
The

Radioactive Exchange®

To promote the exchange of views and information on radioactive waste management

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Volume 6 No. 5

March 18, 1987

DECISION ON SUPREME COURT TN MRS SUIT PETITION DUE MARCH 30

On March 27 the Supreme Court is scheduled to go into conference on Tennessee's petition for "certiorari" to have the Court hear the state's suit challenging DOE's selection of Tennessee as the host state for the MRS facility and their request for an injunction to stop the submission of the MRS proposal to Congress. The Court is to issue the decision on the "writ of certiorari" the following Monday, March 30th. The outcome will undoubtedly have a significant impact on Congressional consideration and authorization of the MRS.

Five States Support Tennessee

In the past week five states -- North Carolina, Ohio, Kentucky, Mississippi and West Virginia -- filed "amicus" briefs with the Supreme Court supporting Tennessee's suit. The "amicus" filings argue the national significance of the Tennessee suit. This could be an important factor in the Court's consideration of the "certiorari" petition. (See **Petition in the HLW Focus**)

DOE ISSUES LLRW MILESTONE CRITERIA SITED STATES TO DO SAME SHORTLY

The March 5 **Federal Register** (Vol. 52, No. 43) includes the Department of Energy's proposed criteria to determine whether states and-or compacts will be in compliance with the 1988 LLRW disposal site development milestones included in the Low-Level Radioactive Waste Policy Amendments Act (LLRWPA).

DOE took the opportunity at the WM '87 Conference to reveal the proposal. The DOE criteria are to be used only to judge whether states and-or compacts will qualify for rebates of surcharges paid by their respective LLRW generators post the 1988 milestone deadline. The sited states retain the authority to set compliance criteria to determine site access and the imposition of penalty surcharges.

Reactions of Unsited States

Officials from Texas and California, states nearest to making site selections, remarked at WM '87 that they meet the DOE criteria. (See **Criteria** pg. 2)

(Criteria from pg. 1)

[Editor's Note: The 1988 milestone requires a compact region or state without LLRW burial facilities to have a plan in place to site such a facility.] There was some concern, however, expressed by others that the DOE criteria is "too detailed." One issue that will apparently cause considerable discussion in the coming months is DOE's criteria that a siting plan specify the agency within a state government that has been designated the authority to select and develop the burial facility.

Comments on the proposed criteria are due by April 20 (45 days after the Notice appeared in the **Register**).

Sited States Criteria Coming

As noted above, the DOE 1988 milestone criteria are to be used only to determine whether a state or region is to receive a surcharge rebate. The states of South Carolina, Nevada and Washington retain their authority to determine site access and the imposition of penalty surcharges.

It was made very clear in remarks at WM '87 that, though the three states are working together, and with DOE, to ensure that the 1988 milestone compliance criteria to be adopted by each are "comparable to the extent practicable," there will be differences among them.

South Carolina's Virgil Autry made it clear that each of the states will, to some degree, have differing milestone compliance criteria in order to satisfy their respective state statutes adopted to implement provisions of the LLRWPA. Although they all agreed that their proposals would be circulated prior to the milestone deadline, it was also pointed out that there was no intention to go through an open comment period on their criteria prior to making them final.

States to Rely on "Reasonableness"

From the comments and presentations made at WM '87 and the presentations of Virgil Autry of South Carolina, Jerry Griepentrog of Nevada and Terry Husseman and Elaine Carlin of Washington, it appears that the sited states criteria will be far less specific than the DOE proposal. Nevada's Jerry Griepentrog explained that "sincerity of effort" and "reasonableness, but not leniency" will be the primary bases of sited states determination of compliance. They all expressed the desire to receive the site development plans from the compacts and states by mid-summer of this year.

Highlights of DOE Criteria

DOE's detailed milestone compliance criteria are spelled out in the FR notice in a table format spread out over several pages and correlated with specific provisions of the LLRWPA. Included among the list of criteria are the following:

Regarding the option of selecting a site developer: DOE will require that the host state or region submit a signed copy of a contract; identify the **actual** site to be developed; indicate current ownership of the land.

Site Plan Adoption: Site plans submitted by non-sited states or compacts to meet the 1988 milestone must be **signed** by officials responsible for approving the plan.

Siting Plan Details: The siting plan submitted to meet the milestone criteria must include some 70+ elements, including: citations as to the authority given to state agencies to implement the siting plan; descriptions of facility design; site monitoring programs; emergency plans; financial structure and fee structure; and, a very detailed and milestone-specific site development and licensing schedule.

Information copies of the criteria can be obtained from Jeff Smiley's office (in case you missed the FR notice) (301) 353-4216.
★★

LLRW Volume Disposal Update

LLRW ACCEPTED FOR DISPOSAL AT BARNWELL, BEATTY AND HANFORD (REVISED) Through January 1987

(Volumes in Cubic Feet)

