

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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File 1694

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TABLE 1

SAMPLE IDENTIFICATIONS AND COLLECTION DATA DRESDEN GENERATING STATION DRESDEN, ILLINOIS

ORISE Sample ID	NRC Region III Sample ID	Collection Date	Collection Time
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, TPUs, and MDCs ^a (pCi/L)			
1694W0001	D-06-1-01	61,500	<u>±</u>	2,000 ^b	(400)
1694W0014	D-06-1-14	4,550	±	430	(390)
1694W0018	D-06-1-18	130	<u>+</u>	230	(390)
1694W0021	D-06-1-21	690	±	260	(390)

^{*}MDCs are in parentheses.

 $^{^{\}rm 6}{\rm Uncertainties}$ represent the 95% confidence level, based on total propagated uncertainties.