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U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

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

Subject: 10 CFR 54.21(b) Annual Amendment to Oyster Creek Generating Station License Renewal Application (TAC No. MC7624)

Reference: AmerGen's "Application for Renewed Operating License," Oyster Creek Generating Station, dated July 22, 2005 (TAC No. MC7624)

In the referenced letter, AmerGen Energy Company, LLC (AmerGen) submitted a License Renewal Application (LRA) for the Oyster Creek Generating Station (OCGS). The Enclosure to this letter provides the annual amendment to the OCGS LRA in accordance with 10 CFR 54.21(b). This amendment identifies changes to the current licensing basis (CLB) that materially affect the contents of the OCGS LRA. This amendment is required to be submitted each year following submittal of the LRA and at least 3 months before scheduled completion of NRC review of the LRA.

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 07-18-2006

Michael P. Gallagher
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AmerGen Energy Company, LLC

Enclosure: 10 CFR 54.21(b) Update – Amendment to Oyster Creek LRA

A114

cc: Regional Administrator, USNRC Region I, w/o Enclosure
USNRC Project Manager, NRR - License Renewal, Safety, w/Enclosure
USNRC Project Manager, NRR - License Renewal, Environmental, w/o Enclosure
USNRC Project Manager, NRR - OCGS, w/o Enclosure
USNRC Senior Resident Inspector, OCGS, w/ Enclosure
Bureau of Nuclear Engineering, NJDEP, w/Enclosure
File No. 05040

ENCLOSURE

10 CFR 54.21(b) Update

Amendment to License Renewal Application for
Oyster Creek Generating Station

AMERGEN ENERGY COMPANY, LLC

Introduction

The License Renewal Rule, 10CFR54.21(b), requires that each year following submittal of a license renewal application (LRA), an amendment must be submitted to identify changes to the facility current licensing basis (CLB) that materially impact the content of the License Renewal Application (LRA). In accordance with this requirement, AmerGen Energy Company, LLC has completed the review of the Oyster Creek Generating Station CLB changes since the submittal of the LRA. This Enclosure provides its results and identifies the primary sections of the LRA that are impacted by the CLB changes.

Review Process

The annual update review is a procedurally controlled process to satisfy the requirements of 10CFR54.21(b). Specifically, the process is used to identify and evaluate changes to the plant CLB by reviewing plant documents, which include but are not limited to the following:

- Engineering Change Requests
- Licensing Documents
- Component Record Lists
- UFSAR Changes
- Drawing Changes
- Operating Experience

Changes to the text or supporting license renewal boundary drawings of the LRA as submitted on July 22, 2005 are identified as part of the review. These changes are then reviewed by a technical verification team to determine those changes to the CLB that materially affect the LRA for inclusion in this Enclosure. Changes to the LRA described in formal AmerGen correspondence to the NRC, including RAI responses, are not included in the annual update because 1) these changes were not initiated due to changes in the Oyster Creek CLB, and 2) this information has already been incorporated into the NRC's LRA review.

Review Results

The review identified two (2) CLB changes that impact the LRA. The CLB changes resulted from both plant and procedure changes. The review did not identify new operating experience that affects the content of the LRA.

Each change and its impact on the LRA are discussed below.

Piping modification to Roof Drains and Overboard Discharge system

Subsequent to the July 22, 2005 submittal of the LRA, Oyster Creek implemented a modification that impacts the content of Section 2.3.3.33, Roof Drains and Overboard Discharge and Section 2.3.3.27, Radiation Monitoring System. These sections discuss the capability of the contents of a turbine building sump to be pumped to the discharge canal or radwaste system. To preclude the inadvertent release of the sump contents with loss of air or valve failure, a modification was performed to eliminate the option of routing the sump pump discharge to the discharge canal. The modification involved removal of a 3-way valve and installation of a spool piece directing sump discharge only to the radwaste system. In addition, this modification removes abandoned piping to the

overboard discharge and will remove the associated radiation monitor. Removal of these components does not affect the aging management previously performed on the Roof Drains and Overboard Discharge system since the component type and material previously included in the LRA have not changed as a result of the modification.