	<u>January</u>	<u>Year to Date</u>		<u>January</u>	<u>Year to Date</u>
Northeast					
Connecticut	2,174.90	2,174.90	Rocky Mountain		
New Jersey	723.20	723.20	Colorado	0.00	0.00
	<u>2,898.10</u>	<u>2,898.10</u>	Nevada	0.00	0.00
			New Mexico	0.00	0.00
Appalachian			Wyoming	0.00	0.00
Pennsylvania	8,064.50	8,064.50		<u>0.00</u>	<u>0.00</u>
West Virginia	0.00	0.00			
Maryland	0.00	0.00	Western III		
Delaware	0.00	0.00	South Dakota	0.00	0.00
	<u>8,064.50</u>	<u>8,064.50</u>	Arizona	0.00	0.00
				<u>0.00</u>	<u>0.00</u>
Southeast					
Georgia	913.00	913.00	Northwest		
Florida	12,347.20	12,347.20	Idaho	0.00	0.00
Tennessee	8,144.40	8,144.40*	Washington	6,458.00	6,458.00
Alabama	5,026.50	5,026.50	Oregon	8,366.20	8,366.20
N. Carolina	6,691.80	6,691.80*	Utah	0.00	0.00
S. Carolina	6,858.60	6,858.60	Alaska	0.00	0.00
Mississippi	1,766.00	1,766.00	Hawaii	573.80	573.80
Virginia	2,055.10	2,055.10	Montana	0.00	0.00
	<u>43,802.60</u>	<u>43,802.60</u>		<u>15,389.00</u>	<u>15,398.00</u>
Central States			Unaligned		
Arkansas	0.00	0.00	Rhode Island	114.10	114.10
Louisiana	1,552.00	1,552.00	Vermont	0.00	0.00
Nebraska	3,359.00	3,359.00	New Hampshire	22.50	22.50*
Kansas	622.50	622.50	Maine	0.00	0.00
Oklahoma	7,567.50	7,567.50	New York	1,880.70	1,880.70
	<u>13,101.00</u>	<u>13,101.00</u>	Massachusetts	2,289.80	2,289.80*
			Texas	0.00	0.00
Central Midwest			North Dakota	0.00	0.00
Illinois	17,830.40	17,830.40	California	5,973.60	5,973.60
Kentucky	0.00	0.00	Puerto Rico	0.00	0.00
	<u>17,830.00</u>	<u>17,830.40</u>	D.C.	0.00	0.00
				<u>10,280.70</u>	<u>10,280.70</u>
Midwest					
Wisconsin	176.00	176.00	TOTAL:	128,680.40	128,680.40
Indiana	0.00	0.00			
Iowa	1,351.00	1,351.00	(As reported 2/1/87)		
Ohio	998.00	998.00	DECEMBER:	230,797.65	1,812,243.05
Michigan	919.50	919.50			
Minnesota	1,262.80	1,262.80			
Missouri	12,597.80	12,597.80*			
	<u>17,305.10</u>	<u>17,305.10</u>			

* Revised Figures

Wrap Up (LLRW)

IN THE MIDWEST

If you haven't heard yet, the Michigan Compact Commission, at their February 27 Commission meeting, designated **Michigan, Minnesota, Wisconsin and Ohio** as the four possible states to host the Midwest region's LLRW disposal facility. Under the terms of the Compact each now has ninety days to withdraw without incurring a penalty. If none of the four volunteers a site by June, then one will be designated as the host. By that time the 90-day no-penalty withdrawal period will have expired.

According to Midwest Compact staff there are a number of communities within these four states that are interested in hosting a LLRW burial site. A forty page proposed "draft" agreement between the Commission and a potential volunteer host state has been distributed to the officials of each potential host state. The next edition of the EXCHANGE will provide highlights of that draft agreement.

IN TEXAS

Selection of Texas' preferred site in Hudspeth County for the location of the state only burial facility has been halted by a state district court injunction granted by a circuit judge in neighboring El Paso County. The injunction was sought by El Paso County officials who contend that the location of a LLRW burial site in neighboring Hudspeth will have an adverse economic impact on the county. El Paso County's boundary is 13 miles from the preferred site location in Hudspeth. The court injunction prohibits the selection of the preferred site until August 11. At that time a full judicial proceeding will be convened on the merits of El Paso's petition.

Texas LLRW Authority officials report that the injunction decision is being appealed. They maintain that any and all legal action will be taken to proceed with the preferred site selection.

IN THE ROCKY MOUNTAIN WEST

At their February 27 meeting the Rocky Mountain Board took enforcement action against Puerto Rico, New Hampshire and Rhode Island, denying access to generators from these states (territories) to the Beatty Regional facility upon determining that they were not in compliance with the first milestone of the LLRWPA (i.e., not being a member of a compact or taking responsibility for the disposal of LLRW generated within their boundaries). These three were among the group of five -- PR, NH, ND, DC, RI -- who were issued "show cause" orders in December (See EXCHANGE, Vol. 6, No. 2). Upon reviewing the responses to the "show cause" orders, the Board decided to grant DC and North Dakota a six month grace period since they demonstrated a sincere effort to join a compact.

IN THE INDUSTRY

Associated Technologies, Incorporated (ATI) has signed an agreement with **INET Corporation** of Newark, CA for INET to represent ATI products and services in ten western states. Mike Naughton, formerly of EPRI and Boston Edison, will be the primary contact at INET. Mr. Herman Miller, President, and Charles Sathrum of INET, will also assist Mike in representing ATI. For further information please contact Dale T. Jessop of ATI at (704) 797-9600.

LN Technologies completed the sale of a mobile solidification unit to FURNAS, the Brazilian nuclear utility. The unit will be installed at the Angra-1 power plant near Rio de Janeiro to replace the installed plant system. The sale includes the unit, operating procedures, process control plan, liner designs, training and spare parts inventory. The unit has already been accepted by Bechtel Overseas and will be shipped to FURNAS following the completion of technician training in March. **

Meeting Notes

WASTE MANAGEMENT '87 ... HIGHLIGHTS AND PERSPECTIVES ON THE LLRW MANAGEMENT SIDE

Perspectives - Overview

The presentation of the American Society of Mechanical Engineers Radwaste Committee's "OSKAR" award for contributions to the area of low-level radwaste management at WM '87 to General Chairman Roy Post was definitely appropriate for this year's annual trek to Tucson. After being treated for most of WM's history as the step-brother to high level waste management as far as meeting planning was concerned, this year's conference demonstrated that LLRW management deserved equal treatment given the number and diversity of those attending the event who were only interested in the LLRW management.

A further indication that WM is definitely a significant LLRW management gathering is that state, federal and industry participants have used the event to announce new initiatives that are being undertaken or even float new ideas or proposals that are just beginning to be considered. This particular meeting could justifiably be termed a "watershed" of such pronouncements.

DOE announced the FR release of the proposed criteria to determine state and-or compact compliance with the 1988 site development milestones set in the Low Level Radioactive Waste Policy Amendments Act (LLRWPA) (Story this issue). The sited states explained the basis of the milestone criteria that they will use to determine site access and the imposition of penalty surcharges; unsited state and compact officials or their contract consultants gave realistic appraisals of whether the LLRWPA site development milestones will be met; New state regulatory initiatives were revealed; and, utilities and vendors gave details on LLRW management practices that were helpful to their colleagues, not just promotional.

