

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

August 20, 2002 E910-02-039

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 Submittal of Information to NRC in July 31, 2002 Meeting

On July 31, 2002, a meeting between NRC and GPU Nuclear, Inc was held in Rockville, MD. The purpose of the meeting was to discuss dose modeling technical issues from the review of SNEC's License Termination Plan (LTP). The purpose of this letter is to summarize what information was provided to you at this meeting. Also, per your request, additional information is being provided to you via this cover letter. This information is described as follows:

Reference NRC Letter dated July 17, 2002, Subject. "Forthcoming Public Meeting – Saxton Nuclear Experimental Facility".

During the July 31, 2002 meeting, GPU Nuclear, Inc. provided the following to the NRC:

- 1. Four 2-set CD ROM copies of SNEC <u>Subsurface</u> Dose Model files. These replace CDs previously provided to the NRC in the 4/8/02 meeting.
- 2. Four CD ROM copies of SNEC <u>Surface</u> Dose Model files. These replace CDs previously provided to the NRC in the 4/8/02 meeting
- 3. One hard copy of the Surface Model book containing:
  - SNEC Calc. E900-01-030, Rev. 3, "SNEC Radionuclide List," dated July 29, 2002 (two copies).
  - DCGL Lists
  - Sensitive Parameter Tables
  - Sensitive Parameter Statistic Reports
  - Base Inputs
  - ANL Derived Kds.
- 4. Two hard copies of the Subsurface Model book containing:
  - DCGL Lists
  - Sensitive Parameter Tables
  - Sensitive Parameter Statistic Reports
  - Base Inputs

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Submittal of Information to NRC in July 31, 2002 Meeting E910-02-039 August 20, 2002 Page 2 of 2

- 5. Radiological results of SNEC groundwater samples taken with ORISE duplicates.
- 6. PowerPoint presentation on dose modeling issues.

In addition to the above, the following information is being provided to you:

- Two (2) CD ROM copies containing dose modeling files. Beside subsurface drinking water, NRC requested that consideration be made on dose impacts from other pathways, if water was brought to the surface via irrigation. These files provide the all pathways subsurface dose analysis results for bedrock, SSGS undisturbed backfill and spray pond undisturbed overburden.
- 2. Table of unresolved RAI issues requiring discussion and resolution. These will be discussed in the next NRC meeting scheduled for August 29, 2002.
- 3. A copy of revised table titled "Comparison of Proposed DCGL Values with Other Miscellaneous Values." This table needs to be inserted into the hard copy Surface Model Book. The reason this table was revised was due to a transcription error from the URS subsurface computer model results to the table. This error incorrectly stated the 25 mrem/yr DCGL result for Pu-238.

If you have any questions on this information, please contact Mr. James Byrne at (717) 948-8461.

