuel Oil Tank.</p> <ol style="list-style-type: none"> 2. Analysis for particulate contamination using modified ASTM D 2276-00 Method A on new fuel oil. 3. Analysis for water and sediment using ASTM D 2709-96 for Fire Pond Diesel Fuel Tank bottom samples. 4. Analysis for bacteria to verify the effectiveness of biocide addition in the Emergency Diesel Generator Fuel Storage Tank, the Fire Pond Diesel Fuel Tanks, and the Main Fuel Oil Tank. 5. Periodic draining, cleaning, and inspection of the Fire Pond Diesel Fuel Tanks and the Main Fuel Oil Tank. Inspection activities will include the use of ultrasonic techniques for determining tank bottom thicknesses should there be any evidence of corrosion or pitting. 6. One time internal inspection of the Emergency Diesel Generator fuel oil day tanks prior to the period of extended operation to confirm the absence of aging effects. 			
23) Reactor Vessel Surveillance	Existing program is credited. The program will be enhanced to implement BWRVIP-116 "BWR Vessel and Internals Project Integrated Surveillance Program (ISP) Implementation for License Renewal," including the conditions specified by the NRC in its Safety Evaluation dated February 24, 2006.	A.1.23	Prior to the period of extended operation	Section B.1.23

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	<p>If the Oyster Creek standby capsule is removed from the RPV without the intent to test it, the capsule will be stored in a manner that maintains it in a condition which would permit its future use, including during the period of extended operation, if necessary.</p>			
24) One-Time Inspection	<p>Program is new. The One-Time Inspection program will provide reasonable assurance that an aging effect is not occurring, or that the aging effect is occurring slowly enough to not affect the component or structure intended function during the period of extended operation, and therefore will not require additional aging management. This program will be used for the following:</p> <ol style="list-style-type: none"> 1. To confirm crack initiation and growth due to stress corrosion cracking (SCC), intergranular stress corrosion cracking (IGSCC), or thermal and mechanical loading is not occurring in Class 1 piping less than four-inch nominal pipe size (NPS) exposed to reactor coolant. Inspections will include UT examination of 10% of the total small bore Class I butt welds and destructive or non-destructive examination of a single small bore Class I socket welded connection. 2. To confirm the effectiveness of the Water Chemistry program to manage the loss of material and crack initiation and growth aging effects. 	A.1.24	<p>Prior to the period of extended operation</p> <p>Perform prior to the period of extended operation</p>	Section B.1.24

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	low flow area in the Reactor Water Cleanup System, and two stainless steel pipe sections in a stagnant or low flow area in the Isolation Condenser System will be included in the one-time inspection samples for stress corrosion cracking.		program prior to period of extended operation	
25) Selective Leaching of Materials	Program is new. The Selective Leaching of Materials program will consist of inspections of a representative selection of components of the different susceptible materials to determine if loss of material due to selective leaching is occurring. Visual inspections will be consistent with ASME Section XI VT-1 visual inspection requirements and supplemented by hardness tests and other examinations of the selected set of components. If selective leaching is found, the condition will be evaluated to determine the need to expand inspections.	A.1.25	Prior to the period of extended operation	Section B.1.25
26) Buried Piping Inspection	Existing program is credited. The program will be enhanced to include: 1. Inspection of buried piping within ten years of entering the period of extended operation, unless an opportunistic inspection occurs within this ten-year period. The inspections will include at least one carbon steel, one aluminum and one cast iron pipe or component. In addition, for each of these materials, the locations selected for inspection will include at least one location where the pipe or component has not been previously replaced or	A.1.26	Prior to the period of extended operation	Section B.1.26

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	<p>the readings.</p> <ul style="list-style-type: none"> • Notify NRC within 48 hours of confirmation of the identified condition. • Conduct visual inspection of the external surface in the sand bed region in areas where any unexpected corrosion may be detected. • Perform engineering evaluation to assess the extent of condition and to determine if additional inspections are required to assure drywell integrity. • Perform operability determination and justification for operation until next inspection. <p>These actions will be completed prior to restart from the associated outage.</p> <p>Note: The frequency for the inspections described in commitment 1 (above) has been changed to every other refueling outage, in accordance with commitment 21 of the IWE Inspection Program.</p> <p>2. A strippable coating will be applied to the reactor cavity liner to prevent water intrusion into the gap between the drywell shield wall and the drywell shell during periods when the reactor cavity is flooded.</p> <p>3. The reactor cavity seal leakage trough drains and the drywell sand bed region drains will be monitored for leakage.</p>		<p>Prior to filling the reactor cavity with water</p> <p>Periodically</p>	

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	<p>recoated, if any such locations remain.</p> <ol style="list-style-type: none"> 2. Fire protection components in the scope of the program. 3. Piping located inside the vault in the scope of the program. The vault is considered a manhole that is located between the reactor building and the exhaust tunnel. 			
27) ASME Section XI, Subsection IWE	<p>Existing program is credited. The program will be enhanced to include:</p> <ol style="list-style-type: none"> 1. Ultrasonic Testing (UT) thickness measurements of the drywell shell in the sand bed region will be performed on a frequency of every 10 years , except that the initial inspection will occur prior to the period of extended operation and the subsequent inspection will occur two refueling outages after the initial inspection, to provide early confirmation that corrosion has been arrested. The UT measurements will be taken from the inside of the drywell at the same locations where UT measurements were performed in 1996. The inspection results will be compared to previous results. Statistically significant deviations from the 1992, 1994, and 1996 UT results will result in corrective actions that include the following: <ul style="list-style-type: none"> • Perform additional UT measurements to confirm 	A.1.27	<p>Prior to the period of extended operation</p> <p>Prior to the period of extended operation (completed during 2006 refueling outage); then every other refueling outage thereafter</p>	Section B.1.27