Discussion of the Turbine Building sump (1-5) effluent and the Turbine Building sump (1-5) Radiation Monitor included in LRA section 2.3.3.33 and discussion of the Turbine Building sump Radiation Monitor in LRA section 2.3.3.27 are deleted.

The boundary drawing LR-JC-147434 sheet 3 for the Miscellaneous Floor and Equipment Drain system would change to reflect the removal of piping, the 3-way valve and the addition of a piping spool piece.

Fire Safe Shutdown

Subsequent to the July 22, 2005 submittal of the license renewal application (LRA), Oyster Creek implemented a change to one of the procedures credited for fire safe shutdown. Portions of the Condensate and Feedwater systems are now credited to assure adequate makeup to the Isolation Condenser during one of the postulated fire scenarios. This procedural change results in the Condensate system now having an intended function of "Relied upon in safety analyses or plant evaluations to perform a function that demonstrates compliance with the commission's regulations for Fire Protection (10 CFR 50.48)," which would require including the condensate system in the scope of license renewal per 10CFR 54.4(a)(3). The Feedwater system already includes a 10CFR 54.4(a)(3) system intended function for Fire Protection.

As described in LRA Section 2.3.4.1 for Condensate system and LRA Section 2.3.4.3 for Feedwater system, the piping and components associated with this change were previously included in the scope of license renewal for potential spatial interaction per 10 CFR 54.4(a)(2). Therefore, equipment in the Condensate and Feedwater systems were already evaluated with aging effects identified and aging management program(s) specified. This change in component intended function has no impact on the aging management evaluations performed or on the aging management activities proposed in the LRA for the Condensate or Feedwater systems.

Depiction of affected components on boundary drawing LR-BR-2003 for the Condensate and the Feedwater systems would change color (from red to green), indicating that the reason for inclusion of the associated components within the scope of license renewal has changed from (a)(2) (red) to (a)(3) (green). This does not affect the aging management evaluations or conclusions for these systems.

In summary, although the basis for scoping certain equipment into License Renewal has changed, this CLB change does not add or change any components, materials, environments, aging effects or aging management programs credited for license renewal for either the Condensate or Feedwater systems.

Revisions to the LRA

The primary revised sections of the LRA that reflect the changes described above are provided here. As discussed above, the change in some component intended functions in the Condensate and Feedwater systems has no impact on the aging management evaluations performed or on the aging management activities proposed in the LRA, and are therefore not incorporated as revisions to the LRA. The strikethrough text identifies the required deletions and the ***italic and bold*** text identifies the required additions to the LRA.

The following affected paragraphs of the LRA associated with the Roof Drains and Overboard Discharge system piping modification would be revised as follows:

2.3.3.27 Radiation Monitoring System

System Purpose

The Process and Effluent Radiological Monitoring System consists of Main Steam Line Monitoring, Process Liquid Monitoring, Air Ejector Offgas Monitoring, Stack Radioactive Gaseous Effluent Monitoring (RAGEMS), Turbine Building RAGEMS, Domestic Sewer Effluent Monitor, and Augmented Offgas Building Ventilation Monitor. Process Liquid Monitoring is comprised of the reactor building closed cooling water monitor ***and*** ~~,~~ the service water radiation monitor. ~~and the turbine building sump radiation monitor.~~

2.3.3.33 Roof Drains and Overboard Discharge

System Purpose

The Roof Drains and Overboard Discharge System (RDODS) is a passive drainage system designed to collect and discharge effluents from the plant to the discharge canal. The purpose of the RDODS is to collect and discharge effluents from plant open cooling water systems, plant building drainage systems, and yard area storm drains. The RDODS accomplishes this through a 30" overboard discharge line that starts outside of the Reactor Building and runs to the discharge canal. It carries Service Water discharge from the Reactor Building Closed Cooling Water heat exchangers, Emergency Service Water from the Containment Spray System heat exchangers, ~~Turbine Building sump 1-5 effluent,~~ roof/floor/equipment drainage from various plant buildings, and yard area storm water.