Sincerely,

G. A Kuehn' Program Director, SNEC

cc: NRC Project Manager NRC Project Scientist, Region 1

## **SNEC LTP RAI Status**

NRC Ref	Q#	Торіс	GPU Response Letter# / Date	NRC Accept Letter Date	LTP Section	LTP Rev 1 Updated? (Y/N)	Status
RAI 1 08/18/00	1	10CFR 50 75 records	E910-00-0016 9/18/00	1/17/01	2.1.1	Y	
	2	Use of NIST traceable sources	E910-00-0016 9/18/00	1/17/01	2.1.2	Y	
	3a	Update Rad Inventory	E910-00-0016 9/18/00	1/17/01	2.2.1; T2-1	Y	
	3b	Update project dose	E910-00-0016 9/18/00	1/17/01	T3-1	Y	Updated further in LTP Rev1 & ER
	30	Update RW projections	E910-00-0016 9/18/00	1/17/01	T3-2	Y	Updated further in LTP Rev1 & ER
	4	DSF & soil beneath DSF characterization/classification	E910-01-013 7/2/01		2.2 4 1.2 T2-6	Y	
	5	SSGS Discharge Tunnel characterization/classification	E910-01-016 9/4/01		224.14	Y	
	6	CV Soil characterization/classification	E910-02-003 1/24/02		2 2 4.2 T2-15	N	Carried over into RAI3 Q1.
	7	Gamma logging	E910-01-013 7/2/01	11/2/01	2 2 4.2/3 T2-16	Y	Carried over into RAI3 Q2
	8	Pavements characterization/classification	E910-01-013 7/2/01		2.2 4 3 T2-28	Ŷ	Carried over into RAI3 Q3
	9	Monitoring wells	2245		2 2.4 5	Y	Carried over into RAI3 Q3
	10	Justify site characterization/classification	E910-00-0016 9/18/00	1/17/01	26	Y	Nuclei - Luci Octour des NDO
	11	Clarify radionuclides of concern	E910-00-0016 9/18/00		T2-5		Nuclide List Calc under NRC review
<u></u>	12	CV saddle characterization/classification	E910-02-003 1/24/02		434	N Y	
	13	SSGS Sump characterization/classification	E910-01-016 9/4/01		44	T Y/N	Nuclide List Calc under NRC
	14	Radionuclide inventory Ni- 63/H-3	E910-00-0016 9/18/00		521		review
-	15	Listing of Rad Instruments	E910-00-0016 9/18/00	11/2/01	T5-9/10	Y	Carried over into RAI3 Q4
	16	Use of surrogate & gross activity DCGLs	E910-00-0016 9/18/00	1/17/01	5.2 3 2.1 5 2 3 2 3 5 2.3.2 4	Y	
	17	Exposure rate measurements DQO	E910-00-0016 9/18/00	1/17/01	523.24	Y	
	18	Northeast dump site characterization/classification	E910-00-0016 9/18/00	1/17/01	5 2 4 2 T5-1/2	Y	
	19	High degree of confidence	E910-00-0016 9/18/00	1/17/01	5244	Y	
	20	Footnote problems	E910-00-0016 9/18/00	1/17/01	5 4; T5-5	Y	
	21	Scan & static measurements	E910-00-0016 9/18/00	1/17/01	5 4.3	Y	
	22	Upgrading areas to a higher classification	E910-00-0016 9/18/00	1/17/01	54.4	Y	Correct eventuate DALO5
	23	NUREG-1507 concerns & Tc- 99 energy mistake	E910-00-0016 9/18/00	11/2/01	5 5.2 4 1 5 5.2 2	Y	Carried over into RAI Q5
	24	Use of beta/gamma surrogate for alpha detection	E910-00-0016 9/18/00	1/17/01	55242 5525	Y	
	25	Subsurface sampling	E910-00-0016 9/18/00	1/17/01	5534.7		
	26	Statistics Type 1 error	E910-00-0016 9/18/00	1/17/01	T5-16	Y	
	27	Predetermine sample size "Selecting a min. # of samples"	E910-00-0016 9/18/00	1/17/01	App 5-2	Y	

