



UNITED STATES  
 NUCLEAR REGULATORY COMMISSION  
 WASHINGTON, D. C. 20555

FEB 24 1989

NOTE TO: HLWM Branch Chiefs  
 FROM: Mark Delligatti, SPAET Program Element Manager  
 SUBJECT: HIGH-LEVEL WASTE INFORMATION SUMMARY  
 FOR FEBRUARY 23, 1989

Enclosed is the High-Level Waste Information Summary prepared by the Center for Nuclear Waste Regulatory Analyses (CNWRA). Items in this issue should be of interest to all segments of the Division.

A handwritten signature in cursive script that reads "Mark Delligatti".

Mark Delligatti, SPAET Program Element Manager

Enclosure: As Stated

cc: REBrowning BYoungblood  
 MMace SFortuna  
 JCook BStiltenpole  
 PAltomare RMacDougall

8903010101 890224  
 PDR WASTE PDC  
 WM-11

426.1  
 Wm-11  
 2/24/89

CENTER FOR NUCLEAR WASTE REGULATORY ANALYSIS  
Washington Office

Pertinent Information Summary

5-89

February 23, 1989

INTRODUCTION

The purpose of this summary is to provide timely information that is relevant to the management of High Level Nuclear Waste. Source document information is provided the reader who desires more information. Accuracy of the information is not guaranteed.

REPORT

Subject: U.S. Senate Bill Introduced to Combat 'Greenhouse Effect';  
Weakened from Last Year's Version

Source: Nuclear Waste News - February 9, 1989

Summary: On February 2, 1989, Senator Tim Wirth (D-Colorado) introduced the "National Energy Policy Act of 1989. This bill, introduced to fight the 'Greenhouse Effect', includes programs to develop advanced nuclear reactors, to minimize generation of radioactive wastes and to develop better ways of disposing of such wastes. \$100 million is authorized for advanced nuclear and nuclear waste research programs in FY 1991, and not more than \$200 million for each of the fiscal years 1992 and 1993. Removed from this bill were provisions, included in last year's bill, for demonstration projects.

Subject: Opposing Bills on HLW Site Introduced in Nevada Legislature

Source: Nuclear Waste News - February 9, 1989

Summary: On January 17, 1989 a joint resolution was introduced in the Nevada legislature urging both houses to express to the U.S. Congress their "adamant opposition" to the Yucca Mountain HLW site. On January 18, 1989 a bill was introduced in the state senate creating a state committee to "negotiate on behalf of the state with the secretary of energy ... and the nuclear waste negotiator" on the Yucca Mountain HLW site.

	Initials	Date
Cognizant Director Approval	<i>[Signature]</i>	2/22/89
Element/Subelement Approval	<i>[Signature]</i>	2/22/89

**Subject:** DOE Answers Congressional Queries on Spent Nuclear Fuel;  
Issues Sixth Annual Report on FIS Plan

**Source:** Radwaste News - February 9, 1989  
Nuclear Waste News - February 16, 1989

**Source:** Recently the DOE responded to a Congressional query on the availability of sufficient storage at reactor sites with the issuance of its sixth annual report on the federal interim storage (FIS) plan. The DOE predicts that, by the year 2000, the need for additional at-reactor storage capacity may reach 3700 metric tons of uranium (MTU). The annual need for additional capacity per year between 1989 and 2000 ranges from 92 to 570 MTU. If spent fuel was shipped among reactors the needed capacity would be reduced to 2000 MTU and the annual rate would range from 63 to 43 MTU for the years 1989 to 2000. The change in projections, a reduction, for spent fuel storage needs from prior years' reports is due to DOE now using the "no new orders (on nuclear reactors)" case as its base case.

The DOE feels that part of the needed storage capacity will be satisfied by extension of the life of the fuel in the reactor, extension of current storage pools and the addition of recently licensed dry storage facilities.\*

The FIS Plan was established under the 1982 Nuclear Waste Policy Act (NWPA). DOE is required to fully recover the cost of the FIS program from its users. This requirement would imply that if only a single utility requested and was granted an FIS contract, it would be responsible for the entire cost of the program. So far, NRC has not received any applications for determination of eligibility for FIS services. The title of DOE's report is, "Implementation Plan for Deployment of Federal Interim Storage Facilities for Commercial Spent Nuclear Fuel."