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	<p>outage:</p> <ul style="list-style-type: none"> • Inspection of the drywell shell coating and moisture barrier (seal) in the affected bays in the sand bed region • UTs of the upper drywell region consistent with the existing program • UTs will be performed on any areas in the sand bed region where visual inspection indicates the coating is damaged and corrosion has occurred • UT results will be evaluated per the existing program <p>Any degraded coating or moisture barrier will be repaired.</p> <p>4. Prior to the period of extended operation, AmerGen will perform additional visual inspections of the epoxy coating that was applied to the exterior surface of the Drywell shell in the sand bed region, such that the coated surfaces in all 10 Drywell bays will have been inspected at least once. In addition, the Inservice Inspection (ISI) Program will be enhanced to require inspection of 100% of the epoxy coating every 10 years during the period of extended operation. These inspections will be performed in accordance with ASME Section XI,</p>		<p>Prior to the period of extended operation (completed during 2006 refueling outage); then every other refueling outage thereafter</p>	

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	<p>Subsection IWE. Performance of the inspections will be staggered such that at least three bays will be examined every other refueling outage.</p> <p>Note: The scope and frequency for the inspections described in commitment 4 (above) has been changed to all 10 bays every other refueling outage, in accordance with commitment 21 of the IWE Inspection Program.</p> <p>5. A visual examination of the drywell shell in the drywell floor inspection access trenches will be performed to assure that the drywell shell remains intact. If degradation is identified, the drywell shell condition will be evaluated and corrective actions taken as necessary. In addition, one-time ultrasonic testing (UT) measurements will be taken to confirm the adequacy of the shell thickness in these areas. Beyond these examinations, these surfaces will either be inspected as part of the scope of the ASME Section XI, Subsection IWE inspection program or they will be restored to the original design configuration using concrete or other suitable material to prevent moisture collection in these areas.</p> <p>Note: Commitment 5 (above) is supplemented by commitments 16 and 20 of the IWE Inspection</p>		<p>Prior to the period of extended operation (completed during 2006 refueling outage)</p>	

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	<p>Program.</p> <p>6. The coating inside the torus will be visually inspected in accordance with ASME Section XI, Subsection IWE, per the Protective Coatings Program. The scope of each of these inspections will include the wetted area of all 20 torus bays. Should the current torus coating system be replaced, the inspection frequency and scope will, as a minimum, meet the requirements of ASME Section XI, Subsection IWE.</p> <p>7. AmerGen will conduct UT thickness measurements in the upper regions of the drywell shell every other refueling outage at the same locations as are currently measured.</p> <p>8. The IWE Program will be credited for managing corrosion in the Torus Vent Line and Vent Header exposed to an Indoor Air (External) environment.</p> <p>9. During the next UT inspections to be performed on the drywell sand bed region (reference AmerGen 4/4/06 letter to NRC), an attempt will be made to locate and evaluate some of the locally thinned areas identified in the 1992 inspection from the</p>		<p>Every other refueling outage prior to (completed during 2006 refueling outage) and during the period of extended operation</p> <p>Every other refueling outage prior to (completed during 2006 refueling outage) and during the period of extended operation</p> <p>Prior to the period of extended operation (completed during 2006 refueling outage); then every</p>	

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	<p>exterior of the drywell. This testing will be performed using the latest UT methodology with existing shell paint in place. The UT thickness measurements for these locally thinned areas may be taken from either inside the drywell or outside the drywell (sand bed region) to limit radiation dose to as low as reasonably achievable (ALARA).</p> <p>Note: Commitment 9 (above) is supplemented by commitments 14 and 21 of the IWE Inspection Program.</p> <p>10. AmerGen will conduct UT thickness measurements on the 0.770 inch thick plate at the junction between the 0.770 inch thick and 1.154 inch thick plates, in the lower portion of the spherical region of the drywell shell. These measurements will be taken at four locations using the 6"x6" grid. The specific locations to be selected will consider previous operational experience (i.e., will be biased toward areas that have had corrosion or leakage). These measurements will be performed prior to the period of extended operation and repeated at the second refueling outage after the initial inspection, at the same location. If corrosion in this transition area is greater than areas monitored in the upper drywell, UT inspections in the transition area will be performed on the same frequency as those in the</p>		<p>other refueling outage thereafter</p> <p>Prior to the period of extended operation and two refueling outages later</p>	

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	<p>commitment 21 of the IWE Inspection Program.</p> <p>13. The reactor cavity concrete trough drain will be verified to be clear from blockage once per refueling cycle. Any identified issues will be addressed via the corrective action process.</p> <p>14. UT thickness measurements will be taken from outside the drywell in the sandbed region during the 2008 refueling outage on the locally thinned areas examined during the October 2006 refueling outage. The locally thinned areas are distributed both vertically and around the perimeter of the drywell in all ten bays such that potential corrosion of the drywell shell would be detected.</p> <p>Note: The frequency for the inspections described in commitment 14 (above) has been changed to every other refueling outage, in accordance with commitment 21 of the IWE Inspection Program.</p> <p>15. Starting in 2010, drywell shell UT thickness measurements will be taken from outside the drywell in the sandbed region in two bays per outage, such that inspections will be performed in all 10 bays within a 10-year period. The two bays with the most locally thinned areas (bay #1 and bay #13) will be</p>		<p>Once per refueling cycle</p> <p>During the 2008 refueling outage and every other refueling outage thereafter</p> <p>All 10 bays will be inspected during the 2008 refueling outage and every other refueling outage thereafter.</p>	