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## **SNEC LTP RAI Status**

NRC Ref	Q#	Торіс	GPU Response Letter# / Date	NRC Accept Letter Date	LTP Section	LTP Rev1 Updated? (Y/N)	Status/ Resp. Person
RAI 2	1A	SHPO requirements	E910-01-012 6/20/01		ER	Y	
11/08/00	1B	Consult Pa agencies (Game/boat/fish,etc)	E910-01-012 6/20/01		ER	Y	
	2	Justify Np-237 DCGL exclusion	E910-01-012 6/20/01		Chpt 2 & 5	N	There is no Np-237 @SNEC.
	ЗA	Use of screening DCGL & assumptions	E910-01-012 6/20/01	<u>}</u>	App 6 1	Ŷ	
	ЗB	Area Factors for building surfaces	E910-01-012 6/20/01		App 6 1	Y	Verified to NRC in 5/14/02 mtg Issue resolved.
	4	Soil DCGL assumptions & justification	E910-02-005 2/4/02		622 App 61	Y	Dose models currently under review by NRC
	5	Contaminated media limits	E910-02-005 2/4/02		622	Y	Dose models currently under review by NRC
	6	How gross DCGLs will be calculated	E910-02-005 2/4/02	_	52323 52.324	Y	
	7	Stream sediment exposure pathway issues	E910-02-005 2/4/02		6 2 2 2 6 2 2.6 T2-19	Y	
	8	Subsurface DCGLs	E910-02-005 2/4/02		6 2.2 T2-19	Y	Dose models currently under review by NRC
	9	Alpha emitters at historical outfalls	E910-02-005 2/4/02		2 2.4 3, T2- 1, 2 3 1, 5 2.1, T5-1, T5-4, 5.5 3 6, ER	Y	
	10	Site Specific decommissioning costs	E910-00-0018 12/4/00 E910-01-002 2/14/01		7.1	Ŷ	
RAI 3 01/17/01 & 11/2/01	1	Classification of area under CV saddle	E910-01-007 3/19/01 E910-02-002 1/24/02		2.2 4 2	N	Carried over from RAI 1 Q6. Work scope not clearly defined
	2	Clarify intent of gamma logging	E910-01-007 3/19/01	11/2/01	2.2.4 T2-3		Carried over from RAI 1 Q7.
	3	Groundwater TRUs and hydrology issues	E910-01-007 3/19/01 E910-02-003 1/24/02		2.2.4.5 ER	Y	Carried over from RAI 1 Q9
	4	Efficiency footnote to LTP Table 5-10	E910-01-007 3/19/01	11/2/01	T5-10 5 5.2 4 4	Y	Carried over from RAI 1 Q15
	5	Correct Tc-99 energy	E910-01-007 3/19/01	11/2/01	5 5.2 2	Y	Carried over from RAI 1 Q23
	6	SSGS characterization, DCGL and Kd values	E910-01-007 3/19/01 E910-02-003 1/24/02		App 6.1	Y	
	7A	Asbestos Disposal	E910-02-003 1/24/02	11/2/01	ER	Y	
	7B	PCB Disposal	E910-02-003 1/24/02		ER	Y	
	7C	SSGS sump debris disposal	E910-02-003 1/24/02	11/2/01	ER	Y	
Characterization Commitments 1/17/01		Phase 1 Characterization - DSF - CV Pipe Tunnel & subsurface soil - Pavement & subsurface soil	E910-01-0001 1/30/01 E910-01-013 7/2/01		Chpt 2	Y	
		Phase 2 Characterization - SSGS footprint - SSGS discharge tunnel & surrounding environs	E910-01-0001 1/30/01 E910-01-016 9/04/01		Chpt 2	Y	
		Phase 3 Characterization - River sediment - Yard drains - Intake tunnel	E910-01-0001 1/30/01 E910-02-002 1/11/02		Chpt 2	Y	