However, will all this happening there was one glaring shortcoming that most assuredly must be corrected by WM '88 or LLRW-inclined attendees may become disenchanted. This shortcoming was the scheduling of concurrent sessions that prevented utility personnel, state and federal bureaucrats and vendors from hearing each others pronouncements and having the opportunity for open discussion. In fact, on Tuesday morning a session on compacts and state activities conflicted with a panel on utility waste management practices and prevented many of the utility people from hearing some state officials say that the cost of disposal of waste at a new site may be way beyond \$100 per cubic foot, and discussion of other regulatory initiatives being undertaken regarding the disposal of radioactively contaminated lead. WM organizers must realize that LLRW deserves equal treatment with HLW. Devoting the opening day session to just HLW must also be changed, allowing plenary sessions for both high and low level waste management.

In this and following editions the EXCHANGE will highlight several LLRW management papers ranging from presentations on BRC, mixed waste, cost of disposal technologies and utility VR practices of immediate interest to generators.

Of Immediate Interest To Generators

In the panel sessions focusing on compact and state site development activities there were several pronouncements that should perk the interest of LLRW generators: NY officials revealed that in a recent study a NY-only traditional shallow-land burial site would require up to \$125 per cubic foot disposal charges to support its operations; Illinois IDNS Director announced that the current fee of \$90,000 per utility reactor to support the state LLRW program would be increased to \$600,000 per reactor; Midwest Compact officials estimated that economic incentives to local host communities would cost about \$10 per cubic foot; at least one consultant admitted that a site couldn't be developed in the Midwest unless a state volunteered to host a facility.

More to come...

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Calendar

March		
15-18	Annual AIF Fuel Cycle Conference; Boston, MA; Contact: AIF Conference Office (301) 654-9260.	
18	Hearing: Senate Energy and Natural Res. Committee; Price-Anderson legislation; Contact: M. L. Wagner (202) 224-5360.	
19	Hearing: House Energy Research Subcommittee; Chair Marilyn Lloyd; HLW Budget; Contact: Lou Ventre (202) 225-6371.	
24	Meeting: Northeast Compact Commission; Contact: Denise Prace (609) 799-1193.	
26-27	Hearings: House Interior Committee; Price-Anderson Bill H.R. 1414; Contact: Sam Fowler (202) 225-8331.	
30	Court Decision: Supreme Court Decision on Tennessee petition for consideration of MRS suit.	
29-4/2	International Topical Meeting on Remote Systems and Robotics in Hostile Environments; Pasco, WA; Spons: American Nuclear Society; Contact: J. Berger (509) 376-1178.	
April		
1	DEADLINE: Proposal Seeking LLRW Burial Site Operator Selection, Central States Region.	
4	Hearing: Senate Energy and Water Appropriations Subcommittee; Chair Sen. Johnston.	
6	Workshop: Radioactive Waste: A Kaleidoscope of Environmental and Economic Issues; Sheraton Carlton Hotel, Washington, D.C.; Spons. American Bar Association Natural Resources and Public Utilities Section; Registration Fee: \$125 ABA Members, Attorneys; \$75.00 for Gov't Attorneys, PI Groups, Law Prof.; Contact: Sue O'Neill (312) 988-5625.	
10-12	Meeting: NCSL Legislative Working Group on High-Level Waste; Stanford Court Hotel, San Francisco, CA; Registration Fee: \$65.00; Contact: Cheryl Runyon (303) 623-7800.	
14-16	Workshop: Packaging, Transportation and Disposal of LLRW; Spons: Chem-Nuclear; Sheraton Charleston, Charleston, SC; Contact: Jan Edmunds-Folk (803) 259-1781.	
22-24	Conference: Sixth Annual Incineration Conference on Incineration of Mixed and LLRW; Pheasant Run Resort, St. Charles, Illinois; Spons: University of California in cooperation with DOE, IAEA, ASME, and chapters of the Health Physics Society; Contact: Charlotte Baker, LLW Projects Coordinator, University of CA, Irvine, CA 92717. (714) 856-7066. Telex: 7101 115 338.	
23	Meeting: Northwest Interstate Compact Committee; Portland, Oregon; Contact: Elaine Carlin (206) 459-6244.	
28	Hearing (Tentative): House Interior Committee, Nuclear Power Reactor Decommissioning; Contact: Sam Fowler (202) 225-8331.	
?	Hearings: Senate Environment and Public Works; P-A Legislation and HLW Program oversight; Contact: Dan Berkovitz (202) 224-4039).	
30 - 1	Meeting: Fifth Annual Spring Meeting: CALRAD Forum; "Progress Toward A Safe, Reliable, Cost-Effective LLW Disposal Facility in CA"; Palm Springs, CA; Contact: Jean Parker (415) 647-3353.	
May		
1	Public Hearing (Tentative): Washington State proposals on Hanford Site users liability requirements; Contact: Elaine Carlin (206) 459-6228.	
3-6	Meeting: Low-Level and Mixed Waste Disposal: The Public and the Science; Hyatt Regency Bethesda, Bethesda, MD; Spons: American Nuclear Society; Contact: Mary Keenan (312) 352-6611.	
3-6	Fourth International Symposium on Environmental Aspects of Stabilization/Solidification of Hazardous and Radioactive Wastes; Hotel Tower Place, Atlanta, GA.; Spons: ASTM; Contact: T.M. Gilliam (615) 574-6820.	
5-7	Nuclear Power Assembly; Washington, D.C.; Co-Spons: American Nuclear Energy Council, American Nuclear Society, American Public Power Association, Atomic Industrial Forum, Edison Electric Institute, National rural Electric Cooperative Association and the U.S. Committee for Energy Awareness; Contact: AIF (301) 654-9260.	
6-8	Annual Conference: The Hazardous Materials Advisory Council; Radisson Mark Plaza Hotel, Washington, D.C. Contact: (202) 783-7460.	
11-15	Short Course: ASME Short Course on Radioactive Waste Management for Nuclear Power; Old Town Holiday Inn, Alexandria, VA; Contact: Gloria Greene (212) 705-7398.	
TBD	(Spring 1987) Coordinated Research Program on High-Level Waste Forms; Australia; Spons: IAEA; Contact: W. Porter (202) 252-4573.	
June		
16-19	THE THIRD ANNUAL RADIOACTIVE EXCHANGE DECISIONMAKERS' FORUM -- LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT: FACING THE NEW REALITIES -- Site Development; Long Term Liability; Economics; Public Acceptance. Grand Traverse Village, Valleyview Conference Center, Traverse City, Michigan. Registration: Exchange Subscribers: Prior to May 1 - \$595.00; After May 1 - \$635.00. Non-Subscribers: Prior to May 1 - \$650.00; After May 1 - \$690.00. Contact: (202) 362-9756.	
(?)	HOST STATE DESIGNATION: The Midwest Compact Commission is to designate a host state if none of the four candidate states volunteer.	
June/July		
28-1	Meeting: "The Critical Path" (A DOE Low-Level Waste Management technical assistance project on disposal technology selection); Copley Plaza Hotel, Boston, MA; Registration Fee: \$125.00; Contact: Julie Conner (208) 526-0648.	
	REGIONAL SITE OPERATOR SELECTIONS: Central States Compact Commission to Select Regional Site Operator.	