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	<p>upper drywell (every other refueling outage).</p> <p>11. AmerGen will conduct UT thickness measurements in the drywell shell "knuckle" area, on the 0.640 inch thick plate above the weld to the 2.625 inch thick plate. These measurements will be taken at four locations using the 6"x6" grid. The specific locations to be selected will consider previous operational experience (i.e., will be biased toward areas that have had corrosion or leakage). These measurements will be performed prior to the period of extended operation and repeated at the second refueling outage after the initial inspection, at the same location. If corrosion in this transition area is greater than areas monitored in the upper drywell, UT inspections in the transition area will be performed on the same frequency as those in the upper drywell (every other refueling outage).</p> <p>12. When the sand bed region drywell shell coating inspection is performed (item 27, commitments 4 and 21), the seal at the junction between the sand bed region concrete and the embedded drywell shell will be inspected per the Protective Coatings Program.</p> <p>Note: The frequency for the inspections described in commitment 12 (above) has been changed to every other refueling outage, in accordance with</p>		<p>Prior to the period of extended operation and two refueling outages later</p> <p>Prior to the period of extended operation (completed during 2006 refueling outage); then every other refueling outage thereafter</p>	

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	<p>inspected in 2010. If the UT examinations yield unacceptable results, then the locally thinned areas in all 10 bays will be inspected in the refueling outage that the unacceptable results are identified.</p> <p>Note: The scope and frequency for the inspections described in commitment 15 (above) have been changed to all 10 bays every other refueling outage, in accordance with commitment 21 of the IWE Inspection Program.</p> <p>16. Perform visual inspection of the drywell shell inside the trenches in bay #5 and bay #17 and take UT measurements inside these trenches in 2008 at the same locations examined in 2006. Repeat (both the UT and visual) inspections at refueling outages during the period of extended operation until the trenches are restored to the original design configuration using concrete or other suitable material to prevent moisture collection in these areas.</p> <p>Note: Commitment 16 (above) is supplemented by commitment 20 of the IWE Inspection Program.</p> <p>17. Perform visual inspection of the moisture barrier between the drywell shell and the concrete</p>		<p>During the 2008 refueling outage and subsequent refueling outages until trenches are restored to original configuration</p> <p>In accordance with ASME Section XI,</p>	

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	<p>floor/curb, installed inside the drywell during the October 2006 refueling outage, in accordance with ASME Section XI, Subsection IWE during the period of extended operation.</p> <p>18. AmerGen will perform a 3-D finite element structural analysis of the primary containment drywell shell using modern methods and current drywell shell thickness data to better quantify the margin that exists above the Code required minimum for buckling. The analysis will include sensitivity studies to determine the degree to which uncertainties in the size of thinned areas affect Code margins. If the analysis determines that the drywell shell does not meet Code-specified safety factors (i.e., 2.0 for the refueling load case and 1.67 for the post-accident load case), the NRC will be notified in accordance with 10 CFR 50 requirements.</p> <p>19. AmerGen will perform an engineering study to investigate cost-effective replacement or repair options to eliminate or reduce reactor cavity liner leakage.</p> <p>20. AmerGen is committed to perform visual and UT inspections of the drywell shell in the inspection trenches in drywell bays 5 and 17 during the Oyster Creek 2008 refueling outage (see commitment 16 of</p>		<p>Subsection IWE</p> <p>Prior to the period of extended operation</p> <p>Prior to the period of extended operation</p> <p>Every refueling outage until trenches are restored</p>	

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	<p>AmerGen's IWE Program (item 27), made in its letter 2130-06-20426). AmerGen will extend this commitment and also perform these inspections during the 2010 refueling outage. In addition, AmerGen will monitor the two trenches for the presence of water during refueling outages. Visual and UT inspections of the shell within the trenches will continue to be performed until no water is identified in the trenches for two consecutive refueling outages, at which time the trenches will be restored to their original design configuration (e.g., refilled with concrete) to minimize the risk of future corrosion.</p> <p>21. Perform the full scope of drywell sand bed region inspections prior to the period of extended operation and then every other refueling outage thereafter. The full scope is defined as:</p> <ul style="list-style-type: none"> • UT measurements from inside the drywell (commitment 1) • Visual inspections of the drywell external shell epoxy coating in all 10 bays (commitment 4) • Inspection of the seal at the junction between the sand bed region concrete and the embedded drywell shell (commitment 12) • UT measurements at the external locally thinned areas inspected in 2006 (commitments 9 and 14) 		<p>During the 2008 refueling outage and every other refueling outage thereafter. If the analysis being performed under commitment 18 above establishes increased margin, or if ongoing inspections continue to demonstrate that drywell shell corrosion has been</p>	

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	22. Verify that the sand bed drain lines are clear from obstruction.		sufficiently arrested, the period between inspections may be increased to minimize personnel radiation exposure. Every other refueling outage	
28) ASME Section XI, Subsection IWF	Existing program is credited. The scope of the program will be enhanced to include additional MC supports, and require inspection of the underwater supports for loss of material due to corrosion and loss of mechanical function and loss of preload on bolting by inspecting for missing, detached, or loosened bolts.	A.1.28	Prior to the period of extended operation	Section B.1.28
29) 10 CFR Part 50, Appendix J	Existing program is credited.	A.1.29	Ongoing	Section B.1.29
30) Masonry Wall Program	Existing program is credited. The Masonry Wall Program is part of the Structures Monitoring Program.	A.1.30	Ongoing	Section B.1.30
31) Structures Monitoring Program	Existing program is credited. The program includes elements of the Masonry Wall Program and the RG 1.127, Inspection of Water-Control Structures Associated With Nuclear Power Plants aging management program. The Structures Monitoring Program will be enhanced to include:	A.1.31	Prior to the period of extended operation	Section B.1.31

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	<ol style="list-style-type: none"> 1. Buildings, structural components and commodities that are not in scope of maintenance rule but have been determined to be in the scope of license renewal. These include miscellaneous platforms, flood and secondary containment doors, penetration seals, sump liners, structural seals, and anchors and embedment. 2. Component supports, other than those in scope of ASME XI, Subsection IWF. 3. Inspection of Oyster Creek external surfaces of mechanical components that are not covered by other programs, HVAC duct, damper housings, and HVAC closure bolting. The scope of this enhancement includes the Reactor Building Closed Cooling Water System carbon steel piping and piping elements located inside the Drywell since operating experience has shown an exposure to an environment conducive to corrosion during outages. Also, to confirm that there is no significant age related degradation occurring on the external carbon steel surfaces of the feedwater and main steam system located inside containment, one-time visual inspections of feedwater and main steam system piping inside the containment for loss of material due to corrosion will be performed. Inspection and acceptance criteria of the external surfaces will be the same as those specified for structural steel components and structural bolting. 			