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NRC Ref	Торіс	LTP Section	Status
Summary Letter dated 05/14/02 Pathway Analysis (Ref 4/8/02 mtg )	Pathway Analysis: Use DandD default metabolic & behavior parameters. (RAI2 Q4/8)		Submitted for review 7/31/02
(RAI2 Q4/8)	Conduct probabilistic analysis to determine sensitive parameters		Submitted for review 7/31/02
(RAI2 Q4/8)	Conduct deterministic analysis to develop DCGLs.		Submitted for review 7/31/02
(RAI2 Q4/8)	Treat Kd as a stochastic parameter		Submitted for review 7/31/02
(RAI2 Q4/8)	Verify hydraulic gradient slope data		Verified in 5/8/02 NRC mtg.
(RAI2 Q4/8)	Verify 10,000 m <sup>2</sup> contaminated area is bounding.	Chpt 6	Verified in 5/8/02 NRC mtg
	Provide Co-Physics report to NRC		GPU provided report
(RA12 Q4/8)	Provide information to justify reducing list of SNEC isotopes		SNEC Calc E900-01-030, rev 3 submitted to NRC in 7/31/02 mtg
(RA12 Q6)	NRC to re-evaluate the need for additional information to close out RAI2 Q6 on gross DCGLs		
Summary Letter dated 05/14/02 HP Issues (Ref 4/8/02 mtg.)	Revise LTP to include the removal of all concrete from CV. Include new survey units	Chpts. 3 & 4	
	Demonstrate that CV surface surveys behind installed steel support structures comply w/release criteria		
	Need to provide TRU/HTDN data for survey units Maps need to indicate boundaries of survey units for the grounds as opposed to showing only area classifications		GPU agreed to do and will put info into FSS packages
Summary Letter dated 6/4/02	SNEC will use volumetric values for embedded pipes in conjunction with contaminated bldg area DCGLs (Ref RAI2 Q3A)	523.1.1	
(Ref. 5/8/02 mtg )	Update LTP Table 5-2 to show which DCGL values (i.e. surface or volumetric) will be used in each survey unit.	Table 5-2	
(RAI2 Q3B)	NRC to recheck its evaluation of SNEC surface area factors (Ref SNEC Calc E900-01-005)	Chpt 5	NRC has rechecked and concurred
(RAI2 Q4/8)	Dose model. Use probabilistic approach to determine sensitivity analysis	Dose Model Chpt 6	
61	DandD metabolic & behavior parameters will be used as constraints	"	
"	PRCC method to be used in determining 25 <sup>th</sup> or 75 <sup>th</sup> percentile parameters. Check will be made to see if mean is captured with this distribution range.	"	
45	Sensitive parameters will be used in the deterministic analysis	16	
"	Sensitivity & DCGL development will be conducted on each nuclide individually.	66	
(RAI2 Q4/5/8)	K₄s using site-derived ranges will be included in sensitivity analysis	56	Copy of ANL report provided to NRC in 4/8/02 mtg.
(RAI2 Q4/8)	Include justification for the 10,000 m <sup>2</sup> contamination area & 1 m contamination zone thickness in LTP chpt 6.	£6	
(RA12 Q8)	Use mass balance parameter in subsurface model	""	
Summary Letter Dated 6/13/02 (Ref 5/22/02 mtg )	NRC to provide feedback to SNEC on the format for presenting data from water & soil samples taken from under the CV.		
	NRC to provide guidance to SNEC on how the TRU/HTDN data should be presented in the LTP.		
(RAI3 Q1)	Provide to NRC soil & gw data from samples taken under CV. Revise TRU/HTDN table to clarify footnotes, i.e. state analytical techniques used & other nuclides analyzed but not listed	Chpt 2	· · · · · ·
	Revise TRU/HTDN table to cross reference data to sample locations	Chpt 2	
	Revise LTP to describe survey process to identify activated areas in CV.	Chpt 5	
	Revise LTP to denote all survey units that include the inner/outer steel supports & discuss design of the FSS.	Table 5-2	
	Review & clarify the LTP discussion on FSS design for survey units	Chpt 5	Per NUREG 1727 Section 14 4
	Commit in LTP that boundaries & char. data specific to each survey unit would be included in FSS design package.		
	NRC agreed to format of Table 5-2. However, SNEC will revise to include numeric value for each survey unit to ref. FSS package	Table 5-2	

