

May 11, 2006

Mr. William Snell  
U.S. Nuclear Regulatory Commission  
Region III  
2443 Warrenville Road  
Lisle, IL 60532-4351

**SUBJECT: TRITIUM (H-3) REANALYSIS RESULTS FOR FOUR WATER  
SAMPLES FROM THE VICINITY OF THE DRESDEN  
GENERATING STATION, DRESDEN, ILLINOIS [INSPECTION  
REPORT NO. 05-000237/2006-003]  
(RFTA NO. 06-001)**

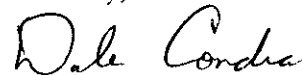
Dear Mr. Snell:

The Oak Ridge Institute for Science and Education (ORISE) received a request by e-mail on April 26, 2006 to reanalyze four water samples for tritium. The samples were collected in the vicinity of the Dresden Generating Station in Dresden, Illinois and received by the laboratory as part of a shipment of 37 samples on March 20, 2006. The sample identifications and collection data are presented in Table 1. The tritium data are presented in Table 2. The results from the reanalysis were statistically indistinguishable with the results from the original analysis. The pertinent procedure references are provided in the specific table.

ORISE's Quality Control (QC) requirements were met for these analyses. The QC files are available for your review upon request.

My contact information is listed below. You may also contact Wade Ivey at 865.576.9184 with any questions or comments.

Sincerely,



Dale Condra, Manager  
Laboratory

RDC:WPI:ar

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**TABLE 1**

**SAMPLE IDENTIFICATIONS  
AND COLLECTION DATA  
DRESDEN GENERATING STATION  
DRESDEN, ILLINOIS**

<b>ORISE Sample ID</b>	<b>NRC Region III Sample ID</b>	<b>Collection Date</b>	<b>Collection Time</b>
1694W0001	D-06-1-01	2/18/2006	11:00 AM
1694W0014	D-06-1-14	3/2/2006	5:40 PM
1694W0018	D-06-1-18	3/3/2006	12:15 PM
1694W0021	D-06-1-21	3/3/2006	9:00 AM

TABLE 2

CONCENTRATIONS OF TRITIUM  
 IN WATER SAMPLES  
 BY LIQUID SCINTILLATION ANALYSIS  
 AP2, REVISION 15; CP4, REVISION 3  
 DRESDEN GENERATING STATION  
 DRESDEN, ILLINOIS

ORISE Sample ID	NRC Region III Sample ID	Tritium Concentrations, TPU's, and MDCs <sup>a</sup> (pCi/L)
1694W0001	D-06-1-01	61,500 ± 2,000 <sup>b</sup> (400)
1694W0014	D-06-1-14	4,550 ± 430 (390)
1694W0018	D-06-1-18	130 ± 230 (390)
1694W0021	D-06-1-21	690 ± 260 (390)

<sup>a</sup>MDCs are in parentheses.

<sup>b</sup>Uncertainties represent the 95% confidence level, based on total propagated uncertainties.