



**Entergy Nuclear Operations, Inc.**  
**Pallsades Nuclear Plant**  
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**Terry A. Davis**  
Licensing Manager

PNP 2014-014

10 CFR 72.44

February 20, 2014

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

**SUBJECT: 2013 ISFSI Annual Radioactive Effluent Release Report**

Big Rock Point  
Dockets 50-155 and 72-043  
License No. DPR-6

Dear Sir or Madam:

In accordance with 10 CFR 72.44(d)(3), Entergy Nuclear Operations, Inc. is submitting the annual independent spent fuel storage installation (ISFSI) radioactive effluent release report for Big Rock Point for the period from January 2013 through December 2013.

This letter contains no new commitments and no revision to existing commitments.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry A. Davis".

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**Attachment: Independent Spent Fuel Storage Installation Annual Radioactive Effluent Release Report**

CC Administrator, Region III, USNRC  
BRP Decommissioning Inspector, USNRC  
NMSS Project Manager, USNRC

## ATTACHMENT

### INDEPENDENT SPENT FUEL STORAGE INSTALLATION ANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

**BIG ROCK POINT**  
**January 2013 – December 2013**

#### I. FACILITY DESCRIPTION

The Independent Spent Fuel Storage Installation (ISFSI) is located within the owner-controlled area of the Big Rock Point (BRP) site. The storage of spent fuel at BRP meets the requirements of 10 CFR 72, and the Certificate of Compliance No. 72-1026, issued by the Nuclear Regulatory Commission (NRC).

#### II. EFFLUENT LIMITS AND CONTROLS

The ISFSI operates under effluent control limits as required by 10 CFR 72.104. However, the design of the sealed storage canisters at the ISFSI precludes any gaseous or liquid effluent releases.

#### III. RADIOLOGICAL EFFLUENT RELEASES

As noted in Section II, by design, there are no radioactive liquid or gaseous effluents originating from the ISFSI facility. The annual radiological surveillance performed during this reporting period did not indicate any release of radioactivity from the ISFSI.

#### IV. ISFSI ENVIRONMENTAL MONITORING PROGRAM

The BRP Radiological Environmental Monitoring Program (REMP) is described in the Offsite Dose Calculation Manual (ODCM), Section I, Subsection 4.0. The ISFSI Environmental Monitoring Program, which is contained within the BRP REMP, consists of thermoluminescent dosimeters (TLDs) at four locations along the perimeter of the ISFSI site, and three control TLDs 10.5 to 12.6 miles from the site. Quarterly TLDs are read quarterly, as reflected in Section VI. Quarterly measurements are compared to control measurements to evaluate compliance with 10 CFR 72.104. The results for the ISFSI TLDs and the control TLDs measured in 2013 are summarized in Section VI.

#### V. SAMPLE ANOMALIES

None.

## VI. ISFSI ENVIRONMENTAL MEASUREMENTS

### BRP ISFSI Environmental TLD Results (mR) January 2013 – December 2013

<b>TLD No./Location</b>	<b>1<sup>st</sup> Quarter</b>	<b>2<sup>nd</sup> Quarter</b>	<b>3<sup>rd</sup> Quarter</b>	<b>4<sup>th</sup> Quarter</b>
BRP-18 / 137 meters NW of ISFSI	18	14	18	19
BRP-19 / 137 meters SW of ISFSI	19	17	23	21
BRP-20 / 137 meters SE of ISFSI	20	18	24	21
BRP-21 / 137 meters NE of ISFSI	18	14	21	19
Control Location – Petoskey BRP-05	19	15	19	20
Control Location – Boyne City BRP-06	20	17	20	19
Control Location – Ironton BRP-07	20	15	22	21

## VII. CONCLUSIONS

When compared to the control locations, it is evident that the dose from ISFSI operations during the reporting period does not exceed the limits as defined in 10 CFR 72.104.