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NRC Ref	Торіс	LTP Section	Status
	Revise LTP to eliminate MARSSIM method to assess 10% of the FSS samples since most conservative ratios will be used for those areas where TRU/HTDNs are at MDA.	5 2.7.6	
	Table 5-5, pg 5-24, Footnote 9. Revise LTP to describe FSS design for residual materials in subsurface soils	Table 5-5 5 4	Subsurface sampling procedure
	Revise LTP to describe content of the FSS report per NUREG	528 57.2	
	1727, Section 14 5, pg 14-11: Revise LTP to delete all text referring to collection of additional samples prior to any statistical analysis	5 /.2 5 1.3 / 5.2 5.3 / 5 6	Will use NRC letter report, "Two stage Sampling in Fina Status Decom," Feb 2000.
	Revise LTP to explain methods to remove CV dome and prevent recontamination of lower half of CV during removal of dome.	Chpts 3 & 4	Info may not be available un after LTP approval If this is case NRC will make it an in- process inspection item
•	Include list of LTP changes requiring a license amendment. (sacred cows)	Chpt 1	A Adams provided Plumbroc information
	Revise LTP to reflect removal of concrete from inside the CV	Chpt 3 & 4	
<u> </u>	Revise Figure 5-1 to show storm drain system.	Fig 5-1	
-,,-	Revise figures specific to SSGS basement walls & discharge tunnel sections to reflect sample locations	Chpt 2	
,	Revise LTP tables to clarify sample type descriptions.	Tables 2 3a, 2.3b, 2 6a	
	Reflect guidance in NUREG-1727, App E on background reference areas. Delete sentence "If any background reference area is determined to be inappropriate it is adjusted as necessary and documented "	5441/5442	
6/21/02 Mtg	CV saddle characterization results still needed by NRC. Schneider suggested SNEC email him the results (RAI3 Q1)		Same as 6/13/02 Summary Letter above
	"QA Procedures", pg 2-18 Clarify procedure on how decommissioning data from earlier periods of site remediation will be included into the DQO process (e.g. site soil remediation in	2.5	Data obtained from written procedures Cophysics repo on RESRAD verifications of
	1994 and survey of RWDF, Pipe tunnel & C&A bldgs) "Remaining Tasks" pg 3-2 Provide summary of embedded/buried	32	Reactor Support Bldg releases. Summary to be put in Chpt :
	pipe that will remain on site after license term		Detailed info will be put into FSS package.
	"Surrogate Ratio DCGLs", pg 5-7. Revise last par to indicate when a surrogate ratio is established using data prior to remediation, it may not always be the case to reestablish new ratio by post remediation sampling. In most cases the most conservative ratio will be applied to the survey unit	5 2.3 2 3	SNEC will use best data tha represents the area Nuclid justification will be documented in survey package.
(RAI2 Q6)	"Gross Activity DCGLs" pg 5-8. Clarify the statement "Post remediation sampling will be used to adjust DCGL values as necessary before performing the FSS." May need to apply a different method for regulatory compliance vice adjusting DCGL.	5 2.3.2.4	Section will be revised Sampling data will be used to calculate the effective (unity DCGL Section will also be revised to allow use of both surface & volumetric DCGL
	"Changes in Classification" pg 5-14. Revise 2 <sup>nd</sup> sentence to say "All changes of area classification (after LTP approval) where a higher classification is lowered (i e , Class 1 to Class2) will require a license amendment (see Section 1 0)	5 2.4 4	Section to be revised to reflect NRC approval before lowering a classification.
	"Written Procedures", Table 5-3, pg 5-18 Clarify whether a procedure will be developed to cover preparation and contents of FSS report.	5 2.7.2	FSS report guidance will be in new procedure
	"SNEC Facility Sample Analysis", pg 5-19 3" bullet bottom of pg states "5-10% of selected sample groups will be analyzed" Need to clarify the term "selected sample groups "	5.2.7.6	At least 5% of total samples will be analyzed for HTD nuclides
	"Survey Design", pg 5-23 Clarify survey design or procedure reference for facility systems such as piping	5.4	Applicable procedure will be referenced in LTP.
	"Survey Design", Table 5-5, pg 5-24: Re Footnote I, provide a reference describing subsurface sampling procedure	5.4	Applicable procedure will be referenced in LTP.
	"Measurement Locations", pg 5-28: Define the term "supplemental measurement locations"	5.4.3 2	Will use NRC letter report, "Two stage Sampling in Fina Status Decom," Feb 2000
	"Gamma Scan MDC for Land Areas", pg 5-38: Use of scan MDC values in MARSSIM, Table 6.7 for SNEC is inappropriate. Such values need to be site specific.	5.5 2 4.3	Site specific scan MDCs will be derived & incorporated into survey packages
	"HTD Radionuclides", pp5-38/39 Clarify reference to EPRI report on "Utility Use of Constant Scaling Factors "	5.536	Section will be deleted after approval of SNEC nuclide in