**Subject:** Bill Introduced in House Allowing DOE to Open WIPP

**Source:** Inside Energy/with Federal Lands - February 13, 1989

**Summary:** A bill introduced in the House during the first week of February will allow the DOE to open its WIPP site in New Mexico. The bill introduced by Reps. Joe Skeen (R-New Mexico) and Richard Stallings, (D-Idaho), authorizes the Department of Interior to withdraw from public use more than 10,000 acres of federal lands containing and surrounding the WIPP site, an authorization needed before the site can be opened.

\*According to 'Radwaste News', DOE is clearly supporting the dry modular storage casks for future expansion of the storage capacity at reactor sites, although this was not specifically stated in their report to Congress. The DOE believes that these casks provide the highest flexibility for storage, shipment and treatment at a MRS facility, and shipment to the national repository.

**Subject:** Canadian Group Gives Approval To A Multibarrier Disposal System For HLW

**Source:** Nuclear Waste News - February 16, 1989

**Summary:** The Technical Advisory Committee (TAC), comprised of representatives from eight Canadian technical and scientific societies, has praised the general idea of a multibarrier disposal system to isolate HLW. As stated in their ninth annual report, the committee is also pleased with Canada's HLW research effort. The Atomic Energy of Canada Ltd. (AECL) is developing a plan for deep geologic disposal (500 to 1,000 m) in the stable rock of the Canadian Shield.

Copies of TAC's Ninth Annual Report are available from the chairman of the committee, Dr. L.W. Shemilt, General Sciences Bldg., Room 216, McMaster University, Hamilton, Ontario L8S 4K1, 416/522-2802.

**Subject:** Japanese Company Signs \$10 Million Contract with Battelle For HLW Barrier Study

**Source:** Nuclear Waste News - February 16, 1989

**Summary:** Battelle's Pacific Northwest Laboratories, has signed a \$10 million, three-year agreement with the Power Reactor and Nuclear Fuel Development Corp. of Tokyo, Japan, for an assessment of engineered barrier systems for commercial high-level radioactive wastes.

Battelle will develop computer models to simulate environmental conditions and corrosion of the various barrier systems. In addition, they will conduct a series of chemical experiments to determine the solubility levels of the actinides. Eventually, corrosion of metallic containers may cause extremely low levels of these elements to migrate from the "man-made system," states Battelle scientist, Michael J. Apted. He further states, "The Japanese must be able to accurately predict the rate and concentration at which these elements will be released from the waste and engineered barrier system, and their possible migration to the surrounding geological environment."

**Subject:** DOE Requests \$500 Million in FY 90 for Nuclear Waste Fund; Increase from FY 89

**Source:** OCRWM Bulletin - January/February 1989

**Summary:** The DOE asked Congress for \$500 million for operation of the Nuclear Waste Fund in FY 1990. This is an increase from FY 1989. Listed below are selected program areas where there are requests for increases or decreases in operation funds.

First Repository - Increase of \$114.9 million to fund an intensified site characterization program at Yucca Mountain, Nv., including the start of full-scale construction of the ESF.

**Monitored Retrievable Storage** - A decrease of \$5 million due to the delayed submission of the MRS Review Commission Report, thereby delaying initiation of the survey and evaluation of potentially suitable sites.

**Transportation and Systems Integration** - An increase of \$6.4 million for final design activities on Legal Weight Truck and Rail/Barge casks and associated tests; acceleration of technical development, data systems and test support and an increase in the level of effort associated with systems integration studies, analyses and requirements.

**Program Management and Technical Support** - An increase of \$7.8 million for Repository Licensing Support System

**Nuclear Regulatory Commission (NRC) Fees** - An increase of \$12.1 million due to revised NRC estimates for FY 1988-FY 1989 licensing activities.