Survey of Generators of Low-Level Radioactive Waste
for Interest in an Assured Isolation Facility

The Nuclear Regulatory Commission directed the NRC staff to proceed with a rulemaking plan that explores interest in the assured isolation concept for the storage of low-level radioactive waste (LLW) and provides a foundation for a Commission decision on whether to develop a rule. The rulemaking plan should include Agreement State interaction and participation (SRM-SECY-02-0127, 9/5/02, ML022480322). This decision was made in conjunction with the Commission's approval of the staff's proposed response to a letter from the State of Ohio requesting NRC's views on a proposed Ohio regulation for licensing an assured isolation facility. (See 9/12/02 letter to Robert Owen, ML022560082.) Accordingly, the U.S. Nuclear Regulatory Commission staff and the Conference of Radiation Control Program Directors, Suggested State Regulations Committee on Part L, chaired by Robert Owen, State of Ohio, are jointly developing basic information on the projected need for disposal or storage of LLW and projected disposal capacity.

As an important aspect of this basic information, we are interested in knowing the extent of need for and interest in an assured isolation facility that would provide long-term, centralized storage of low-level radioactive waste, including material regulated under the Atomic Energy Act, naturally-occurring material, accelerator-produced material and technologically-enhanced material (discrete sources only for this last). The facility would be open to multiple generators. We exclude mixed radioactive and chemical waste from this inquiry. We realize that not all this information is readily available even for past activities and that any projections for the period of ten years are very uncertain, so we would appreciate rough estimates or ranges, with any qualifications you think appropriate. For purposes of this survey, we do not define an assured isolation facility other than to describe it as an engineered facility that would provide long-term, centralized storage of LLW to multiple generators. The facility could be designated as: 1. Exclusively for storage, with no option for disposal at the AIF; 2. For storage, with the expectation of disposal of the waste at the AIF; or 3. For storage, with the option of disposing of waste at the AIF. The tables below are our preferred format for information but if it is more convenient to use another format, please feel free to provide the information in the most complete form you can. There are no formulas in the tables.

Company: South Texas Project Nuclear Operating Company (STPNOC)

For ten years, beginning in 2003:

1. How many cubic feet and how many curies of low-level waste material in Classes A, B and C and non-Atomic Energy Act radioactive waste (ARM, NORM, TENORM) that your company generates do you expect to require disposal? If you don't have a breakdown by category, please provide a cumulative figure.

2. How much disposal capacity do you expect to be available to your company for the various categories of waste?

3. Are there any other options for storage, disposal, or processing, not presently in use, that you expect to be available to reduce the quantities of low-level waste without a designated disposition (e.g., extended storage, segregation of wastes, volume reduction)?

Estimated Generation of LLW by Category (thousands of cubic feet)											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
Class A	19.2	19.2	19.3	19.2	19.2	19.3	19.2	19.2	19.3	19.2	192.3
Class B	0.7	0.3	0.9	0.4	0.9	0.6	0.6	0.6	0.6	0.6	6.2
Class C	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0
NARM	0	0	0	0	0	0	0	0	0	0	0
Total	20.0	19.6	20.3	19.7	20.2	20.0	19.9	19.9	20.0	19.9	199.5

Estimated Generation of LLW by Category (curies)											
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
Class A	2	2	2	2	2	2	2	2	2	2	20
Class B	440	440	440	440	440	440	440	440	440	440	4400
Class C	90	90	90	90	90	90	90	90	90	90	900
NARM	0	0	0	0	0	0	0	0	0	0	0
Total	532	532	532	532	532	532	532	532	532	532	5320

Estimated Disposal Capacity of LLW by Category (thousands of cubic feet)												
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total	Net*
Class A	19.2	19.2	19.3	19.2	19.2	19.3	19.2	19.2	19.3	19.2	192.3	0
Class B	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0.6	5.6
Class C	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0.6	0.4
NARM	0	0	0	0	0	0	0	0	0	0	0	0
Total	19.4	19.4	19.5	19.4	19.4	19.5	19.2	19.2	19.3	19.2	193.5	6.0

*Amounts generated minus disposal capacity

Estimated Disposal Capacity of LLW by Category (Curies)												

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total	Net*
Class A	2	2	2	2	2	2	2	2	2	2	20	0
Class B	440	440	440	440	440	440	0	0	0	0	2640	1760
Class C	90	90	90	90	90	90	0	0	0	0	540	360
NARM	0	0	0	0	0	0	0	0	0	0	0	0
Total	532	532	532	532	532	532	2	2	2	2	3200	2120

*Amounts generated minus disposal capacity

Estimated Total Generation and Disposal of LLW and NARM (thousands of cubic feet)*												
	2003	2004	2005	2006	2007	2008	2008	2009	2010	2011	2012	Total
Total Generated	20.0	19.6	20.3	19.7	20.2	20.0	N/A	19.9	19.9	20.0	19.9	199.5
Disposal Capacity	19.4	19.4	19.5	19.4	19.4	19.5	N/A	19.2	19.2	19.3	19.2	193.5
Disposal/ Storage Needed (net)	0.6 LLW	0.2 LLW	0.8 LLW	0.3 LLW	0.8 LLW	0.5 LLW	N/A	0.7 LLW	0.7 LLW	0.7 LLW	0.7 LLW	6.0 LLW

*If information is not available for both LLW and NARM, please indicate which material you are providing information for.

Estimated Total Generation and Disposal of LLW and NARM (curies)*												
	2003	2004	2005	2006	2007	2008	2008	2009	2010	2011	2012	Total
Total Generated	532	532	532	532	532	532	N/A	532	532	532	532	5320
Disposal Capacity	532	532	532	532	532	532	N/A	2	2	2	2	3200
Disposal/ Storage Needed (net)	0 LLW	0 LLW	0 LLW	0 LLW	0 LLW	0 LLW	N/A	530 LLW	530 LLW	530 LLW	530 LLW	2120 LLW

*If information is not available for both LLW and NARM, please indicate which material you are providing information for.

In response to the question, "Are there any other options for storage, disposal, or processing, not presently in use, that you expect to be available to reduce the quantities of low-level waste

without a designated disposition (e.g., extended storage, segregation of wastes, volume reduction)? "

STPNOC is currently either exploring or using the following options: segregation of resins and filters by waste classification, volume reduction of resins and dry active waste, and arrangements for direct burial of LLW at the Envirocare Facility in Utah. We also plan to construct several on-site storage containers to help enhance our ability to segregate our different waste classes and to provide on-site storage capability should we lose access to approved disposal facilities. Currently, for Class B and C waste, the Barnwell site in South Carolina is the only option and the site closes its doors to STPNOC in 2008.