
The

Radioactive Exchange®

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

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CONGRESSMEN SAY DOE DOCUMENTS REVEAL MANIPULATION OF HLW SITE DATA

N. CAROLINA SEEKS COMPACT CHANGE TO PROHIBIT FUTURE STATE WITHDRAWAL

Representatives Markey, Wyden, Swift and Weaver have sent a letter to Secretary Herrington exclaiming that conclusive evidence has been found "among DOE's own internal documents" that "DOE distorted and disregarded its own scientific analysis in order to support selection of the Hanford, Washington site and to avoid selection of the Richton Dome, Mississippi site.

One of the key factors that will determine whether North Carolina remains in the Southeast Compact upon their selection as the host for the Southeast's second regional facility is the acceptance by the other member states of an "amendment" to the current compact agreement that will prohibit their withdrawal after startup of the new regional facility.

They further charge that DOE appears to have manipulated data, weighing factors and analytic techniques to arrive at a predetermined set of sites....ignored findings and recommendations of its own technical staff and the National Academy of Sciences...."

A special Ad-Hoc Committee has been established to develop a proposal to achieve this objective. This group, the Ad-Hoc Committee on Sanctions, is chaired by Capt. Bill Briner, and includes the following Commissioners or Alternates: Jay Hakes (FL), Ben Smith (TN), Bill Newberry (SC); and Representative George Miller (NC). The Committee has already met once to discuss their charge and will meet again on November 10 in Raleigh, NC.

The five page letter levels several charges against the HLW program, including the fact that Department officials misled Congressman Markey's Subcommittee as to the existence of certain DOE draft and supporting site selection documents. (See Data in the HLW Focus)

Governor Martin's Position

Captain Briner reported that he has formally (See SE Compact pg.2)

(SE Compact from pg. 1)

informed the Compact Commission and the Ad Hoc Committee of Governor Martin's position on North Carolina's continued participation in the SE Compact. According to the NC Compact Commissioner, the NC Governor will support North Carolina's membership under the following conditions.

- The Compact is amended to prohibit the withdrawal of a party state after January 1, 1995.
- A compactwide tariff is established to ensure that the best available technology will be utilized to construct a disposal facility and that the economic well-being of the host community will be provided for.

Legislature Involved

The Governor's support will also be contingent upon the results of the two ongoing studies being conducted by the legislature under the auspices of the Joint Select Committee on LLRW and the Joint Legislative Utility Review Committee (See EXCHANGE, Vol. 5, No. 15). Both committees held private meetings withing the past month. EXCHANGE Publisher Ed Helminski was invited as an outside expert in compact activities to provide the membership of both committees with his view of ongoing activities outside the Southeast region. **

STATE COMPACT COMPLIANCE CRITERIA FOR '88 LLRWPA MILESTONE IN DRAFT

At the recent meeting of the Low-Level Radioactive Waste Forum (October 28-29, Austin, Texas) a "draft working paper" outlining criteria for determining whether states and/or compacts would be in compliance with the second LLRW disposal site development milestone specified in the Low Level Radioactive Waste Policy Amendments Act (LRWPAA) was presented. For the most part the draft criteria merely reiterats the language of the LLRWPA, but adds more specific details.

As specified in the LLRWPA the second milestone requires that by January 1, 1988:

- Each compact region identify a host state; or select a LLRW site developer

and the site to be developed; **and** the compact region or the respective host state is to have developed a siting plan detailing procedures and schedules for site selection and licensing; **and** have delegated the necessary authority to carry out the plan.

- Each non-compact is to state develop a siting plan, meeting the same requirements as set for the regional compacts.

The Act also stipulates the specific elements that are to be included in the siting plan.

Draft Criteria

The "draft" criteria discussed among DOE and state officials at Austin plainly states that for regional compacts a host state must be designated and formal, signed documentation of such must be submitted to DOE and the sited states.

