



71-9788

**Department of Energy**  
Washington, DC 20585

NR:RS:TEAngerhofer Z#08-03540  
September 11, 2008

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Washington, DC 20555

**SUBMARINE REACTOR COMPARTMENT DISPOSAL PACKAGE - REQUEST FOR  
RENEWAL OF NRC CERTIFICATE OF COMPLIANCE (DOCKET NO 71-9788; TAC  
NOS. L23438 AND L23439)**

Reference: (a) Naval Reactors Letter Z#C07-04862 dated  
January 3, 2008

In Reference (a), Naval Reactors (NR) requested that the Nuclear Regulatory Commission (NRC) review the Safety Analysis Reports for Packaging (SARPs) for the S5G and S4G Reactor Compartment Disposal Packages (RCDPs), and add the S5G and S4G RCDPs to the NRC Certificate of Compliance (CoC) for submarine RCDPs. Reference (a) also included changes to the SARPs for the submarine RCDPs currently listed on the CoC (SSN 688 Class and S5W submarine RCDPs). The new SARPs and the changes to the existing SARPs demonstrate that the RCDPs comply with the 2004 revision to 10 CFR 71, and therefore requested that the renewed NRC CoC be updated from USA/9788/B(U)-85 to USA/9788/B(U)-96 to reflect this.

Based on a discussion between NR (Angerhofer) and NRC (Osgood) on September 10, 2008, Naval Reactors understands that the NRC will soon issue Requests for Additional Information (RAIs) for the RCDPs not currently on the CoC (S5G and S4G). Therefore, in order to provide time to respond to these RAIs, yet keep the NRC CoC current, NRC action on the CoC for the RCDPs currently listed on the CoC (SSN 688 Class and S5W) should be taken separately from action to add the S5G and S4G RCDPs.

In addition to the changes to demonstrate compliance with the 2004 revision to 10 CFR 71, reference (a) included changes to Section 2.4.4 (Chemical and Galvanic Reactions) of the SARPs for SSN 688 Class and S5W RCDPs, to be consistent with the approach

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used in the new submarine RCDP SARP. These changes replaced existing information with an evaluation of hydrogen accumulation based on quantitative testing of samples from S5W and SSN 688 Class submarine reactor plants that shows that detectable (more than 0.15%) hydrogen did not accumulate in these plants approximately ten years after inactivation. The next SSN 688 Class RCDP scheduled to ship was sealed less than a year before the projected shipping date (where the existing SARP Section 2.4.4 predicts less than 4% hydrogen), and the remaining S5W RCDP contains one of the plants that was tested, with no hydrogen detected.

NRC is requested to renew the CoC for submarine RCDPs, to include SSN 688 Class and S5W RCDPs, and update the CoC to reflect that these RCDPs meet the 2004 revision to 10 CFR 71. NR will take separate action to address RAIs on the S5G and S4G RCDPs upon receipt of those RAIs.



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