the HLW Focus

of the Radioactive Exchange®

(Petition from pg. 1)

DOE Opposes Cert Request

DOE has filed their brief in opposition to Tennessee's "certiorari" petition. DOE argues that the lower courts followed the principles set out in the "Chevron vs. Natural Resources Defense Council" decision providing that an agency, in this case DOE, adopted a permissible response to the issues involved with the MRS proposal within limits of the Nuclear Waste Policy Act, after having determined that Congress "had not addressed the precise question at issue."

DOE further argues that the charge that the state had "no meaningful input into the design and implementation of the MRS program is plainly wrong." The brief points out the state "is free to provide Congress with any information...it deems relevant," and is free to participate in the Environmental Impact Assessment. "Indeed," according to the brief, "the only thing [Tennessee] may not do is play a formal editorial role in the development of the Secretary's MRS proposal." **

NRC ISSUES RULEMAKING NOTICE ON REDEFINITION OF HLW

NRC's long-awaited Advanced Notice of Proposed Rulemaking on the re-definition of high level nuclear waste was finally issued in the February 27, **Federal Register**. Dan Fehringer, NRC Division of Waste Management, who labored hard and diligently on the proposal for the last year or more, made the announcement and described its key elements at WM '87. (Dan in fact announced at his presentation on March 3 that the FR notice would be released within a day or so,

unaware that it was already printed in the 27th FR.)

As explained by Fehringer at WM '87, and according to the ANPR, wastes would be classified as HLW **only** if they are both "**highly radioactive**" and in need of "**permanent isolation**." Waste not meeting **both criteria** would fall into a category of "special types of LLRW. In suggesting this approach the Commission found "untenable" arguments that "a material requires permanent isolation because it is highly radioactive." The Commission determined that the two key features that could be used to distinguish high-level wastes from other waste categories are: "intense radioactivity for a few centuries followed by a long-term hazard requiring permanent isolation."

Concentration-Based Definition

The ANPR suggests limits for LLRW be utilized to numerically define the terms "highly radioactive" and "requires permanent isolation." The result would be that waste would be considered "highly radioactive if it contained short-lived radionuclides in excess of the current Class C concentration limits for such nuclides." Permanent isolation would only be required for wastes containing "long lived radionuclides in excess of the corresponding long-lived Class C concentration limits."

Four Waste Categories

The ANPR proposed waste classification approach would divide wastes into four categories: Wastes which are (1) **neither** "highly radioactive" **nor** in need of "permanent isolation" would continue to be classified as low-level wastes routinely

acceptable for near-surface disposal under the Commission's Part 61 regulations. Wastes which are **either** (2) "highly radioactive," or (3) in need of "permanent isolation," **but not both**, would be classified as special types of "above Class C" low-level wastes, and the federal government would be responsible for their disposal under provisions of the Low-Level Radioactive Waste Policy Amendments Act (P.L. 99-240). Finally, wastes which are (4) **both** "highly radioactive" **and** in need of "permanent isolation" would be classified as HLW.

Reprocessing Wastes Not Included

The classification approach is to apply to all commercially-generated wastes from sources other than reprocessing of spent nuclear fuel. As explained by Mr. Fehring in his paper, questions have been raised concerning the application of the proposed classification system to reprocessing wastes from either commercial or defense sources. Commissioner Asselstine initially raised the concern that the proposed ANPR could, if applied to the wastes at the Hanford tank farm, mean that these wastes would end up **not** being designated as HLW and therefore possibly affect NRC's licensing authority over their long-term storage or in-situ disposal (See EXCHANGE, Vol. 6, No. 1). However, according to NRC, the proposed ANPR approach would not affect waste categorized as HLW under the DOE Reorganization Act of 1974. This would include the Hanford tank farm wastes.

If this distinction is maintained, a dual classification system for HLW would result. If the ANPR categorization would apply to the Hanford tank waste it is estimated that only about four to five percent would be categorized as HLW.

A Proposed Revised Definition

Based on the ANPR, a revised definition of HLW could be as follows:

"'High-level radioactive waste' or 'HLW' means: (1) irradiated reactor fuel, (2) liquid wastes resulting from the operation of the first cycle solvent

extraction system, or equivalent, and the concentrated wastes from subsequent extraction cycles, or equivalent, in a facility for reprocessing irradiated reactor fuel, (3) solids into which such liquid wastes have been converted, and solid radioactive wastes from other sources, provided such solid materials contain both long-lived radio-nuclides in concentrations exceeding the values of Table 1 and short-lived radionuclides with concentrations exceeding the values of Table 2." (See Tables pg. 13)

APPROPRIATIONS HEARING SET STAGE FOR "WARFARE" ON HLW PROGRAM

The friendly treatment of DOE OCRWM Ben Rusche and his budget request of \$725 million to support the Amended Mission Plan by House Appropriations Subcommittee Chairman Bevill and other committee members sets the stage for open Congressional warfare on the HLW program. This attitude is in direct contrast to those interests opposing DOE's intent to use an appropriations approval their \$725 million for the Amended Mission Plan as tantamount to approving the second round delay. The only real criticism faced by Mr. Rusche during the hearing came from Congressman Les AuCoin of Oregon, a member of the full Appropriations Committee but not the Energy and Water Subcommittee.

