

**NUCLEAR ENGINEERING SECTION
2008-2009 FACT SHEET
OYSTER CREEK LICENSE RENEWAL AND
STATE-SPONSORED INDEPENDENT REVIEW OF THE DRYWELL**

On April 8, 2009, the NRC issued a license renewal for an additional 20 years to Oyster Creek. This ended a process which began on July 22, 2005 and was the most contested license renewal for any nuclear plant. The license was to expire on April 9, 2009.

One of the last parts of the Oyster Creek license renewal process was the drywell three-dimensional analysis. NJDEP-Bureau of Nuclear Engineering (BNE), had questions related to Oyster Creek's confirmatory analysis performed by Structural Integrity Associates (SIA) and the NRC work performed by Sandia National Laboratories (Sandia). These questions prompted BNE to commission an independent review of Exelon's and NRC's work. This is documented in a BNE letter to the NRC dated September 16, 2008 and is available on-line (see Reference 1).

BNE contracted Becht Nuclear Services (Becht) to perform the independent review which resulted in a report dated April 6, 2009 which is available on-line (see Reference 2). The review included the Exelon analysis and the NRC-sponsored analysis by Sandia. In a BNE letter to the NRC dated April 7, 2009, available on-line (see Reference 3), BNE informed the NRC of Becht's findings.

In Section 3 of their report, Becht describes conditions and assumptions with both positive and negative effects on the accuracy and conservatism of the evaluations. Becht's review concluded that the SIA analysis presents a modern, up-to-date deterministic evaluation in accordance with ASME Section III, Subsection NE. The analysis demonstrates that Code requirements are satisfied for the drywell in its current state of degradation based on the limited thickness measurements available and as modeled based on these measurements.

Becht recommended that continued measurement of drywell thickness and evaluation be an ongoing process, and that the interval of inspections and measurements be done and evaluated as frequently as practicable in the early years of extended operation. This is consistent with the State of New Jersey's position that it would be prudent to inspect 100 percent of the drywell bays during the fall refueling outage for sandbed coating failures.

Referenced URL's

1. http://www.nj.gov/dep/rpp/download/OC_Drywell_3D.pdf
2. http://www.nj.gov/dep/rpp/download/OC_BechtNucServDrywellAna_Review.pdf
3. http://www.nj.gov/dep/rpp/download/OC_LipotiLetToNRC3DAna_IndReview.pdf