With regard to the requirement that a compact region or independent state have a siting plan, the draft criteria, as presented, would require the **enactment of a siting law**. Pending legislation would not be acceptable.

In addition, a state would be required to designate a specific state agency to carry out the siting plan. Both of these criteria came under heavy scrutiny by state and compact officials. In the ensuing discussion, the need of having any "detailed criteria beyond that actual language of the Act" came into question.

Texas Prepared to Submit Plan

Texas officials revealed that they were about ready to "test" the adequacy of their siting plan against the 1988 milestone criteria in the Act. They described a "staff siting plan document" which is planned to be submitted to DOE in the near future as documentation of their state's compliance with the '88 milestone. This could very well serve as the "model" of siting plan documentation that will need to be submitted by the compacts and independent states in order to meet the '88 milestone. **

UPDATE: NRC HEARING ON B&W PROCESSING CENTER--DIOXIN EMISSIONS

At the recently convened NRC Administrative Hearing on Babcock & Wilcox's license application to construct and operate a LLRW supercompactor and a large scale incinerator at their Apollo PA facility, Mr. Jack Lauber, Associate Air Pollution Control Engineer for the New York State Department of Environmental Conservation and the author of cited papers on dioxin emissions from hospital incinerators, testified that in his view the B&W "high efficiency incinerator and multistage air cleaning system should result in a destruction and removal efficiency of at least 9.99 percent of any hazardous compound such as dioxins."

Mr. Lauber's testimony is notable because the papers on hospital incinerators that he coauthored were cited by the Intervenor as providing evidence that dioxins could be emitted from incinerators like B&W's.

Incinerator Similarities Refuted

The Intervenor's testimony cited an '85 paper coauthored by Mr. Lauber and colleagues Drum and Doyle, that, in their view, provided evidence that dioxins were being emitted from an incinerator "similar to the proposed [B&W] facility." Mr. Lauber refutes the Intervenor's claim stating that though "dioxins had been measured in the emissions from hospital incinerators...none of them can be considered 'similar' to the [B&W] facility." In his view, the two-stage combustion chamber B&W incinerator, with the second chamber "operating at 2100°F with a retention time of 1.33 seconds and excess air of about 100 percent," coupled with the planned "multi-stage air cleaning system with the gases leaving the scrubber system at...approximately 180°F...then slightly heated (to approximately 230°F) before entering a HEPA/charcoal absorber/HEPA system...goes far beyond what is usually required for a municipal waste incinerator or even a hazardous waste incinerator."

Conflicts in Papers Refuted

Mr. Lauber explained that there is no conflict between an '83 paper on dioxin emissions and a more recent one published in '85. The Intervenor had pointed out that Mr. Lauber's '83 paper is cited by an EG&G review of Intervenor testimony (See EXCHANGE, Vol. 5, No. 10) in support of the contention that dioxins are emitted as particles and therefore could be captured by filters, but ignores the '85 paper which cites that dioxin vapors are present in incinerator emissions and would therefore not be captured by filters.

Mr. Lauber plainly states that the allegation his 1983 and 1985 articles expressed different views as to whether dioxins appear in the particle or vapor phase and whether they will be captured by filters "is essentially false." He explained that dioxins can be emitted in either the vapor or particle phase, but "that at appropriate exhaust gas temperatures the dioxins would be converted to the particle phase and could be removed by an efficient control system."