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NRC Ref	Торіс	LTP Section	Status
	"Data Recording", pg 5-46 Clarify term "correcting for background" & reference the applicable procedure	5 5 5.3	Revise LTP to state material specific bkgd will be subtracted
	"Definitions", pg 5-54: Def #26, "Survey Unit" needs to be revised to delete of revise the ref To "the actual size of a survey unit is not deemed to be critical."	58	Revise to use MARSSIM definition
	"Elevated Msmt Comparison", pg 5-67, 2 <sup>nd</sup> par: Clarify text at end of this par. re msmt densities Note NUREG-1727, App E provides guidance to this issue		Text will be removed from this section
(RAI1 Q22)	"Resurvey", 2 <sup>nd</sup> par. needs to explain that when a new survey unit is separated out from an existing survey unit or is subdivided, the new survey unit should include a buffer zone that adequately bounds the area of identified contamination.	544.5	SNEC agrees to buffer the open/outer edges of impacted areas
	"Resurvey", 4 <sup>th</sup> par. Indicates replacement msmts Are collected within remediated area where only a small fraction of the area (<10%) of a Class 1 survey unit is remediated This statement needs to be clarified since replacement samples cannot be taken from areas remediated due to FSS & then combined with sample data from the remainder of the survey unit to demonstrate compliance. When an area in a survey unit is remediated, a new set of the required sample size (i.e. the predetermined sample size from the DQO process) must be obtained during the FSS	5.4 4 5	Revise LTP - The whole survey unit will be resurveyed
7/31/02 Mtg	SNEC Calculation E900-01-030, Rev 3, "SNEC Radionuclide List" was submitted to NRC for final review. List contains 11 nuclides applicable to SNEC	Chpt 6	NRC reviewing
	Submitted to NRC electronic media (CDs) for surface and subsurface dose models.	Chpt 6	NRC reviewing
	NRC requested SNEC look at other pathways, other than drinking water, for bedrock, SSGS undisturbed backfill and spray pond undisturbed overburden.	Chpt 6	URS will run RESRAD to include these additional pathways
<u> </u>	SNEC provided NRC results of groundwater duplicate analyses. NRC will compare against ORISE results		NRC reviewing

