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U. S. Nuclear Regulatory Commission
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Washington, DC 20555

Oyster Creek Generating Station
Facility Operating License No. DPR-16
NRC Docket No. 50-219

Subject: Additional Commitments Related to the Aging Management Program for the Oyster Creek Drywell Shell, Associated with AmerGen's License Renewal Application (TAC No. MC7624)

References:
1. January 18, 2007 Meeting Between ACRS License Renewal Subcommittee, AmerGen Energy Company, LLC and NRC Staff, related to License Renewal of Oyster Creek Generating Station
2. February 1, 2007 Meeting Between Full ACRS, AmerGen Energy Company, LLC and NRC Staff related to License Renewal of Oyster Creek Generating Station
3. ACRS Letter Dated February 8, 2007, Describing the Outcome of the February 1, 2007 ACRS Review of the Oyster Creek Generating Station License Renewal Application

In the Reference 1 meeting, AmerGen Energy Company, LLC (AmerGen) presented detailed information related to the condition of and aging management program activities for the primary containment drywell shell, as part of AmerGen's efforts to renew the operating license for the Oyster Creek Generating Station (OCGS). The Subcommittee identified several specific issues related to the drywell shell structural analysis and certain aspects of the program proposed by AmerGen to manage aging of the drywell shell for the extended period of operation.

During the full ACRS review of the Oyster Creek License Renewal Application (LRA) in the Reference 2 meeting, AmerGen presented its proposed responses to the issues identified by the Subcommittee in the January 18, 2007 meeting. In its February 1st presentation, AmerGen made three additional commitments to address these previous Subcommittee items. This letter documents these commitments.

In addition, AmerGen is making a commitment to perform the full scope of drywell sand bed region inspections, consistent with what was performed during the 2006 refueling outage, on a frequency of every other refueling outage. AmerGen believes that this commitment is

responsive to a recommendation made by NRC Staff at the February 1, 2007 ACRS meeting, which was endorsed by the ACRS in its February 8, 2007 letter to the NRC Chairman.

The details of these four new commitments are provided in the Enclosure to this letter. The ASME Section XI, Subsection IWE Primary Containment Inspection aging management program (commitment 27) is modified to include these new commitments, and to clarify the effect of these new commitments on previously made IWE program commitments.

If you have any questions, please contact Fred Polaski, Manager License Renewal, at 610-765-5935.

I declare under penalty of perjury that the foregoing is true and correct.

Respectfully,

Executed on 02-15-07

Michael P. Gallagher
Vice President, License Renewal
AmerGen Energy Company, LLC

Enclosure: Regulatory Commitments

cc: Regional Administrator, USNRC Region I
USNRC Project Manager, NRR - License Renewal, Safety
USNRC Project Manager, NRR - License Renewal, Environmental
USNRC Project Manager, NRR - Project Manager, OCGS
USNRC Senior Resident Inspector, OCGS
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File No. 05040

ENCLOSURE – REGULATORY COMMITMENTS

The following table identifies additions being made to item #27 of the License Renewal Commitment List, Table A.5 of the Oyster Creek LRA. Four commitments are being added to the ASME Section XI, Subsection IWE Primary Containment Inspection Program as part of this submittal. These new commitments are numbered to sequentially follow the commitments made in previous LRA correspondence as part of the IWE Inspection Program. The full set of commitments made as part of the IWE Program is repeated here for convenience. **Bold** font is used to highlight new information.

In addition, clarifications are made to certain previously made IWE Program commitments to indicate 1) commitments that were completed during the 2006 refueling outage and 2) the effects, if any, of the new commitments on the scope or frequency of previously made commitments. Again, **bold** font is used to highlight information introduced in this submittal.