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	<p>4. The visual inspection of insulated surfaces will require the removal of insulation. Removal of insulation will be on a sampling basis that bounds insulation material type, susceptibility of insulated piping or component material to potential degradations that could result from being in contact with insulation, and system operating temperature.</p> <p>5. Inspection of electrical panels and racks, junction boxes, instrument racks and panels, cable trays, offsite power structural components and their foundations, and anchorage.</p> <p>6. Periodic sampling, testing, and analysis of ground water to confirm that the environment remains non-aggressive for buried reinforced concrete.</p> <p>7. Periodic inspection of components submerged in salt water (Intake Structure and Canal, Dilution structure) and in the water of the fire pond dam, including trash racks at the Intake Structure and Canal.</p> <p>8. Inspection of penetration seals, structural seals, and other elastomers for change in material properties.</p> <p>9. Inspection of vibration isolators, associated with component supports other than those covered by ASME XI, Subsection IWF, for reduction or loss of isolation function.</p> <p>10. The current inspection criteria will be revised to add loss of material, due to corrosion for steel</p>			

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	<p>components, and change in material properties, due to leaching of calcium hydroxide and aggressive chemical attack for reinforced concrete. Wooden piles and sheeting will be inspected for loss of material and change in material properties.</p> <p>11. Periodic inspection of the Fire Pond Dam for loss of material and loss of form.</p> <p>12. Inspection of Station Blackout System structures, structural components, and phase bus enclosure assemblies.</p> <p>13. Inspection of Forked River Combustion Turbine power plant external surfaces of mechanical components that are not covered by other programs, HVAC duct, damper housings, and HVAC closure bolting. Inspection and acceptance criteria of the external surfaces will be the same as those specified for structural steel components and structural bolting.</p> <p>14. The program will be enhanced to include inspection of Meteorological Tower Structures. Inspection and acceptance criteria will be the same as those specified for other structures in the scope of the program.</p> <p>15. The program will be enhanced to include inspection of exterior surfaces of piping and piping components associated with the Radio Communications system, located at the meteorological tower site, for loss of material due to</p>			

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	<p>corrosion. Inspection and acceptance criteria will be the same as those specified for other external surfaces of mechanical components.</p> <p>16. The program will be enhanced to require visual inspection of external surfaces of mechanical steel components that are not covered by other programs for leakage from or onto external surfaces, worn, flaking, or oxide-coated surfaces, corrosion stains on thermal insulation, and protective coating degradation (cracking and flaking).</p> <p>17. The program will be enhanced to require performing a baseline inspection of submerged water control structures prior to entering the period of extended operation. A second inspection will be performed six years after this baseline inspection and a third inspection eight years after the second inspection. After each inspection, an evaluation will be performed to determine if identified degradation warrant more frequent inspections or corrective actions.</p>			
32) RG 1.127, Inspection of Water-Control Structures Associated with Nuclear Power Plants	<p>Existing program is credited. The program is part of the Structures Monitoring Program. The RG 1.127, Inspection of Water-Control Structures Associated with Nuclear Power Plants aging management program will be enhanced to include:</p> <p>1. Monitoring of submerged structural components</p>	A.1.32	Prior to the period of extended operation	Section B.1.32

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	<p>and trash racks.</p> <ol style="list-style-type: none"> 2. Periodic inspection of components submerged in salt water (Intake Structure and Canal, Dilution structure) and in the water of the fire pond dam. 3. Periodic inspection of the Fire Pond Dam for loss of material and loss of form. 4. Inspection of steel components for loss of material, due to corrosion. 5. Inspection of wooden piles and sheeting for loss of material and change in material properties. 6. Parameters monitored will be enhanced to include change in material properties, due to leaching of calcium hydroxide, and aggressive chemical attack. <p>Submerged water control structures will be inspected under the Structural Monitoring Program as follows: A baseline inspection of submerged water control structures will be performed prior to entering the period of extended operation. A second inspection will be performed six years after this baseline inspection and a third inspection eight years after the second inspection. After each inspection, an evaluation will be performed to determine if identified degradation warrants more frequent inspection or corrective actions.</p>			
33) Protective Coating Monitoring and Maintenance Program	Existing program is credited. The Oyster Creek Protective Coating Monitoring and Maintenance Program provides for aging management of Service Level I coatings inside the primary containment and	A.1.33	Prior to the period of extended operation	Section B.1.33

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	<p>Service Level II coatings for the external drywell shell in the area of the sand bed region. The program will be enhanced to include:</p> <ol style="list-style-type: none"> 1. The inspection of Service Level I and Service Level II protective coatings that are credited for mitigating corrosion on interior surfaces of the Torus shell and vent system, and, on exterior surfaces of the Drywell shell in the area of the sandbed region, will be consistent with ASME Section XI, Subsection IWE requirements. 2. Additional visual inspections of the epoxy coating that was applied to the exterior surface of the drywell shell in the sand bed region, such that the coated surfaces in all 10 drywell bays will have been inspected at least once prior to entering the period of extended operation. 3. The inspection of 100% of the sandbed region epoxy coating every 10 years during the period of extended operation. Inspections will be staggered such that at least three bays will be examined every other refueling outage. 4. The inspection of all 20 torus bays at a frequency of every other refueling outage for the current coating system. Should the current coating system be replaced, the inspection frequency and scope will be re-evaluated. Inspection scope will, as a minimum, meet the requirements of ASME Section XI, Subsection IWE. 			

