

RECEIVED
REGION 1



2007 AUG -7 PM 12: 41

August 1, 2007

Mr. Jim Kottan
U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

**SUBJECT: REPORT FOR ANALYSES FOR SAMPLES FROM SET TWENTY-FIVE
FROM THE INDIAN POINT POWER STATION, BUCHANAN, NEW YORK
[INSPECTION REPORT NO. 050-247/2007-003] [RFTA NO. 07-001]**

Dear Mr. Kottan:

The Oak Ridge Institute for Science and Education (ORISE) received set 25, consisting of six water samples, associated with the Indian Point Power Station on May 16, 2007. Sample analysis was initiated based on your previous direction for handling samples from this licensee and modified based on a phone conversation with John White on July 3, 2007 and an e-mail from Stacie Sakai on July 9, 2007. Sample identification and collection data for the samples addressed in this report are presented in Table 1. Gamma spectroscopy and tritium data are provided in Table 2 and Table 3, respectively. The pertinent procedure references are provided in each 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:WPL:bf

Enclosures

c: T. Carter, NRC/FSME/DWMEP 7J8
E. Knox-Davin, NRC/FSME/TWFFN 8A23
S. Roberts, ORISE
File 1697

J. White, NRC Region I
E. Abelquist, ORISE

Distribution approval and concurrence :	Initials
Technical Management Team Member	DR
Quality Manager	ATP

Voice: 865.241.3242

Fax: 865.241.3248

E-mail: Dale.Condra @orau.org

TABLE 1

**SAMPLE IDENTIFICATIONS
AND COLLECTION DATA
INDIAN POINT POWER STATION
BUCHANAN, NEW YORK**

ORISE Sample ID	NRC Region I Sample ID	Collection Date	Collection Time
1697W0148	MW-60-37'-(001)	5/8/2007	13:27
1697W0149	MW-60-54'-(001)	5/8/2007	11:52
1697W0150	MW-60-74'-(001)	5/8/2007	12:17
1697W0151	MW-60-137'-(001)	5/8/2007	12:03
1697W0152	MW-60-156'-(001)	5/8/2007	12:33
1697W0153	MW-60-178'-(001)	5/8/2007	15:16

TABLE 2

**CONCENTRATIONS OF SELECTED
GAMMA EMITTING RADIONUCLIDES
IN WATER SAMPLES
BY GAMMA SPECTROSCOPY CP1, REVISION 15
INDIAN POINT POWER STATION
BUCHANAN, NEW YORK**

ORISE Sample ID	NRC Region I Sample ID	Radionuclide Concentrations, TPUs, and MDCs ^a (pCi/L)			
		Co-58	Co-60	Cs-134	Cs-137
1697W0148	MW-60-37'-(001)	-0.5 ± 1.9 ^b , 2.8	1.0 ± 1.7 , 3.1	-2.1 ± 2.0 , 3.0	-0.5 ± 1.6 , 2.8
1697W0149	MW-60-54'-(001)	-0.6 ± 3.2 , 4.5	-1.3 ± 2.9 , 4.9	0.0 ^c ± 2.9 , 4.8	-2.0 ± 3.1 , 4.4
1697W0150	MW-60-74'-(001)	-1.3 ± 2.2 , 3.5	0.0 ± 2.1 , 3.7	1.0 ± 2.1 , 3.7	-2.5 ± 3.3 , 3.9
1697W0151	MW-60-137'-(001)	-0.1 ± 2.3 , 3.8	-1.0 ± 2.2 , 3.7	2.4 ± 2.4 , 4.3	0.2 ± 2.1 , 3.7
1697W0152	MW-60-156'-(001)	1.5 ± 1.9 , 3.0	1.1 ± 1.7 , 3.1	1.2 ± 1.9 , 3.0	-0.6 ± 1.7 , 2.8
1697W0153	MW-60-178'-(001)	0.3 ± 3.1 , 4.5	0.8 ± 2.6 , 4.6	0.0 ± 4.8 , 4.7	0.0 ± 2.9 , 4.3

^aThe MDC for each radionuclide is after the comma.

^bUncertainties represent the 95% confidence level, based on total propagated uncertainties.

^cZero values are due to rounding.

TABLE 3

**CONCENTRATIONS OF TRITIUM
IN WATER SAMPLES
BY LIQUID SCINTILLATION ANALYSIS
AP2, REVISION 16, CP4, REVISION 3
INDIAN POINT POWER STATION
BUCHANAN, NEW YORK**

ORISE Sample ID	NRC Region I Sample ID	Radionuclide Concentrations, TPUs, and MDCs^a (pCi/L)
1697W0148	MW-60-37'-(001)	-40 ± 160 ^b , 280
1697W0149	MW-60-54'-(001)	240 ± 170 , 280
1697W0150	MW-60-74'-(001)	250 ± 170 , 280
1697W0151	MW-60-137'-(001)	290 ± 170 , 280
1697W0152	MW-60-156'-(001)	170 ± 170 , 280
1697W0153	MW-60-178'-(001)	840 ± 200 , 280

^aThe MDCs are after the comma.

^bUncertainties represent the 95% confidence level, based on total propagated uncertainties.