In addition to his statements on these two key issues, Mr. Lauber was asked and provided his technical opinion regarding the Dr. Barry Commoner's theory that dioxins are formed in the cooler parts of an incinerator. He also addressed the question of dioxin emissions from an incinerator tested by EPA at Hampton, VA. He stated that Commoner's theory was not supported by the existing technical literature and the Hampton, Va., incinerator off gas treatment capability could in no way be compared to the B&W system. (Copies of Mr. Lauber's testimony may be obtained from: Maurice Axelrad at (202) 955-6600.) **

NRC REORG PLAN -- NO STATE PROGRAMS, INSPECTION AND ENFORCEMENT OFFICES

On Monday, November 3, the Nuclear Regulatory Commission will meet in Executive Session to discuss a major staff reorganization plan proposed by Chairman Lando W. Zech, Jr., and Executive Director for Operations (EPO) Victor Stello, Jr. According to the memo sent by the Chairman

and the EDO to the Commissioners and the staff the proposed plan is intended to streamline management in order to allow the agency to better fulfill its fundamental safety mission without requiring any action by the Congress. As proposed, the reorganization would:

- o Abolish the Office of Inspection and Enforcement with that Office's inspection responsibilities split between the Office of Nuclear Reactor Regulation (NRR) and the Office of Nuclear Materials Safety and Safeguards (NMSS), and enforcement responsibilities transferred to a new Office of Enforcement that would report to the Deputy EDO.
- o Create a new Office of Congressional, Intergovernmental and Public Affairs which would absorb the liaison responsibilities of State and International programs.
- o Abolish the Office of International Programs dividing its functions between NMSS and the Chairman's Office, and abolish the Office of State Programs, dividing its non-liaison functions between NMSS and the Chairman's Office.
- o Provide the Office of Research with a greater role in rulemaking.

Wrap Up (LLRW)

AT THE DISPOSAL SITES

The South Carolina Department of Health and Environmental Control has notified **Associated Technologies Inc. (ATI)** and **WasteChem** that **Bitumen Solidified waste** will be accepted at the Barnwell facility under "certain conditions." The conditions are:

- o "The Bitumen solidified waste shall be a free standing monolith, and shall not demonstrate the characteristic of a free flowing fluid."
- o The Bitumen material is to be "full formula oxidized bitumen."

Chem Nuclear, the Barnwell site operator, is directed to dispose of Bitumen solidified waste by providing "sufficient backfill material to fill all voids around the waste to provide structural stability and minimize trench subsidence," and establishing "specific handling, placement and backfilling procedures to assure exposure to workers is maintained in accordance with ALARA requirements." For more information contact Virgil Autry at the South Carolina Bureau of Radiological Health, 2600 Bull Street, Columbia, SC 29201, Ed Day at ATI (704) 376-5752, or David Enegeess at WasteChem.

- o Consolidate three existing staff offices into the Office of Administration and Resource Management.

NMSS Increased Responsibilities

The Office of NMSS has been given responsibility for non-reactor operational and licensing activities. It assumes responsibility for the Agreement States Program and for the import-export licensing activities of the Office of International Programs. All NRC activities dealing with reactor operations, licensing operational safety and safeguards, and inspection of operating reactors are consolidated within NRR.

Though there were a couple of Commissioners that were apparently a bit miffed when the proposal was sent by the Chairman simultaneously to the Congress and the Commission rather than first to the Commissioners, it seems that there isn't much opposition to the proposal. From what the EXCHANGE has learned, one factor that will influence support for the reorganization will be the individuals that the Chairman and the EDO have in mind for the management positions. Apparently there is some concern on the Hill. **

International Update

INTERNATIONAL LOW-LEVEL WASTE DISPOSAL -- RECENT DEVELOPMENTS

Following are the highlights of a paper presented at the 8th Annual DOE Low-Level Waste Management Forum by Susan J. Mitchell, Pacific Northwest Laboratory (509) 376-8579.

OVERVIEW

According to Ms. Mitchell the current trends in international LLRW disposal are:

- Away from ocean dumping because of the present moratorium;
- Towards engineered storage and shallow disposal: Engineered Storage - Belgium, Netherlands; Engineered shallow disposal - Japan, France;
- Towards deeper disposal concepts: Sub-seabed disposal - Sweden, United Kingdom; Mines for disposal - Germany, Spain; Other deeper disposal concepts -- Finland (at reactor); Swiss (mountain);

Bucking the trend is South Africa which, because of excellent climatological conditions, has found it possible to use traditional shallow-land burial at a remote site.

