

GPU Nuclear, Inc. Three Mile Island Nuclear Station Route 441 South Post Office Box 480 Middletown, PA 17057-0480 Tel 717-948-8461

December 22, 2003 E910-03-048

U.S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, DC 20555

Gentlemen,

Subject: Saxton Nuclear Experimental Corporation (SNEC) Operating License No., DPR-4 Docket No. 50-146 Containment Vessel (CV) Radiation Survey

In our December 5. 2002 letter (E910-02-058) GPU Nuclear provided responses to seven (7) requests for additional information (RAI) questions. These questions and responses were related to the SNEC Facility Technical Specifications Change Request (TSCR No. 62) to allow removal of the CV upper dome following Final Status Survey of the below grade portions of the CV. From that letter the GPU Nuclear committed to taking the following action to RAI question 7.

### **Question 7**

Please provide survey information on radiation levels on the operating floor level of the CV after backfilling and isolation activities are complete.

### **Response:**

GPU Nuclear agrees to provide survey information on radiation levels on the "operating floor" level of the CV after backfilling and isolation activities are complete. Note that the term "operating floor" has traditionally referred to the original 818'/812' elevation concrete floor of the CV. Since all the concrete has been removed from the CV this floor is no longer in place. Following back fill and isolation activities, a cover will be placed on top of the back fill to prevent cross contamination during removal of the upper CV dome. This cover, and any exposed portion of the CV liner, which will remain following license termination, will be included in the Final Status Survey (FSS).

The purpose of this letter is to provide you the information on radiation levels on the operating floor of the CV since backfilling and isolation activities have been completed. A nominal six-inch concrete cap has been poured over the backfill materials at approximately the 803.9' elevation. This elevation represents the new operating floor level. Radiation readings were taken on this elevation.

Twenty nine (29) general area radiation readings were taken at waist level. Survey information is provided in Attachment 1. The radiation survey results are consistent with natural background and are listed as follows:

Average radiation dose rate:0.0035 +/- 0.0016 mr/hrRange of readings:0.002 - 0.005 mr/hr

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If you have any questions on this information, please contact Mr. Art Paynter at (814) 635-4384.

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Sincerely,

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Arth Ofen AFPaynter SNECKSD for

G. A. Kuehn Program Director, SNEC

cc: NRC Project Manager, NRR NRC Project Scientist, Region 1

Attachments: Attachment 1 – CV Radiation Survey Results

## **CV Radiation Survey Results**

 Location:
 New CV Ops Floor @803.9' elevation - post concrete cap installation

 Survey Date:
 12/18/2003

 Technician:
 Bill Horton

 Instrument
 Bicron microrem meter

 Serial #
 C233J

 Cal. Due Date
 3/11/2004

1 2 3 4 5 6 7 8 9	Reading (mr/hr)           0.004           0.003           0.003           0.003           0.003           0.002           0.004           0.002           0.004           0.003
3 4 5 6 7 8 9	0.003 0.004 0.003 0.003 0.002 0.004 0.004 0.003 0.003
4 5 6 7 8 9	0.004 0.003 0.003 0.002 0.004 0.004 0.003 0.003
5 6 7 8 9	0.003 0.003 0.002 0.004 0.004 0.003 0.003
6 7 8 9	0.003 0.002 0.004 0.004 0.003 0.003
7 8 9	0.002 0.004 0.004 0.003 0.003
8 9	0.004 0.004 0.003 0.003
9	0.004 0.003 0.003
	0.003 0.003
	0.003
10	
11	
12	0.003
13	0.004
14	0.003
15	0.002
16	0.005
17	0.003
18	0.003
19	0.003
20	0.003
21	0.004
22	0.004
23	0.005
24	0.003
25	0.004
26	0.005
27	0.004
28	0.003
29	0.003
Mean	0.0035
Uncertainty (2 <sub>0</sub> )	0.0016

### Comments:

Concrete cap poured on 12/17/03. Radiation readings required per NRC RAI Q7 for TSCR#62.
 Survey readings taken at waist level.

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SNEC FS	NEC FSS RADIOLOGICAL			SURVEY Survey Unit #		CV1-1 Sur			Survey #	vey# 200-03-1658		
Location				Containment V	essel Genera	l Area at elevat	ion 808	ft	· · · · · · · · · · · · · · · · · · ·	<b>_</b>		
Grid #	N//			۱ ۱		Area Classific	cation	ation N/A			N/A	
Reason For Survey General Area Survey		after Concrete Cap Installation		Date of Survey 12		12/18/03	18/03 Time		of Survey 1315			
Technicia	an	W. Horto	"W" D	Horton	Techni	cian N/A						
GRCS Revi	view	R. Sh	epherd A	thigher			Date	e Of Revie	w 12-	18-0	>3	
Radiolo	logical in	strument l	Data	Radiologi	al Instrumen	it Data		Radiolo	gical Inst	rumen	t Data	
Inst./Probe Type		micro Rem		Inst./Probe Type		N/A	Inst./Probe Type		×	N/A		
Serial Number	er(s)	C23	33J	Serial Number(s)			Seria	l Number(	s)			
Cal. Due Date	e(s)	3/11	/04	Cal. Due Date(s)			Cal. I	Due Date(	s)			
Efficiency (%	%)	N/	/A	Efficiency (%)		β,γ:	Effi	ciency (%)	)		8,γ:	
ABCR (cpm	n)	N/	Ά	ABCR (cpm)			AB	CR (cpm)				
BRA Averag	ge	N	Ά	BRA Average			BR	A Average				
BRA Location		N/A		BRA Location		★	BRA Location			•		
Source Chec	cks :	Sat. 🛛 Unsat. 🗋		Source Checks	Sat. 🗋	Unsat. 🔲	Source Checks		s Sa	t. 🗖	Uns	at. 🗆
All readings an	re gener	al area at a	approximatel	y waist level.	Comments							
All readings ar	re gener	al area at a	approximatel	y waist level.								
All readings an	re gener	al area at a	approximatel		survey Map							
All readings an												



# Containment vessel radiation survey

Survey # 200-03-1658

Technician: W. Horton

Instrument: C233J microR

Date: 12/18/03