System Operation

The RDODS is comprised of a 30" overboard discharge line that starts at the seal well (evaluated with Miscellaneous Yard Structures) outside of the Reactor Building. Service Water Discharged from the Reactor Building Closed Cooling Water heat exchangers enters the overboard discharge line through the seal well. Emergency Service Water from the Containment Spray System heat exchangers, ~~Turbine Building sump 1-5 effluent,~~ plant building roof/floor/equipment drainage, and plant yard area storm water drains enter the overboard discharge line at various locations along its length. The overboard discharge line runs below grade and terminates at the discharge canal.

The RDODS does not include process liquid monitoring. Process liquid monitoring is performed prior to the effluents entering the overboard discharge line. The Process Liquid Monitoring Subsystems (evaluated with Radiation Monitoring System) are comprised of the Reactor Building Closed Cooling Water Monitor ***and*** the Service Water Radiation Monitor. ~~and the Turbine Building sump 1-5 Radiation Monitor~~. These subsystems have been designed to continuously measure, indicate, and record the radioactivity concentration levels of major process system discharge streams. These monitors ensure that plant releases do not exceed the limits specified in 10CFR20 and 10CFR50 Appendix I.

The following re-write of LRA Section 2.3.4.1 is provided to show the impact of the above-described Fire Safe Shutdown change on the Condensate System:

2.3.4.1 Condensate System

System Purpose

~~The intended function of the Condensate System (CNDS) for license renewal is to maintain leakage boundary integrity to preclude system interactions as described in ISG-09, Guidance on the Identification of Structures, Systems, and Components that meet 10 CFR 54.4(a)(2), dated March 15, 2002. For this reason, this system's pressure retaining components located in proximity to other components performing safety related functions have been included in the scope of license renewal. This system is not required to operate to support license renewal intended functions, and is in scope for potential spatial interaction.~~

The ***Condensate System*** (CNDS) is designed to transfer sub-cooled condensate from the main condenser hotwell to the Feedwater System. It provides the ability to transfer condensate water from the Main Condenser, through the condensate demineralizer and supply the Reactor Feed Pump at a suitable pressure and required purity level. The CNDS includes the Condensate System and the Condensate Demineralizer System.

During normal plant operations, the purpose of the CNDS is to purify condensate by removing corrosion products, dissolved solids, chemicals and other impurities that may enter the reactor coolant cycle. The CNDS accomplishes this purpose by processing the condensate through demineralizers. In the likely event that station auxiliary power is available, the Condensate and Feedwater Systems provide additional emergency core cooling capability.

System Operation

The CNDS is comprised of three condensate pumps, steam packing exhauster, seven mixed bed demineralizer units (includes one spare), one recycle pump and the required piping, valves, instrumentation and controls. Demineralizer resins are no longer chemically regenerated and reused.

The CNDS begins with two lines from each of the three Main Condenser hotwells that discharge into a common condensate supply header. The condensate pumps take suction from the condensate supply header and discharge into a common header that

branches to provide cooling flow to the three intercondensers and three aftercondensers (scoped in the Main Condenser Air Extraction System) of the steam jet air ejector (SJAE) units. These six condensers are arranged in parallel. Manually operated isolation valves are provided on the suction and discharge lines for each condensate pump, a check valve is provided on each condensate pump discharge line.

The three sets of inter/after condensers for the SJAE units are provided with motor operated isolation valves at their intake and discharge lines. The flow recombines downstream of the SJAE condensers, passes through the steam packing exhauster and enters the condensate demineralizers. Upstream of the demineralizers, a branch line is provided for demineralizer backwash and a branch line to condensate pump seals. Downstream of the demineralizers, branch lines are provided to the reactor feedwater pump seals, the low pressure turbine exhaust hood sprays, the condensate pump seals, the Control Rod Drive System and the Condensate Transfer System. The CNDS flow path ends at the inlet isolation valves of the Feedwater Heaters.