Pentagon Influence on Hanford Selection?

In addition to strong criticism of the second round decision and other aspects of DOE's program, Mr. AuCoin took the opportunity to raise a completely new set of allegations regarding DOE's choice of the Hanford site for the HLW repository -- that the Pentagon had influenced the decision in order that the geological repository be near a military installation with defense nuclear waste facilities.

Mr. AuCoin suggested to Mr. Rusche that the Defense Department did influence DOE's selection of Hanford and requested that Mr. Rusche examine DOE files for correspondence from the Pentagon. AuCoin remarked as to how the Pentagon could save money on the transport of defense HLW to the

the repository if it was in close proximity rather than in the eastern part of the country. Mr. Rusche stated that as far as he knew DOE had not received any such communication from Defense.

The Oregon Congressman also called attention to the NRC's critical comments on the selection of Hanford, and inquired as to why DOE had not extended the search for more superior basalt sites.

New Budget Request Shortly

Mr. Bevill at the opening of the hearing asked Mr. Rusche why the Department had submitted a justification for a FY '88 budget request of \$725 million but only officially requested \$500 million. Rusche explained that the budget was "split in two pieces" in recognition of the instruction given the Department in the past Congress' Continuing Resolution (wherein the Department was directed only to expend \$499 million) and to give the Congress ample opportunity to discuss the direction of the program. The OCRWM Director then added that an amended formal request for the additional \$225 million would be sent to Congress very shortly.

Interior, Energy Budget Recommendations

One interesting facet of the Bevill hearing was that only Mr. AuCoin brought up the Interior Committee's recommendation to the House Budget Committee that HLW program funds be frozen at the FY 87 level of \$425 million, and Congressman Phil Sharp's Energy and Power Subcommittee's very negative recommendations.

The lack of interest in Interior's specific recommendation and Energy and Power's criticism is reflective of the Appropriation's action in the past Congress when the full Committee and the Subcommittee voted against following Chairman Udall's recommendation to provide funds to support the second round program. It would seem that the Appropriations Committee is not opposed to DOE's intention to seek approval for the Amended Mission Plan though Appropriations as opposed to action from the authorizing committees. **

SENS. JOHNSTON, HATFIELD, COLLEAGUES GIVE STERN WARNING TO SEC. HARRINGTON

Senate Energy Committee Chairman Bennett Johnston joined by Ranking Minority Committee member McClure and Senators Domenici, Hecht, Melcher, Evans Bingaman, Bumpers, Murkowski, Nickles, Wallop, Conrad and Wirth have forwarded a strongly worded letter to Secretary Herrington issuing a stern warning that DOE's planned course of action regarding the decision on the second round repository and the Amended Mission Plan "is contrary to the Nuclear Waste Policy Act." In addition Senator Hatfield, in a separate supporting "Dear John" letter, emphasized that the appropriations process cannot be used to justify the second round postponement.

DOE Proposed Action Termed Illegal

The Johnston-McClure, et. al., letter points out to the Secretary that DOE's own general counsel Michael Farrell concluded that the requirements of the NWPA, including recommendations on a second repository, must be adhered to unless "supplanted by new legislation." On the role of the Mission Plan the Senators reiterated the position that it has "no legal status." Furthermore, they emphasize that "Congress is under no obligation to respond to the mission plan or Amendments to it by some particular time limit. ...Congress' action or inaction in reviewing the mission plan has no effect on the legality of the actions by the Department under the program. If, therefore, DOE takes an action that is contrary to the Act, it is risking litigation."

The Senators express their disagreement with DOE's interpretation that "an appropriation of \$725 million for the waste program for FY 88" would serve as an "approval of the proposed amendments to the Mission Plan."

In their view "action taken by the Congress in appropriations acts approving one or another level of appropriations does not supercede statutory mandates of the Nuclear Waste Policy Act of 1982. [DOE is] obligated to carry out the requirements of the Act using whatever level of appropri-

ations Congress provides."

Senator Hatfield strongly supported his colleagues view of DOE's intent to use the appropriations process to seek approval of the Amended Mission Plan. He warns the Secretary "on the dangers" of DOE's proposed action on the second round program terming the action "illegal", emphasizing "that the Department's upcoming FY 1988 appropriations level, or accompanying report language, cannot be used to justify a change in the specific requirements of the Act." **

JOHNSTON DOUBTS NRC COMMENTS ON HLW EAs SUPPORT STATE CRITICISMS

In a March 10 letter to Nuclear Regulatory Commission Chairman Lando Zech, Senator Energy and Natural Resources Chairman Bennett Johnston expresses the view that the sited states may be overstating the extent to which NRC's comments criticize DOE's HLW site selection. He requests clarification on several issues raised by the states.

Johnston remarks in the letter that contrary to the views of state officials, it is his understanding that "the NRC staff did not conclude that any of the sites should be found unsuitable...nor that DOE should not go ahead with site characterization."

Clarification of State Charges Requested

The Energy and Natural Resources Chairman requests that Chariman Zech provide the Committee with comments on several significant issues raised by the States and Indian tribes in their recent Congressional testimony. Included in the list of general questions are the following:

- (1) Have the states accurately characterized the nature and intent of the NRC staff comments? How serious are the issues identified by NRC?
- (2) Should the Committee be concerned that DOE is "recklessly" plowing ahead with flawed sites, as the states have charged?

- (3) Do the NRC staff concerns indicate that DOE should select other sites for characterization or simply that DOE needs to collect more data to evaluate these sites?
- (4) Based on the information available today, does NRC feel there is any reason **not** to go ahead with site characterization at the sites in Nevada, Washington, and Texas?
- (5) Evaluating DOE's performance to date, does it appear that DOE is heading in the right direction in its efforts to develop a data base that will be sufficient to support a repository license application?