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34) Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements	Program is new. The program will be used to manage aging of non-EQ cables and connections during the period of extended operation. A representative sample of accessible cables and connections located in adverse localized environments will be visually inspected at least once every 10 years for indications of accelerated insulation aging.	A.1.34	Prior to the period of extended operation	Section B.1.34
35) Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Used in Instrumentation Circuits	Existing program is credited. The program will be enhanced to include: <ol style="list-style-type: none"> 1. A review of the Reactor Building High Radiation Monitoring and Air Ejector Offgas Radiation Monitoring system calibration results for cable aging degradation before the period of extended operation and every 10 years thereafter. 2. A review of the LPRM/APRM and IRM system cable testing results for cable aging degradation before the period of extended operation and every 10 years thereafter. 	A.1.35	Prior to the period of extended operation	Section B.1.35
36) Inaccessible Medium Voltage Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements	Program is new. The program manages the aging of inaccessible medium-voltage cables (2.4 kV, 4.16 kV, 13.8 kV and 34.5 kV) that feed equipment performing license renewal intended functions. These cables may at times be exposed to moisture and are subjected to system voltage for more than 25% of the time. Manholes, conduits and sumps associated with these cables will be inspected for water collection every 2 years and drained as required. In addition, the cable	A.1.36	Prior to the period of extended operation	Section B.1.36

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	<p>circuits will be tested using a proven test for detecting deterioration of the insulation system due to wetting, such as power factor or partial discharge, as described in EPRI TR-103834-P1-2, or other testing that is state-of-the-art at the time the test is performed. The cable circuits will be tested at an initial frequency of six years, after which the frequency will be evaluated and adjusted, based on test results; the period between tests shall not exceed 10 years. Results of cable tests will be trended. Trending will occur at the same frequency as cable testing. Inclusion of the 13.8 kV system circuits in this program reflects the scope expansion of the Station Blackout System electrical commodities. Inclusion of the 34.5 kV system circuits in this program reflects the scope enhancement for reconciliation of this aging management program from the draft January 2005 GALL to the approved September 2005 GALL.</p>			
<p>37) Periodic Testing of Containment Spray Nozzles</p>	<p>Existing plant specific program is credited. Carbon steel piping upstream of the drywell and torus spray nozzles is subject to possible general corrosion. The periodic flow tests of drywell and torus spray nozzles address a concern that rust from the possible general corrosion may plug the spray nozzles. These periodic tests verify that the drywell and torus spray nozzles are free from plugging that could result from corrosion product buildup from upstream sources.</p>	<p>A.2.1</p>	<p>Ongoing</p>	<p>Section B.2.1</p>

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38) Lubricating Oil Monitoring Activities	<p>Existing plant specific program is credited. The program manages loss of material, cracking, and fouling in lubricating oil heat exchangers, systems, and components in the scope of license renewal by monitoring physical and chemical properties in lubricating oil. Sampling, testing, and monitoring verify lubricating oil properties. Oil analysis permits identification of specific wear mechanisms, contamination, and oil degradation within operating machinery, and components of systems in scope for license renewal. The program will be enhanced to add surveillance for verification of flow through the Fire Protection System diesel driven pump gearbox lubricating oil cooler.</p> <p>AmerGen will enhance Oyster Creek Program B.2.2 to include sampling and measurement of flash point of diesel engine lubricating oil to detect contamination of lubricating oil by fuel oil.</p>	A.2.2	Prior to the period of extended operation	Section B.2.2
39) Generator Stator Water Chemistry Activities	Existing plant specific program is credited. The program manages loss of material aging effects by monitoring and controlling water chemistry. Generator stator water chemistry control maintains high purity water in accordance with General Electric and EPRI guidelines for stator cooling water systems.	A.2.3	Ongoing	Section B.2.3
40) Periodic Inspection of	Existing plant specific program is credited. The program includes internal and external surface	A.2.4	Prior to the period of extended operation	Section B.2.4

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Ventilation Systems	inspections of ventilation system components for indications of loss of material, such as rust, corrosion and pitting. Heat transfer surfaces are inspected for fouling. Flexible connection and door seal elastomer materials are inspected for detrimental changes in material properties, as evidenced by cracking, perforations in the material or leakage. The program will be enhanced to include duct exposed to soil, instrument piping and valves, restricting orifices and flow elements, and thermowells. The activities will also be enhanced to include inspection guidance for detection of the applicable aging effects.			
41) Periodic Inspection Program	Plant specific program is new. The program includes systems in the scope of license renewal that require periodic monitoring of aging effects, and are not covered by other existing periodic monitoring programs. Activities consist of a periodic inspection of selected systems and components to verify integrity and confirm the absence of identified aging effects. The inspections are condition monitoring examinations intended to assure that existing environmental conditions are not causing material degradation that could result in a loss of system intended functions.	A.2.5	Prior to the period of extended operation	Section B.2.5
42) Wooden Utility Pole Program	Plant specific program is new. The program is used to manage loss of material and change of material properties for wooden utility poles in or near the Oyster Creek Substation that provide structural support for the conductors connecting the Offsite Power System and	A.2.6	Prior to the period of extended operation	Section B.2.6