ITEM NUMBER	COMMITMENT	UFSAR SUPPLEMENT LOCATION (LRA APP. A)	ENHANCEMENT OR IMPLEMENTATION SCHEDULE	SOURCE
27) ASME Section XI, Subsection IWE	Existing program is credited. The program will be enhanced to include: 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	A.1.27	Prior to the period of extended operation Prior to the period of extended operation **(completed during 2006 refueling outage); then every other refueling outage thereafter**	Section B.1.27

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	1992, 1994, and 1996 UT results will result in corrective actions that include the following: • Perform additional UT measurements to confirm the readings. • 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. These actions will be completed prior to restart from the associated outage. **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.** 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.		Refueling outages prior to and during the period of extended operation	

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	3. The reactor cavity seal leakage trough drains and the drywell sand bed region drains will be monitored for leakage. • The sand bed region drains will be monitored daily during refueling outages. If leakage is detected, procedures will be in place to determine the source of leakage and investigate and address the impact of leakage on the drywell shell, including verification of the condition of the drywell shell coating and moisture barrier (seal) in the sand bed region and performance of UT examinations of the shell in the upper regions. UTs will also 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. Any degraded coating or moisture barrier will be repaired. These actions will be completed prior to exiting the associated outage. • The sand bed region drains will be monitored quarterly during the plant operating cycle. If leakage is identified, the source of water will be investigated, corrective actions taken or planned as		Periodically Daily during refueling outages Quarterly during non-outage periods	

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	appropriate. In addition, if leakage is detected, the following items will be performed during the next refueling outage: • 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 Any degraded coating or moisture barrier will be repaired.			
	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		Prior to the period of extended operation **(completed during 2006 refueling outage); then every other refueling outage thereafter**	

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	extended operation. These inspections will be performed in accordance with ASME Section XI, Subsection IWE. Performance of the inspections will be staggered such that at least three bays will be examined every other refueling outage. **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.**			
	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. **Note: Commitment 5 (above) is supplemented by**		Prior to the period of extended operation **(completed during 2006 refueling outage)**	

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	commitments 16 and 20 of the IWE Inspection Program.			
	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.		Every other refueling outage prior to **(completed during 2006 refueling outage)** and during the period of extended operation	
	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.		Every other refueling outage prior to **(completed during 2006 refueling outage)** and during the period of extended operation	
	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.			
	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		Prior to the period of extended operation **(completed during 2006 refueling**	

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	areas identified in the 1992 inspection from the 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). **Note: Commitment 9 (above) is supplemented by commitments 14 and 21 of the IWE Inspection Program.**		**outage); then every other refueling outage thereafter**	
	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		Prior to the period of extended operation and two refueling outages later	

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	upper drywell (every other refueling outage).			
	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).		Prior to the period of extended operation and two refueling outages later	
	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. **Note: The frequency for the inspections described in commitment 12 (above) has been changed to every other refueling outage, in**		**Prior to the period of extended operation (completed during 2006 refueling outage); then every other refueling outage thereafter**	

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	accordance with commitment 21 of the IWE Inspection Program.			
	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.		Once per refueling cycle	
	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. **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.**		During the 2008 refueling outage **and every other refueling outage thereafter**	
	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		**All 10 bays will be inspected during the 2008 refueling outage and every other**	

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	within a 10-year period. The two bays with the most locally thinned areas (bay #1 and bay #13) will be 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. **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.**		**refueling outage thereafter.**	
	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. **Note: Commitment 16 (above) is supplemented by commitment 20 of the IWE Inspection Program.**		During the 2008 refueling outage and subsequent **refueling** outages until trenches are restored to original configuration	

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	17. Perform visual inspection of the moisture barrier between the drywell shell and the concrete 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.		In accordance with ASME Section XI, Subsection IWE	
	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 required thickness values, the NRC will be notified in accordance with 10 CFR 50 requirements.		**Prior to the period of extended operation**	
	19. AmerGen will perform an engineering study to investigate cost-effective replacement or repair options to eliminate or reduce reactor cavity liner leakage.		**Prior to the period of extended operation**	
	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		**Every refueling outage until trenches are restored**	

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	Oyster Creek 2008 refueling outage (see commitment 16 of 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.			
	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: **• 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**		**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**	

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	12) • **UT measurements at the external locally thinned areas inspected in 2006 (commitments 9 and 14)**		**corrosion has been sufficiently arrested, the period between inspections may be increased to minimize personnel radiation exposure.**	