Specific Interest in Nevada

In addition to the general questions, the Louisiana Senator asks for responses to the following specific "technical concerns" raised by the State of Nevada regarding the Yucca Mountain site:

- Active fault movement and reactivation of prior faulting by nuclear weapons testing;
- Hydrothermal activity beneath Yucca Mountain which could affect the waste isolation capability of the site or any containers used there;
- The possibility of ore deposits in the area that might cause future human intrusion;
- DOE's overreliance on the geochemical system to retard radionuclide transport through the rock;
- DOE's overreliance on models of groundwater travel time in the unsaturated zone; and,
- DOE's overreliance on the uncertain performance of engineered barrier systems.

It is rather interesting that the Senator did not request further NRC comment on technical concerns raised by Texas and

Washington state officials regarding the selection of the Deaf Smith county and Hanford sites. **

UDALL, SHARP CO-SPONSOR P-A BILL SIMILAR TO POST CONGRESS' VERSION

Interior Chairman Morris K. Udall and Energy and Power Subcommittee Chairman Phil Sharp introduced a new Price-Anderson Bill (HR 1414) in Congress on March 3. Hearings are scheduled for March 26 and 27. The legislation is identical to House version HR 5650 -- The Interior Commerce-Science Compromise Bill of the past Congress -- except for changes in four areas: the overall liability limit; inflation index for deferred premiums; suits against the U.S.; and, litigation costs.

Unlimited Liability for HLW Activities

With respect to waste activities the bill retains the key provision of HR 5650 which has the practical effect of providing unlimited liability for nuclear waste related accidents. This provision provides that:

DOE contractors involved in waste activities would be limited initially to about \$7 billion [i.e., the overall maximum liability coverage available to cover all currently operating nuclear reactors]. However, if Congress does not enact a compensation plan providing full and prompt compensation within one year after the President submits a plan, the then \$7 billion limitation would be waived. Congress would determine what constitutes "full and prompt" compensation. The result would be unlimited liability, but only if Congress has failed to provide full compensation through a compensation plan.

Substantive Changes

The substance changes in the four listed areas in this version of P-A over that of the

past Congress are:

Liability limit. Although no change has been made in the standard deferred premium provided in both H.R. 3653 and H.R. 5650 (\$63 million per plant), the fact that 7 more plants have come on-line since last October means that the **overall limit on liability has increased from about \$6.5 billion to about \$7 billion.**

Inflation. The so-called "Seiberling Compromise" in H.R. 5650, which would have required Congress to pass a law to adjust the amount of the deferred premiums for inflation, has been **replaced by a more automatic escalator** which requires NRC to adjust the deferred premiums every 5 years without legislation.

Suits against the U.S. The compromise bill of the past Congress permitted suits against the Government under Price-Anderson for injuries arising from an accident involving nuclear waste that was caused by a DOE employee. The Justice Department adamantly opposed this provision as an amendment to the Federal Tort Claims Act. **This Authority to sue the Federal Government under Price-Anderson has been deleted, preserving current law.**

Litigation Costs. H.R. 5650 permitted reasonable litigation costs (expenses incurred by the nuclear insurance pools or industry defendants in investigating, settling, or defending damage claims) to be paid out of insurance proceeds, deferred premiums or government indemnity funds, but only under court supervision, and only if the court determined that such costs were reasonable and equitable and that the party applying for the payment had not attempted to unreasonably delay the prompt settlement or adjudication of the claims. These provisions have been replaced by provisions which **prohibit payment of litigation costs out of insurance proceeds, deferred premiums, or government indemnity funds. ****

IN THE CONGRESS

HLW BUDGET The Interior Committee recommended to the House Budget Committee that DOE's HLW FY 88 budget be frozen at the FY87 level -- \$425 million. Phil Sharp's Energy and Power Subcommittee, though not recommending a specific funding level, communicated its lack of confidence in the DOE HLW program, expressing criticisms similar to those of the Interior Committee.

PRICE-ANDERSON REAUTHORIZATION As this edition went to print March 17, Senate Energy and Natural Resources had scheduled a Price-Anderson Reauthorization hearing for Wednesday, March 18, but a P-A bill had yet to be introduced. Though a compromise bill based on last year's version had been reached with Environment and Public Works, the problem seems to be getting all the right cosponsors on the legislation. If the cosponsor problem remains unresolved, look for a Price-Anderson bill covering contractors from Senator Johnston and a version covering nuclear reactors from Environment and Public Works.

CORRESPONDENCE TO DOE Upon receiving Ben Rusche's response to the letter forwarded directly to Secretary Herrington, accompanied by the committee staff report alleging that DOE distorted and manipulated data to support the HLW site selection (See EXCHANGE, Vol. 6, No. 4), Congressmen Markey, Wyden and Swift quickly sent off another letter chastizing the Secretary for delegating the review of the committee report and findings "to the very office...which was the subject of our investigation." They exclaimed that "an independent and objective review...not a self serving and superficial dismissal of our investigation" was expected. They suggested that the Secretary "appoint a truly independent committee to evaluate the findings of the staff report."

In defense of their charges and findings of the staff report, the Congressmen call the Secretary's attention to statements of two leading consultants relied upon to review the implementation of the Multiattribute

Utility Analysis (MUA) technique in the HLW site selection process. The experts cited are: Mr. Ralph Keeney and Mr. Lee Merkhofer. According to the Congressmen Mr. Merkhofer has stated that the Subcommittee staff report "does an excellent job of identifying the key scientific and value judgements that determine the ranking of the sites. ...DOE's refusal to include the rock type diversity issue in the MUA was flawed ...the conclusions derived from sensitivity studies such as those presented in the Methodology Report...are undermined by the fact that diversity of sites was not addressed in the MUA analysis."

A recently issued report by Mr. Keeney, "An Analysis of the Portfolio of Sites to Characterize for Selecting a Nuclear Repository," is cited as including the following statement: "[T]he Richton Dome site should be preferred to the Deaf Smith site unless a very high value is placed on environmental and socioeconomic impacts versus health and safety impacts and costs. Similarly, only an extremely high value on the environmental and socioeconomic impacts versus the others could possibly result in Hanford being ranked anything but fifth.... Hanford is the least desirable site because its enormously greater costs and its greater health effects are not compensated for by its relatively slight advantage in environmental and socioeconomic impacts."