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	the 480/208/120V Utility (JCP&L) Non-Vital Power System to the Oyster Creek plant. The program consists of inspection on a 10-year interval by a qualified inspector. The wooden poles are inspected for loss of material due to ant, insect, and moisture damage and for change in material properties due to moisture damage.			
43) Periodic Monitoring of Combustion Turbine Power Plant - Electrical	A new plant specific program is credited. The program will be used in conjunction with the existing Structures Monitoring Program, the new Inaccessible Medium Voltage Cables Not Subject to 10CFR50.49 Environmental Qualification Requirements program and the new Electrical Cable Connections Not Subject to 10CFR 50.49 Environmental Qualification Requirements program to manage aging effects for the electrical commodities that support FRCT operation. The Program consists of visual inspections of accessible electrical cables and connections exposed in enclosures, pits, manholes and pipe trench; visual inspection for water collection in manholes, pits, and trenches, located on the FRCT site, for inaccessible medium voltage cables; and visual inspection of accessible phase bus and connections and phase bus insulators/supports; and visual inspection of high voltage insulators above 34.5 kV for salt build-up. The new program will be performed on a twice per year frequency for high voltage insulator inspections; on a 2-year interval for manhole, pit and trench inspections, on	A.1.37	Prior to the period of extended operation	Section B.1.37

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	a 5-year frequency for phase bus inspections, and on a 10-year interval for cable and connection inspections.			
44) Metal Fatigue of Reactor Coolant Pressure Boundary	<p>Existing program is credited. The program will be enhanced to use the EPRI-licensed FatiguePro cycle counting and fatigue usage factor tracking computer program. The computer program provides for calculation of stress cycles and fatigue usage factors from operating cycles, automated counting of fatigue stress cycles and automated calculation and tracking of fatigue cumulative usage factors. The program will also be enhanced to provide for calculating and tracking of the cumulative usage factors for bounding locations for the reactor pressure vessel, Class I piping, the torus, torus vents, torus attached piping and penetrations, and the isolation condenser.</p> <p>AmerGen will revise the Oyster Creek UFSAR to update the current licensing basis to reflect that a cumulative usage factor of 1.0 will be used in fatigue analysis for reactor coolant pressure boundary components, as endorsed by the NRC in 10 CFR 50.55a.</p> <p>Certification by a Professional Engineer of the reactor vessel design specification and design reports prepared for the fatigue activities associated with the Oyster Creek License Renewal Application will be performed.</p>	A.3.1	<p>Prior to the period of extended operation</p> <p>Prior to the period of extended operation</p> <p>Prior to the period of extended operation</p>	Section B.3.1

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45) Environmental Qualification (EQ) Program	Existing program is credited. EQ components that cannot be qualified for 60-years will be replaced before the end of their qualified life.	A.3.2	Ongoing	Section B.3.2
46) New P-T curves	Revised pressure-temperature (P-T) limits for a 60-year licensed operating life have been prepared and will be submitted to the NRC for approval.	A.4.1.3	Prior to the period of extended operation	Section 4.2.3
47) Circumferential Weld Exam Relief	Apply for extension Reactor Vessel Circumferential Weld Examination Relief for 60-year operation	A.4.1.4	Prior to the period of extended operation	Section 4.2.4
48) Axial weld Exam Relief	Apply for extension Reactor Vessel Axial Weld Examination Relief for 60-year operation	A.4.1.5	Prior to the period of extended operation	Section 4.2.5
49) Measure Drywell wall thickness	Drywell wall thickness will be monitored to ensure minimum wall thickness is maintained. The ASME Section XI, Subsection IWE aging management program, will manage the aging effects.	A.4.5.2	Ongoing	Section 4.7.2
50) Fluence Methodology	The NRC has issued a SER for RAMA approving RAMA for reactor vessel fluence calculations. Oyster Creek will comply with the applicable requirements of the SER.	A.4.1.1	Prior to the period of extended operation.	Section 4.2.1
51) Bolting Integrity - FRCT	The Bolting Integrity - FRCT aging management program is a new program that provides for condition monitoring of bolts and bolted joints within the scope of license renewal at the Forked River Combustion Turbine power plant. This program is based on the General Electric recommendations for proper bolting material selection, lubrication, preload application, installation and maintenance associated with the combustion turbine units and auxiliary systems. The program also includes periodic walkdown inspections	A.1.12A	Prior to the period of extended operation	Section B.1.12A

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	<p>for bolting degradation or bolted joint leakage at a frequency of at least once every four years. The program manages the loss of material and loss of preload aging effects. This new program will be implemented prior to entering the period of extended operation.</p>			
<p>52) Closed-Cycle Cooling Water System - FRCT</p>	<p>The Closed-Cycle Cooling Water System – FRCT aging management program is a new program that manages aging of piping, piping components, piping elements and heat exchangers that are included in the scope of license renewal for loss of material and cracking, and are exposed to a closed cooling water environment at the Forked River Combustion Turbine power plant. The Closed-Cycle Cooling Water System – FRCT aging management program relies on preventive measures to minimize corrosion by maintaining water chemistry control parameters and by performing system monitoring and maintenance inspection activities to confirm that the aging effects are adequately managed. Chemistry control, performance monitoring and inspection activities are based on industry-recognized guidelines of EPRI TR-107396, "Closed Cooling Water Chemistry Guidelines," for closed-cycle cooling water systems.</p> <p>Chemical control parameters will be monitored by annual water chemistry sampling. System operational monitoring activities will be performed at a frequency of at least once every six months. This new program will</p>	<p>A.1.14A</p>	<p>Prior to the period of extended operation</p>	<p>Section B.1.14A</p>

