



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

July 17, 2012

EA-12-155

Mr. Anthony Vitale  
Vice-President, Operations  
Entergy Nuclear Operations, Inc.  
Palisades Nuclear Plant  
27780 Blue Star Memorial Highway  
Covert, MI 49043-9530

**SUBJECT: CONFIRMATORY ACTION LETTER - PALISADES NUCLEAR PLANT  
COMMITMENTS TO ADDRESS SAFETY INJECTION REFUELING WATER  
TANK AND CONTROL ROOM CONCRETE SUPPORT STRUCTURE  
LEAKAGE**

Dear Mr. Vitale:

This letter confirms commitments by Entergy Nuclear Operations, Inc. (ENO) in your letter dated July 12, 2012, (Agencywide Documents Access & Management System [ADAMS] Accession Number ML12194A573), to address leakage of approximately 1 gallon-per-day in the area surrounding the Palisades Nuclear Plant (PNP) safety injection refueling water storage tank (SIRWT), which was detected after maintenance activities on the SIRWT during the outage which ended on July 11, 2012. In addition, this letter addresses commitments related to potential leakage through the control room concrete support structure.

While you have not positively determined if the leak source is from the SIRWT tank or residual water in the sand base below the tank that accumulated from previous leaks, the potential exists that this is active leakage from the SIRWT. Based on the information and evaluations you provided regarding the repairs that were completed on the SIRWT, the NRC concludes that the SIRWT structural integrity is acceptable to support safe plant operations. Continued assurance of structural integrity will be met through your implementation of the commitments identified in this letter. In addition, the NRC has concluded your control room concrete support structure continues to perform its safety function. There are commitments associated with this area as well, which provide additional assurance moving forward.

In your letter, you confirmed five ENO commitments to remain in effect to ensure that the SIRWT leakage and the potential leakage through the control room concrete support structure will not adversely affect plant equipment needed for safe plant operations. Those commitments, as clarified in telephone discussions between yourself, O. Gustafson of your staff, and J. Giessner, the NRC Region III Branch Chief, on July 16, 2012, are as follows:

- 1) ENO will measure and trend leakage daily from the SIRWT in accordance with the approved Operation Decision-Making Issue (ODMI) document until such a time as the SIRWT is no longer classified as degraded/nonconforming for this adverse condition. The degradation growth rate will be calculated to determine the need for future SIRWT inspections. ENO will re-perform the growth rate calculation periodically, depending on changes in the observed leakage rate.
- 2) ENO will declare the SIRWT inoperable and shut down the plant, as required by Technical Specifications, prior to, or upon reaching:
  - a. the ODMI calculated leakage rate of 38 gallons per day from the SIRWT or;
  - b. the predicted time allowed ( $\tau_{allow}$  defined in American Society of Mechanical Engineers (ASME) Code Case N-705, "Evaluation Criteria for Temporary Acceptance of Degradation in Moderate Energy Class 2 or 3 Vessels and Tanks," dated October 12, 2006), at which the detected degradation will grow to the maximum structurally allowable size, becomes less than 48 hours.

ENO will notify the NRC prior to changing any of the limits specified in the above criteria. NRC staff will not provide concurrence on the proposed limit change.

- 3) If monitoring determines that the SIRWT is actively leaking, ENO will take appropriate actions to repair the tank within 26 months of the identification of the leak, as specified by ASME Code Case N-705.
- 4) ENO will continue inspections of the concrete support structure above the control room, control room hallway, and the concrete support structure ceiling as prescribed in the approved ODMI. These inspections are to ensure that the temporary modifications installed to prevent impact to safety-related structures, systems and components are performing their intended functions.
- 5) ENO will correct the adverse condition related to cracking of the concrete support structure around the ceiling of the control room, which could lead to water intrusion, prior to restart from the 2013 refueling outage.

Pursuant to Section 182 of the Atomic Energy Act, 42 U.S.C. 2232, you are required to:

- 1) Notify me immediately if your understanding differs from that set forth above;
- 2) Notify me if for any reason you cannot complete the actions within the specified schedule and advise me in writing of your modified schedule in advance of the change; and

- 3) Notify me in writing when you have completed the actions addressed in this Confirmatory Action Letter.

Issuance of this Confirmatory Action Letter does not preclude issuance of an order formalizing the above commitments or requiring other actions on the part of the licensee; nor does it preclude the NRC from taking enforcement action for violations of NRC requirements that may have prompted the issuance of this letter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure(s), and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Sincerely,

***/RA by Gary L. Shear for/***

Charles A. Casto  
Regional Administrator

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- 3) Notify me in writing when you have completed the actions addressed in this Confirmatory Action Letter.

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Letter to A. Vitale from C. Casto dated July 17, 2012.

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