For additional information, see UFSAR Section 10.4.6, 10.4.7.

System Boundary

The CNDS begins with two lines from each of the three Main Condenser hotwells that discharge into a common condensate supply header. The condensate pumps take suction from the condensate supply header and discharge into a common header that branches to provide cooling flow to the three intercondensers and three aftercondensers (scoped in the Main Condenser Air Extraction System) of the steam jet air ejector (SJAE) units. The flow recombines downstream of the SJAE condensers, passes through the steam packing exhauster and enters the condensate demineralizers. Upstream of the demineralizers, a branch line is provided for demineralizer. Downstream of the demineralizers, branch lines are provided to the reactor feedwater pump seals, the low pressure turbine exhaust hood sprays, the condensate pump seals, the Control Rod Drive System and the Condensate Transfer System. The CNDS flow path ends at the inlet isolation valves of the Feedwater Heaters.

The license renewal scoping boundary of the Condensate System (CNDS) encompasses the liquid filled portion of the system that is located in proximity to equipment performing a safety related function. This includes the liquid filled portions of the CNDS located within the Turbine Building. Included in this boundary are pressure retaining components relied upon to preserve the leakage boundary intended function of this system. For more information, refer to the License Renewal Boundary Drawing for identification of this boundary, shown in red.

In addition, a portion of the Condensate system is credited to maintain pressure boundary to assure inventory of the CST is available to provide adequate makeup to the Isolation Condensers or Reactor Vessel during a postulated fire scenario.

~~Components that are not required to support the system's leakage boundary intended function are not included in the scope of license renewal.~~

Not included in the CNDS scoping boundary are the following interfacing systems, which are separately evaluated as license renewal systems:

Condensate Transfer System
Control Rod Drive System
Core Spray System
Instrument (Control) Air System
Feedwater System
Main Condenser Air Extraction System
Hydrogen Water Chemistry
Process Sampling

Reason for Scope Determination

The Condensate System (CNDS) is not in scope under 10 CFR 54.4(a)(1) because no portions of the system are safety related or relied on to remain functional during and following design basis events. The CNDS is in scope under 10 CFR 54.4(a)(2) because failure of non-safety related portions of the system could prevent satisfactory accomplishment of function(s) identified for 10 CFR 54.4(a)(1). ***It also meets 10 CFR 54.4(a)(3) because it is relied upon in the safety analyses and plant evaluations to perform a function that demonstrates compliance with the Commission's regulations for fire protection (10 CFR 50.48).*** The system is ~~not in scope under 10 CFR 54.4(a)(3) because it is~~ not relied upon in safety analyses or plant evaluations to perform a function that demonstrates compliance with the Commission's regulations for ~~fire protection (10 CFR 50.48) and~~ environmental qualification (10 CFR 50.49), ATWS (10 CFR 50.62) or Station Blackout (10 CFR 50.63).

System Intended Functions

1. Resist non-safety related SSC failure that could prevent satisfactory accomplishment of a safety related function. The CNDS has potential for spatial interaction with safety related equipment within the Turbine Building. 10 CFR 54.4(a)(2)

2. ***Relied upon in safety analyses or plant evaluations to perform a function that demonstrates compliance with the commission's regulations for Fire Protection (10 CFR 50.48). A portion of the Condensate system is credited to maintain pressure boundary to assure inventory of the CST is available to provide adequate makeup to the Isolation Condensers during a postulated fire scenario. 10 CFR 54.4(a)(3)***

UFSAR References

10.1
10.4.6
10.4.7

License Renewal Boundary Drawings

LR-BR-2003 Sheet 1
LR-GE-148F444
LR-GE-148F437 Sheet 12
LR-JC-147434 Sheet 1

Note that there is no impact on the system intended functions associated with the Feedwater system as described in LRA Section 2.3.4.3, as a result of this change.