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	be implemented prior to entering the period of extended operation.			
53) Aboveground Steel Tanks - FRCT	<p>The Above ground Steel Tanks - FRCT aging management program is a new program that will manage corrosion of aboveground outdoor steel tanks. Paint coating is a corrosion preventive measure, and periodic visual inspections will monitor degradation of the paint coating and any resulting metal degradation of tank external surfaces. The aboveground tanks external surfaces will be visually inspected for coating degradation by walkdown at least once every two years.</p> <p>The Main Fuel Oil tank bottom is in contact with concrete and soil, and is inaccessible for visual inspection. Therefore, the program includes periodic Non-destructive wall-thickness examinations of the Main Fuel Oil tank bottom to verify that significant corrosion is not occurring.</p> <p>This program, including the initial tank external paint inspections, will be implemented prior to the period of extended operation. The recommended UT inspection of the Main Fuel Oil tank bottom was performed in October 2000, so it is not necessary to perform this inspection again prior to entering the period of extended operation. Based on the results of the October 2000 inspections, and subsequent repairs to the tank floor, the tank was certified to be suitable for the storage of number 2 fuel oil for a period of time not</p>	A.1.21A	Prior to the period of extended operation	Section B.1.21A

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	to exceed 20 years from October 2000, before the next internal inspection would be necessary. Therefore, additional UT inspections will be performed prior to October 2020.			
54) Fuel Oil Chemistry – FRCT	<p>The Fuel Oil Chemistry - FRCT aging management program is a new program that provides assurance that contaminants are maintained at acceptable levels in new and stored fuel oil for systems and components within the scope of Licensing Renewal. The Fuel Oil Storage Tank will be maintained by monitoring and controlling fuel oil contaminants in accordance with the guidelines of the American Society for Testing Materials (ASTM). Fuel oil sampling activities will be in accordance with ASTM D 4057 for multilevel and tank bottom sampling. Fuel oil will be periodically sampled and analyzed for particulate contamination in accordance with modified ASTM Standard D 2276 Method A or ASTM Standard D 6217, and, for the presence of water and sediment in accordance with ASTM Standard D 2709 or ASTM Standard D 1796. The Fuel Oil Storage Tank will be periodically drained of accumulated water and sediment and will be periodically drained, cleaned, and internally inspected. These activities effectively manage the effects of aging by providing reasonable assurance that potentially harmful contaminants are maintained at low concentrations.</p> <p>This new program will be implemented prior to entering</p>	A.1.22A	Prior to the period of extended operation	Section B.1.22A

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	<p>the period of extended operation. The internal inspection of the Main Fuel Oil tank was performed in October 2000, so it is not necessary to perform this inspection again prior to entering the period of extended operation. Based on the results of the October 2000 inspections and repairs, the tank was certified to be suitable for the storage of number 2 fuel oil for a period of time not to exceed 20 years from October 2000, before the next internal inspection would be necessary. Therefore, additional internal inspections of the tank floor are not necessary prior to entering the period of extended operation and will be performed prior to October 2020.</p>			
55) One-Time Inspection - FRCT	<p>The One-Time Inspection – FRCT program will provide measures to verify that an aging management program is not needed, confirms the effectiveness of existing activities, or determines that degradation is occurring which will require evaluation and corrective action. The program will be implemented prior to the period of extended operation.</p> <p>Inspection methods will include visual examination or volumetric examinations. Should aging effects be detected, the program will initiate actions to characterize the nature and extent of the aging effect and determines what subsequent monitoring is needed to ensure intended functions are maintained during the period of extended operation.</p>	A.1.24A	Prior to the period of extended operation	Section B.1.24A
56) Selective	The Selective Leaching of Materials - FRCT aging	A.1.25A	This new program	Section

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Leaching of Materials -FRCT	management program is a new program that will consist of inspections of components constructed of susceptible materials to determine if loss of material due to selective leaching is occurring. For the FRCT power plant, these are limited to copper alloy materials exposed to a closed cooling water environment. One-time inspections will consist of visual inspections supplemented by hardness tests. If selective leaching is found, the condition will be evaluated to determine the ability of the component to perform its intended function until the end of the period of extended operation and for the need to expand inspections. This new program will be implemented in the time period after January 2018 and prior to January 2028.		will be implemented in the time period after January 2018 and prior to January 2028	B.1.25A
57) Buried Piping Inspection – FRCT	The Buried Piping Inspection - FRCT aging management program is a new program that manages the external surface aging effects of loss of material for carbon steel piping and piping system components in a soil (external) environment. The program activities consist of preventive and condition-monitoring measures to manage the loss of material due to external corrosion for piping and piping system components in the scope of license renewal that are in a soil (external) environment. The program scope includes buried portions of glycol cooling water piping located at the Forked River Combustion Turbine station. External inspections of buried components will occur	A.1.26A	Prior to the period of extended operation	Section B.1.26A

Updated through AmerGen Letter RA-08-008 (January 14, 2008)

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	<p>opportunistically when they are excavated during maintenance. Within 10 years prior to entering the period of extended operation, inspection of buried piping will be performed unless an opportunistic inspection occurs within this ten-year period. Upon entering the period of extended operation, inspection of buried piping will again be performed within the next ten years, unless an opportunistic inspection occurs during this ten-year period. This program will be implemented prior to entering the period of extended operation.</p>			
<p>58) Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components- FRCT</p>	<p>The Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components - FRCT aging management program is a new program that consists of visual inspections of the internal surfaces of steel piping, valve bodies, ductwork, filter housings, fan housings, damper housings, mufflers and heat exchanger shells in the scope of license renewal at the Forked River Combustion Turbine power plant that are not covered by other aging management programs. Internal inspections will be performed during scheduled maintenance activities when the surfaces are made accessible for visual inspection. The program includes visual inspections to assure that existing environmental conditions are not causing material degradation that could result in a loss of component intended functions. These inspections will be performed during the major combustion turbine inspection outages and will be</p>	<p>A.1.38</p>	<p>Inspection for CT Unit 1 will be performed by May 2014, and inspection for CT Unit 2 will be performed by November 2015</p>	<p>Section B.1.38</p>

Updated through AmerGen Letter RA-08-008 (January 14, 2008)