Ocean Dumping Ban Forces Using Alternatives.

The suspension of ocean dumping has affected several countries and has been the prime motivation toward investigating various disposal technologies. The European countries have been prohibited from ocean dumping by the London Dumping Convention of 1983. The Convention was extended in 1985 and additional studies were recommended. This extension directly affected the plans of: The United Kingdom, Belgium, The Netherlands and Switzerland. Japan, though not a member of the London Dumping Convention, has suspended its plans for ocean disposal because of the strong opposition of neighboring Pacific Island governments.

Various Disposal Options Being Pursued

The United Kingdom had planned to continue ocean dumping, but has been prevented from doing so by a trade union dispute. The government is currently studying the design of alternative new sites -- a trench site and deep repository sites. The deep repository sites include a deep mine inland site, a cavern under the seabed accessed by land tunnel, and a cavern under the seabed accessed by sea). The Government established corporation -- The Nuclear Industry Radioactive Waste Executive -- has recently announced that it is investigating the possibility of putting a shallow-land burial facility at Elston, Killingholme and Bradwell.

Switzerland is currently characterizing for the construction of a horizontal tunnel in a mountain. The Swiss reference disposal system is to emplace cement-matrix packages in a marl formation several hundred meters below the mountain summit. The facility will be accessible via a horizontal tunnel, lined, and then backfilled with concrete.

French Progress On New LLRW Burial Site

The French La Manche LLRW disposal site is expected to reach full capacity by 1990. The La Manche site design (now of keen interest to the U.S.), commonly termed the Earth-Mounded Concrete Bunker (EMCB), will be used for the next facility which is to be constructed at Aube.

Long-Term Storage

Belgium, The Netherlands and Japan have decided to utilize long term storage while investigating various disposal alternatives. Belgium plans on using interim storage with emphasis on volume reduction. The storage facility is designed to hold all waste generated in the country over a ten year period. In the meantime land disposal is being studied.

The Netherlands has instituted a centralized treatment and long-term land-based storage program with a 50-100 year capacity. It is investigating future geologic disposal in salt domes.

In Japan the current plan is to use shallow, underground concrete pits with concrete lids.

Disposal in Old Mines

The Federal Republic of Germany and Spain intend to use old mines for disposal. In Germany the disposal would be at the Konrad mine, the site of an old iron mine. The waste will be stacked in containers in the mine chambers. The chambers will then be backfilled with rock and sealed. These chambers are at a depth of 800-1300 meters. The operation is expected to begin in 1989. The concept for disposal at Konrad is based on experience gained at the Asse mine used for test disposal of LLRW from 1967-1978.

Spain, which has a long history of strongly opposing ocean dumping, plans on using an old uranium mine in Sierra Albarrana.

Deep Disposal Studied

The Scandinavian countries are pursuing deeper disposal concepts. Sweden is pursuing the construction of a disposal site under the Baltic Sea. The facility will entail excavating caverns 60 meters beneath the seabed, 1000 meters from Forsmark harbor. Access would be by tunnel. The rationale behind this initiative is that any leakage would be in the sea, not groundwater.

Finland intends to dispose of LLRW in bedrock at two existing reactor sites -- Olkiluoto and Loviisa. At Olkiluoto the waste will be in a granite silo at 49-93 meters depth, at Loviisa at 127 meter depth.

Shallow-Land Disposal in South Africa

South Africa has built a traditional shallow-land disposal site in Vaalputs, a remote barren semi-desert area of the country. The site opened this past month (September). The waste is placed in containers and stacked in trenches 600 meters long, 20 meters wide, and 7 meters deep. The trench will be capped with the material excavated, and the surface replanted. The Vaalputs site is also being studied for potential HLW repository and MRS use.