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Information Provided to NRC Since 4/8/02 Mtg.	Submittal Method
1. CoPhysics Report, "Embedded Pipe Radiation Survey Report " January 2002.	Via GPU Letter E910-02-0017, dated 4/17/02
2. ANL Report, "Kd Study of Site Soils and Construction Debris from the SNEC Decommissioning Project," February 2002.	Provided in NRC 4/8/02 Mtg.
3. SNEC Calc. E900-01-005, Determination of Surface Area Factors," April 5, 2002	Provided in NRC 4/8/02 Mtg
4. CD-ROM RESRAD 6 1 Dose Model Files for SNEC Surface Model.	Provided in NRC 4/8/02 Mtg
5. CD-ROM RESRAD 6 1 Dose Model Files for SNEC Subsurface Model and also URS Report	Provided in NRC 4/8/02 Mtg
6. Presentation handouts addressing NRC Letter dated March 28, 2002.	Provided in NRC 4/8/02 Mtg
7. SNEC Calc 6900-02-008, SNEC Facility DCGL Values for Volumetric Contamination," February 7, 2002	Provided in NRC 4/8/02 Mtg
8. Additional copies of CoPhysics Report, "Embedded Pipe Radiation Survey Report " January 2002	Provided in NRC 5/8/02 Mtg
9. SNEC Calc. E900-01-030, Rev 1, "SNEC Radionuclide List," April 30, 2002.	Provided in NRC 5/8/02 Mtg
10 Table of RESRAD input values for SNEC surface model	Provided in NRC 5/8/02 Mtg
11. Presentation handouts addressing NRC Letter dated 5/1/02.	Provided in NRC 5/8/02 Mtg.
12. Summary table of transuranic (TRU) and hard to detect (HTD) radionuclides from SNEC	Provided in NRC 5/22/02 Mtg
characterization work.	
13 Four (4) prints describing the following - SNEC Grout, Sheeting, and Well Location Plan - SNEC Well Location Plan - SNEC Grout Curtain Location Plan - SNEC Anchor Bolt Hole and Well Locations	Provided in NRC 5/22/02 Mtg
14. Presentation handouts addressing NRC Letter dated May 13, 2002.	Provided in NRC 5/22/02 Mtg.
15 SNEC Calc E900-01-030, Rev 2, SNEC Radionuclide List," June 20, 2002	Provided in NRC 6/21/02 Mtg.
16 Presentation handouts addressing NRC Letter dated 6/14/2002	Provided in NRC 6/21/02 Mtg.
17. Four 2- set CD ROM copies of SNEC Subsurface Dose Model files These replace CDs previously provided to NRC in 4/8/02 mtg	Provided in NRC 7/31/02 Mtg.
18 Four CD ROM copies of SNEC Surface Dose Model files These replace CDs previously provided to NRC in 4/8/02 mtg	Provided in NRC 7/31/02 Mtg
<ul> <li>19. Hard copy of Surface Model book containing.</li> <li>SNEC Calc E900-01-030, Rev 3, "SNEC Radionuclide List," July 29, 2002 (2 copies).</li> <li>DCGL Lists</li> <li>Sensitive Parameter Tables</li> <li>Sensitive Parameter Statistic Reports</li> <li>Base Inputs</li> <li>ANL Derived Kds</li> </ul>	Provided in NRC 7/31/02 Mtg
20. Hard copy of Subsurface Model book containing <sup>-</sup> - DCGL Lists - Sensitive Parameter Tables - Sensitive Parameter Statistic Reports - Base Inputs	Provided in NRC 7/31/02 Mtg
21. Radiological results of SNEC groundwater samples taken with ORISE duplicates.	Provided in NRC 7/31/02 Mtg
22. One additional copy of Surface Model Book (see item 19 above)	Via GPU Letter E910-02-039 dated August 20, 2002.
23 Two (2) CD ROM copies providing requested information for all pathways subsurface dose	Via GPU Letter E910-02-039 dated
analysis results for bedrock, SSGS undisturbed backfill and spray pond undisturbed overburden.	August 20, 2002.
analysis results for bedrock, boob undistance backing and spray point undistance overburden.	Via GPU Letter E910-02-039 dated
24, Table of unresolved RAI issues (2 copies) requiring discussion and resolution in August 29, 2002 mtg 25 Two (2) copies of table titled "Comparison of Proposed DCGL Values with Other Miscellaneous	August 20, 2002 Via GPU Letter E910-02-039 dated

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8/19/02

	Proposed Composite DCGL's (URS + SNEC) July-02 25 mrem/y Limit 4 mrem/y DW Limit			.1 Deterministic Values ∋Cl/g)	URS Develope	d Subsurface Values	SNEC Initial RESRAD 5.82 Deterministic DCGL's (pCl/g)	NRC Screening DCGL's (pCl/g)	
			July-02		July-02		February-00	May-99	
			00.702		25 mrem/y Limit	4 mrem/y DW Limit	25 mrem/y Limit	25 mrem/y Limit	<u> </u>
Am-241	25.7	2.3	25.7	207	107	2.3	1.5	2.1	Am-241
C-14	26.8	5.4	26.8	450	42.1	5.4	3.7	12	C-14
Co-60	3.5	66.7	3.5	7.1E+10	8	66.7	2.5	3.8	Co-60
Cs-137	6.6	397	6.6	1.7E+17	21.1	397	8.5	11	Cs-137
Eu-152	10.1	1443	10.1	1.8E+15	20.7	1443	6.3	8.7	Eu-152
H-3	645	31.1	645	279	2185	31.1	260	110	H-3
NI-63	747	.19249	747	1.9E+08	3220	19249	1700	2100	NI-63
Pu-238	30.1	0.41	30.1	23.5	123	0.41	24	2.5	Pu-238
Pu-239	6.8	0.37	6.8	1.4	45.7	0.37	22	2.3	Pu-239
Pu-235 Pu-241	866	19.8	866	4803	4072	19.8	45	72	Pu-241
Sr-90	1.2	0.61	1.2	7.9	5,6	0.61	1.6	1.7	Sr-90

## Comparison of Proposed DCGL Values with Other Miscellaneous Values