ITEM NUMBER	COMMITMENT	UFSAR SUPPLEMENT LOCATION (LRA APP. A)	ENHANCEMENT OR IMPLEMENTATION SCHEDULE	SOURCE
	<p>performed on a frequency of at least once every 10 years.</p> <p>The initial inspections associated with this program will be performed at the next major inspection outage for each unit. Based on an inspection frequency of 10 years, the next inspection for CT Unit 1 will be performed by May 2014, and the next inspection for CT Unit 2 will be performed by November 2015.</p>			
59) Lubricating Oil Analysis Program – FRCT	<p>The Lubricating Oil Analysis Program – FRCT is a new program that includes measures to verify the oil environment in mechanical equipment is maintained to the required quality. The Lubricating Oil Analysis Program – FRCT maintains oil systems contaminants (primarily water and particulates) within acceptable limits, thereby preserving an environment that is not conducive to loss of material, cracking, or reduction in heat transfer. Lubricating oil testing activities include sampling and analysis of lubricating oil for detrimental contaminants. The presence of water or particulates may also be indicative of inleakage and corrosion product buildup. The program will also include the measurement of flash point. This program is augmented by the One Time Inspection – FRCT (B.1.24A) program, to verify the effectiveness of the Lubricating Oil Analysis Program - FRCT. This new program will be implemented prior to the period of extended operation.</p>	A.1.39	Prior to the period of extended operation	Section B.1.39
60) Periodic	The Periodic Inspection Program - FRCT is a new	A.2.5A	Inspection for CT	Section B.2.5A

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ITEM NUMBER	COMMITMENT	UFSAR SUPPLEMENT LOCATION (LRA APP. A)	ENHANCEMENT OR IMPLEMENTATION SCHEDULE	SOURCE
Inspection Program - FRCT	<p>program that will consist of periodic inspections of selected components to verify the integrity of the system and confirm the absence of identified aging effects. Inspections will be scheduled to coincide with major combustion turbine maintenance inspections, when the subject components are made accessible. These inspections will be performed on a frequency not to exceed once every 10 years. The purpose of the inspection is to determine if a specified aging effect is occurring. If the aging effect is occurring, an evaluation will be performed to determine the effect it will have on the ability of affected components to perform their intended functions for the period of extended operation, and appropriate corrective action is taken.</p> <p>Inspection methods may include visual examination, surface or volumetric examinations. When inspection results fail to meet established acceptance criteria, an evaluation will be conducted to identify actions or measures necessary to provide reasonable assurance that the component intended function is maintained during the period of extended operation.</p> <p>The initial inspections associated with this program will be performed at the next major inspection outage for each unit. Based on an inspection frequency of 10 years, the next inspection for CT Unit 1 will be performed by May 2014, and the next inspection for CT Unit 2 will be performed by November 2015.</p>		Unit 1 will be performed by May 2014, and inspection for CT Unit 2 will be performed by November 2015	
61) Buried Piping	The Buried Piping and Tank Inspection – Met Tower	A.1.26B	Prior to period of	Section

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and Tank Inspection – Met Tower Repeater Engine Fuel Supply	<p>Repeater Engine Fuel Supply aging management program is a new program that manages the external surface aging effects of loss of material for copper and carbon steel piping, and carbon steel tanks in a soil (external) environment. The program activities consist of preventive and condition-monitoring measures to manage the loss of material due to external corrosion for piping and tanks in the scope of license renewal that are in a soil (external) environment. The program scope includes buried portions of the Met Tower based radio communications system repeater backup engine generator fuel (propane) supply piping and the associated buried fuel supply tank, located at the Meteorological Tower.</p> <p>External inspections of buried components will occur opportunistically when they are excavated during maintenance. Within 10 years prior to entering the period of extended operation, inspection of buried piping will be performed unless an opportunistic inspection occurs within this ten-year period. Upon entering the period of extended operation, inspection of buried piping will again be performed within the next ten years, unless an opportunistic inspection occurs during this ten-year period. This program will be implemented prior to entering the period of extended operation.</p>		extended operation	B.1.26B

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ITEM NUMBER	COMMITMENT	UFSAR SUPPLEMENT LOCATION (LRA APP. A)	ENHANCEMENT OR IMPLEMENTATION SCHEDULE	SOURCE
62)	AmerGen will commit to perform monitoring of any leakage from the spent fuel pool liner-via the pool leak chase piping.		Prior to the period of extended operation	GALL Reconciliation Letter 2130-06-20293
63)	AmerGen will replace the previously un-replaced, buried safety-related ESW piping prior to the period of extended operation.		Prior to the period of extended operation	Letter 2130-06-20328
64) Electrical Cable Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements	The Electrical Cable Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements aging management program is a new program that will be used to manage the aging effects of metallic parts of non-EQ electrical cable connections within the scope of license renewal during the period of extended operation. A representative sample of non-EQ electrical cable connections will be selected for testing considering application (high, medium and low voltage), circuit loading and location, with respect to connection stressors. The type of test to be performed, i.e., thermography, is a proven test for detecting loose connections. A representative sample of non-EQ cable connections will be tested at least once every 10 years. This new program will be implemented prior to the period of extended operation.	A.1.40	Prior to the period of extended operation	Section B.1.40
65) Corrective Action, Confirmation and Administrative	Prior to the period of extended operation, AmerGen will ensure that procedures are established to implement the program elements	A.0.5	Prior to the period of extended operation	B.0.3

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ITEM NUMBER	COMMITMENT	UFSAR SUPPLEMENT LOCATION (LRA APP. A)	ENHANCEMENT OR IMPLEMENTATION SCHEDULE	SOURCE
Controls for Forked River Combustion Turbine activities	of Corrective Action, Confirmation, and Administrative Controls, as described in Sections A.0.5 and B.0.3 of Enclosure 1 of AmerGen letter 2130-06-20334, for the Forked River Combustion Turbine aging management activities.			