The letter continues on to criticize Mr. Rusche's response, again raising a statement of Mr. Detlof von Winterfeldt, a consultant to the NAS Board: "...I believe that the conclusions drawn in the Recommendation Report are based on selective and misleading use of the analysis described in the Methodology Report. It is extremely hard to find in the Methodology Report any support for the selection of the specific set of three sites recommended for characterization. ...[I]t appears that DOE chose to ignore the implications of its own analysis, and of its own experts' and managers' opinions, and instead simply repeated the choice that was made one and half years ago."

Though Mr. von Winterfeldt's comments had

been treated lightly by DOE since he was not a member of the Board, the Congressmen call attention to the fact that Board members relied heavily upon outside consultant advice since many were not well versed in MUA techniques. A statement by one Board member, Kai N. Lee, is cited in support of this contention.

The letter concludes with a request that the Secretary "revisit the review of our Subcommittee's investigation with a fresh and objective eye, and that [he] scrutinize the DOE documents and statements which supported nearly every finding made in that investigation. It appears that what is desperately needed is a thoroughly independent investigation of the program, and we would urge you to call for such an investigation on your own accord." **

IN THE COURTS

On Tuesday, March 4th, the **Ninth Circuit Court of Appeals** took action on various motions filed by petitioners (The State of Nevada, et.al.) and the defendant (DOE) wherein the petitioners are challenging DOE's HLW repository site selection guidelines, the Environmental Assessments and the decision to delay selection of the second repository. [N.B. The litigation involves a consolidation of several challenges to DOE actions filed by the states of WA, NV, TX and intervenor groups.]

The Court decided the following on the various motions: (**Denied**) DOE's motion to consolidate site selection cases including the second repository suits, with the siting guideline challenges; (**Granted**) Motion filed by the State of Washington to hear the challenges to the second repository site selection "indefinite postponement" on an expedited basis. DOE is now required to file its brief within 54 days, with the petitioners' responses to be filed 30 days thereafter. (**Denied without prejudice**) The states motion for discovery that would have allowed them to serve DOE with

requests to produce documents. The petitioners were directed to make use of DOE's offers to make accessible their files of information. (**Denied**) Petitioners' request seeking a "special master or establishment of special procedures governing discovery and fact finding."

The next expected action on this consolidated litigation package will be an oral hearing on the second repository delay which, according to the court-set schedule, will be during the first week of June.

AT THE SITES

CONTRACTOR SELECTION: MAC Technical Services Co. (MACTEC), a wholly-owned subsidiary of Management Analysis Company, has been selected to provide support services to the DOE Basalt Waste Isolation Project at Hanford. Jimmie F. Dollard, MACTEC's President, said that the work for the DOE Richland Operations Office, located at Richland, Washington, involves support to the DOE during characterization of Hanford as a possible site for high-level radioactive waste isolation. Dollard expects that the negotiations for the contract will begin soon. He added, "The base contract is for three years at a 75-man staffing level, with options for seven additional years. The value of the contract over the three year period is \$20 million. MACTEC has assigned John Thomas to be the Project Director.

(See HLW Revised Definition, pg. 8)

Table 1		Table 2	
Radionuclide	Concentration ¹ (Ci/m ³)	Radionuclide	Concentration ¹ (Ci/m ³)
C-14	8	Ni-63	700
C-14 in act. metal	80	Ni-63 in act. metal	7000
Ni-59 in act. metal	220	Sr-90	7000
Nb-94 in act. metal	0.2	Cs-137	4600
Tc-99	3	Notes for Tables 1 and 2.	
I-129	0.08	¹ If a mixture of radionuclides is present, a sum of the fractions rule is to be applied for each table. The concentration of each nuclide is to be divided by its limit, and the resulting fractions are to be summed. If the sum exceeds one for both tables, the waste is classified as HLW.	
Alpha emitting TRU, t _{1/2} > 5 yr	100 ²		
Pu-241	3,500 ²		
Cm-242	20,000 ²		
		² Units are nanocuries per gram.	

Meeting Notes

WASTE MANAGEMENT '87 ... PERSPECTIVES ON THE HLW MANAGEMENT SIDE

Perspectives - Overview

Over 1400 people assembled in Tucson on March 1-6 for the annual Waste Management conference organized by the University of Arizona. Frustration about the status of the high-level waste program appeared to be widespread among the participants. An adversarial climate was immediately established by the keynote address given by former Congressman Jim McNulty of Arizona. He described a chronology of missed opportunities by DOE in carrying out NWPA responsibilities, citing numerous instances where DOE had not responded, or inadequately responded to Congressional inquiries. He joined in the criticism of the unilateral postponement decision regarding the second round program and culminated his remarks by recommending that one way to get the program back on track would be to get a new Secretary of Energy. McNulty indicated that the program did not have enough public confidence to proceed and that a change at the top would help.

The attendees' collective state of mind was symbolized to some degree later that same day when the only question that OCRWM Director Ben Rusche received from the floor following his luncheon address was an inquiry about whether DOE was considering alternative disposal techniques such as shooting the waste into space. That space disposal could appear to be a promising alternative barely a year after the Challenger disaster indicates the depth of the pessimism at least some observers feel about the state of progress in the geologic disposal program.

So much criticism of the DOE program was voiced during the opening day plenary session and a next day session with state and tribal representatives that many attendees openly voiced their displeasure with all the negativism. Several made it clear to WM '87 organizers that it would be more constructive if next year they make an effort to look at the positive aspects of the program. There were some positive comments on the HLW program at evening sessions (see below), but they did not overcome the general negative remarks heard "quite entirely too much" as remarked by a non-DOE attendee.

1st Round States Air New Proposal

Representatives of the three first round states revealed a new proposal for a way out of what they believe to be the mess the HLW program is now in. Speaking at a session on state and tribal issues in radioactive waste management, Steve Frishman of Texas outlined a series of proposed steps that he had developed in conjunction with the Washington and Nevada:

- (1) Set aside DOE's whole approach of seeking approval of its course of action through the draft Mission Plan amendments and related supplemental appropriation. Congress should instead focus in appropriations on a program that complies with the Nuclear Waste Policy Act and that is consistent with the \$500 million request in the President's budget. (Frishman had noted elsewhere that DOE has not yet said precisely what it would do if it received only the amount it requested in the budget. He also argued that the timing of DOE's submission of the draft Mission Plan amendment made it in effect the final version, since it would be before Congress during the critical period in which appropriations decisions are made; the comments of the states and tribes on the draft would come too late to have any effect.)
- (2) Have a 2 year moratorium on all site-specific work at the three first round sites, this time period being coincident with DOE's schedule to have a "site integration contractor" on board and in full swing. In subsequent questioning, a difference among the states on the nature of the moratorium emerged. Bob Loux of Nevada and Terry Husseman of

Washington referred only to a continued moratorium on shaft sinking, rather than on all site-specific activities as Frishman had suggested.