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COMPACT GROUPINGS, MILESTONE COMPLIANCE, LLRW SITE STATUS, & LEGISLATIVE STATUS (CONGRESS & STATE)

(UPDATE AS OF 10/31/86)

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CONGRESSIONALLY RATIFIED COMPACTS

Unsited Regions In Compliance With First LLRWPA '86 MILESTONE (No Generator Penalty Surcharge In Effect)

COMPACT (MEMBER)	REGIONAL PLAN (RP)	RP STATUS	HOST STATE (HS) DESIGNATION	HS STATUS	SITE SELECTION STATUS	SITE TECHNOLOGY RESTRICTIONS
CENTRAL STATES (AS,OK,NE,AR,LA)	No	N.A.	No	N/A	RFP for developer to be issued 12/86	None
CENTRAL MIDWEST (IL, KY)	Yes	Under Development	IL Host under compact		Preliminary phases just completed	SLB Prohibited by IL law
MIDWEST (WI,IN, IA,OH,MN,MO,MI)	Yes	Proposed; in Public Hearing	Yes	Volunteer sought; Process in RP	No action until HS designated	SLB prohibited by commission law
NORTHEAST (NJ, CT)	Yes	To be Developed; RFP due 11/86	Yes	No Action	No Action	To be determined

Currently Sited Regions (Not Required to meet Milestone Requirements)

SOUTHEAST(1) (GA,FL,TN,AL, NC,SC,MS,VA)	Yes	Complete; Requires One Disposal Site	Yes	NC designated for 2nd R. facility	NC Developing Siting Laws	NC will probably prohibit SLB
NORTHWEST (ID,WA,OR,UT AK,HI,MN)	No	N.A.	WA to be host, Hanford to be Site. No provision for 2nd site.			N.A.
ROCKY MOUNTAIN(2) (CO,NV,MN,WY)	Yes	Complete	CO to Host 2nd facility under compact		Two possible sites under negotiation	None

COMPACTS ADOPTED BY MEMBER STATES NOT CONGRESSIONALLY RATIFIED

Unsited Regions in Compliance with LLRWPA '86 Milestone (No Generator Penalty Surcharge In Effect)

APPALACH(1) (PA,WV,MD, DE)	No	N.A.	PA Host under t(3 of compact		Siting Bill to be introduced 1987	SLB Proh(ted
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STATES UNALIGNED AND MEMBERS OF PROPOSED COMPACTS

STATES	COMPACT UNDER CONSIDERATION	COMPLIANCE WITH MILESTONE* (S.States - DOE)		PENALTY SURCHARGE IN EFFECT*	TO HOST STATE SITE	SITE STATUS
TEXAS	N	Y	Y	N	Y	To select 11/86; SLB prohibited
NEW YORK	Possibility	Y	Y	N	Y	Law passed; SLB prohibited Program underway
MASSACHUSETTS(3)	N	Y	Y	N	Y(?)	Siting bill introduced 1986. SLB prohibited
NEW HAMPSHIRE(4)	Y	Y	N.E.	N	N	No action
MAINE	Y	Y	Y	N	N	No action
RHODE ISLAND(3)	Y(3)	Y	N	N	N	No action
NORTH DAKOTA(4)	N	N	N.E.	Y	N	No action
VERMONT	N	Y	(?)	Y	N	No action
D.C.(5)	Y(NE)	Y(H)	N	Y	N	No action
PUERTO RICO(4)	Y	N	N.E.	Y	N	No action
CALIFORNIA	Y (See Above)	Y	Y	N	Y	CA has selected US Ecology as site operator. Site selection underway.
SOUTH DAKOTA	Y (See Above)	Y	Y	N	N	(See Western III Compact above)

NOTES:

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SLB = Shallow-Land Burial; HS = Host State

* The penalty surcharge for a state or regions generators is in effect only if the sited states rule the states or compacts are out of compliance.

- (1) Under terms of Southeast Compact Barnwell may cease operation as regional facility as of 12/31/92.
- (2) Under terms of Rocky Mountain Compact, Beatty may cease operation as regional facility.
- (3) Rhode Island enacted the RI-MA compact, but MA informed DOE that it's going it alone. DOE therefore ruled RI as out of compliance, however the sited states ruled the state in compliance. Therefore no penalty surcharge is being assessed on the generators, but the state will not receive a rebate.
- (4) DOE did not evaluate compliance of PR, ND, NH.
- (5) D.C. was ruled in compliance by the state of Washington and out of compliance by DOE.

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the HLW Focus

of the Radioactive Exchange®

(Data from pg. 1)

The charges are based on a thirty-five page preliminary report compiled by the subcommittee staff after reviewing files of DOE internal documents for the past three months.

The principal focus of the review was the process that led to the selection of Hanford as one of the top three candidate sites. The staff report includes between one and two inches of copies of DOE documents to support the findings and the Congressmen's charges.

Preliminary Documents Existed

Though OCRWM Director Rusche and the Secretary maintained through all of this past Congress's hearings on the HLW program that draft decision documents were routinely destroyed and not available, the subcommittee staff apparently discovered quite the opposite. The compiled inch-plus thick Appendices include copies of pages from "draft" reports that could be described as "draft" decisionmaking documents.

Site Methodology Report Attacked

The Congressmen accuse DOE of editing and manipulating the methodology report in order to support the final recommendation decision. As stated in the letter the staff review of DOE's internal documents "suggests that DOE had decided on the three sites prior to the completion of the methodology report and then tailored the methodology report to justify the final decision." They support this claim in part by pointing out that "the methodology and

the recommendation reports were edited at the same time by the same individuals at DOE."

Hanford Data Suppressed

The staff uncovered several documents which, in the view of the Congressmen, demonstrates that "information which clearly established the undesirability of the Hanford, Washington site and the relative desirability of the Richton Dome, Mississippi site over the Deaf Smith County, Texas site," was deleted from final documents.

The letter cites the following portion of an earlier draft of the methodology report that was deleted from the final version:

"[I]t can be definitely stated that the results of the composite analysis strongly suggest characterization of the Yucca Mountain, Richton Dome, and Deaf Smith sites...there are no realistic assumptions about either preclosure or postclosure expected performance or about the value used to evaluate performance that can result in Hanford being anything but the last-ranked site."

The Congressmen also claim that DOE eliminated an entire chapter from the methodology report that focused on factors outside the scope of the multiattribute utility analysis. This chapter included an analysis of disqualifying conditions which concluded thusly:

"Based on this review of disqualifying conditions, the Davis Canyon site and

the Hanford site appear to be the least favorable sites. The Deaf Smith County site and the Richton Dome sites appear to be the most favorable sites; and the Yucca Mountain site should fall between these two groupings."

Recommendation Report Faulted

The Congressmen exposed several instances where DOE appears to have deleted specific "unfavorable" sections included in early drafts from the final recommendation report. One such deleted paragraph cited to support this claim is:

"The initial order of preference, from the most-preferred to least preferred, is the Yucca Mountain site, the Richton Dome site, the Deaf Smith County site, the Davis Canyon site, and the Hanford site. Sensitivity analyses show that this initial order of preference is unchanged for a wide range of weights or scaling factors relating postclosure and preclosure impacts."

Rock Diversity Criteria Questioned

DOE selection of the Hanford site was in part based on the need to have "rock diversity" among the three proposed candidate repository locations. The Congressmen challenge DOE's reasoning and the manner in which it applied this criteria. First, it is pointed out that if geologic diversity was a key criteria, the only decision left to make was among the salt sites since Nevada and Hanford offered different host rock types.

If rock diversity was "so important" the Representatives contend that DOE should have included rock diversity criteria in the methodology and weighted it along with the other factors considered. However, it is pointed out that DOE refused "to allow the eight weeks necessary to include it in the formal multiattribute utility analysis."