The proposed delay time would be used for both DOE and the Congress to sort out the problems in the program. DOE, in particular, would have the time to implement its plan to hire a site integration contractor [See EXCHANGE, Vol. 6, No. 4]. Stating his support of the initiative by DOE (which he remarked he had suggested 3 years ago), Frishman argued that it doesn't make any sense to create the potential for management-driven conflicts by charging ahead with site characterization before the integration contractor is on board and in control of the process.

While DOE is getting the integration contractor put in place, Congress could take a hard look at the radioactive waste program as it has actually been implemented, Frishman added. In his view, recognition by key members of Congress that something has to be done about the waste program, and a commitment to take the necessary action, is necessary for the current impasse to be resolved.

- (3) Appoint a high-level commission to review the technical, institutional, and political aspects of the waste program and see if it can come up with recommendations about what to do. The group might be similar to the Rogers Commission that investigated the Challenger disaster, and should be supported by an excellent technical staff. "I'm willing to commit to work in a constructive and honest way with whatever that group is," Frishman pledged.

Observing that there is a growing interest in negotiations among the parties to resolve the conflict in the waste management program, Frishman emphasized that there must be a clear table in order to reach a consensus. For this reason, he said, Congress has to put DOE in a position where they do not have to defend the decisions they have made that have helped create the current impasse.

Interest in Avoiding Prolonged Court Battles (?)

In conclusion, Frishman called for positive efforts on the part of all interested parties to end the current "debilitating death spiral" which, if it continues, can only be "cured" by the courts. Noting that the courts only have the power to stop the process, not to determine how to put the pieces back together, he charged that those who fail to seek a positive way out now will "share the burden of obstructionism if the program is brought to a halt by the courts."

DOE Also Accused of Doing the Right Thing

Amidst the frequent repetition of the criticisms of DOE that have already been thoroughly aired in Washington in hearings during January and February could be heard a few relatively faint voices asserting that all is not bad with the HLW program. Dr. Elizabeth Peelle, a sociologist at Oak Ridge National Laboratory, presented a very positive and encouraging review of the activities of the Oak Ridge MRS Task Force supported by DOE to review the MRS proposal. She concluded that "DOE deserves plaudits for its flexibility and responsiveness in dealing with local concerns."

On the repository side of the program, Ron Halfmoon of the Umatilla tribe - answering questions following his presentation in the session on state and tribal concerns - said that he was encouraged by new people in the program like Steve Kale (head of the Office of Geologic Repositories), whom he described as sincerely interested in reopening communications. In addition, as noted above, Steve Frishman of Texas praised DOE's decision to hire a site integration contractor, a feeling that appeared to be shared by the other first round states.

In the transportation area, Carl Gertz of Idaho National Engineering Laboratory (INEL) reported that a campaign of shipments of spent fuel from the East to INEL for the spent fuel storage test program was conducted successfully and uneventfully by the Department.

HLW Defense Efforts Praised

DOE was also praised for some of its actions concerning nuclear activities at Hanford other than the high-level waste repository program. (While these actions were not the responsibility of OCRWM, there might be a "halo effect" that improves state and local attitudes towards all Departmental activities.) Max Power, of the Washington Institute for Public Policy, reported that there is a good feeling in the state about the openness with which DOE has dealt with the draft Environmental Impact Statement for defense wastes at Hanford. In a paper distributed at the conference, Russell Jim of the Yakima Indian Nation described with favor a jointly-controlled retrospective study of radiation doses resulting from releases at Hanford. He suggested that the management approach that DOE has accepted for this study, in which the states and tribes in the area have a strong voice, might serve as a model for interactions in the high-level waste program.

Most Agree: Ball Is In Congress' Court

"The future of the waste management program lies squarely in the lap of the Congress," Commissioner Edwyna Anderson, chairman of the National Association of Regulatory Commissioners' Subcommittee on Radioactive Waste Management, told the plenary session of the conference. In a hard-hitting speech, Commissioner Anderson criticized Congress' action in approving a limited budget for the program as lacking any positive direction. Noting that "the five year delay [in the first repository] must give utility regulators in every state pause," she warned: "This nation by default is now on a course towards transforming facilities designed for other purposes into 115 MRSs, like it or not." "Only the Congress can step into the breach; only the Congress can right the course of the program," she said. "It is the Congress who must take the lead."

Praising Commissioner Anderson's speech as "really terrific," Steve Kraft, director of the Utilities' Nuclear Waste Management Group, said that the industry is "extremely concerned about the state of affairs in the program. There must be a consensus in the national body politic for this program to go forward," he said. "Measured by the support in Congress, it doesn't exist." Attributing this lack of support in large part to DOE's second round decision, Kraft said "We're appealing to Congress to agree with us on a compromise on the second round. It should lead to a real commitment to a second repository, on a realistic schedule."

The idea that Congress must play a central role in getting the program back on track was echoed later by Steve Frishman of Texas, who emphasized that Congress must make a commitment to doing something. His colleagues from Nevada and Washington took a different stance, however. Both Bob Loux and Terry Husseman argued that Congress gave DOE explicit directions in 1982, and did not need to provide new direction, as DOE has been requesting. "Every day a new idea pops up," said Husseman. "When you have all these new ideas floating around, how can you expect Congress to sort it out if the interested parties can't agree?"

Interesting Technical Papers

In addition to the general HLW program panels WM '87 was marked with a plethora of presentations on the technical aspects of the HLW site selection activities, spent fuel management and transportation. A half dozen or so papers dealt with major programmatic or policy aspects of the HLW program. We will provide highlights of these papers in the upcoming issue. **