NAS Panel Member Criticism Revealed

In support of the Congressmen's claims, the letter concludes with a citation from a letter sent to OCRWM Director Rusche by a

member of the NAS Review Panel--Professor Detlof von Winterfeldt. Professor von Winterfeldt letter (as cited) states "...the conclusions drawn in the Recommendation Report are based on selective and misleading use of the analysis described in the Methodology Report.... I find a convincing analysis that clearly rejects the Hanford site and furthermore supports the selection of the Richton Dome site over the Deaf Smith site...." **

NAS HLW ROLE FURTHER CHALLENGED; PUBLIC ROLE A DOE NOT NAS DECISION

The controversy over the continued role of the National Academy of Science Board on Radioactive Waste Management rages on (See EXCHANGE, Vol. 5, No. 16). In an October 20 response to Office of Civilian Radioactive Waste Management (OCRWM) Director Ben Rusche's highly critical letter, Nevada's HLW Program Director Bob Loux restates the charge that DOE is attempting to "use the institutional inertia of a NAS endorsement...to preempt criticism or objection...by...the affected states and Indian Tribes and the Nuclear Regulatory Commission." He also states that public participation in NAS activities is a DOE policy not NAS's.

Public Role O.K. With NAS

On the issue of state and tribal participation in the planned NAS oversight role, Mr. Loux reports that, at a recent meeting of state and tribal officials, Dr. Raphael Kasper, the Executive Director of the Commission on Physical Sciences, Mathematics and Resources of the NAS National Research Council, indicated public participation in NAS activities is up to the sponsoring agency, not the Academy.

The Nevada HLW Program Director cites the revelation by Dr. Kasper that in a recent NAS study on DOE production reactors, sponsored by DOE, the Academy was specifically required to hold public meetings and provide for full public participation in the effort.

Mr. Loux informed Mr. Rusche that "the Academy is willing, pending a request from

the Department, to allow for full public participation of their review of the Department's program." He charges that "contrary to statements made by [OCRWM-DOE] staff, it is the Department [DOE], rather than the Academy who has determined and continues to endorse limits regarding public participation and on the ability of the states-tribes to assist in defining the scope of the Academy's involvement in [DOE's HLW] program."

NAS Past Involvement Questioned

In addition to arguing for state and tribal involvement in formulating and then carrying out any NAS oversight role, Mr. Loux responded to Mr. Rusche's claim in the September letter that there is "no better place, no more capable body, no more independent body [DOE] could turn to than the NAS and the National Research Council...." In his response Mr. Loux raises the spectre of NAS actions in the late fifties and sixties:

- A recommendation of the NAS Committee on Geologic Aspects of Radioactive Waste Disposal in which the then AEC was advised to chose "the **best** possible geologic structure rather than location of a repository at each of AEC's plants at Hanford, Savannah River and the National Testing Station in Idaho;"
- A 1966 NAS letter criticizing "AEC's preference of cost over best geology," rejected by the AEC and its publication prohibited; and,
- A NAS panel recommendation condoning the selection of a site in Lyons, Kansas.
**

PROJECTIONS FOR ADDITIONAL SPENT FUEL STORAGE CAPACITY LOWERED (AGAIN!)

The just released DOE update of "Spent Fuel Storage Requirements (DOE/RL-85-2)" issued by the Department's Richland Operations Office projects a lesser need for additional storage capacity than was estimated in the report issued last year.

The report attributes most of the projected

decrease in the utilities' estimates for additional storage requirements to two factors:

- o Increased utilization of fuel cycles with longer periods between discharges, and of innovative cycles involving reuse of previously discharged assemblies.
- o Increased estimates of maximum storage capacity in some reactor pools caused in part by continued utility use of reracking.

'85 Capacity Lower Than '84

Though the report projects a decrease in the earlier estimated future spent fuel storage requirements, the reported 1983-4 available spent fuel storage capacity is downgraded by 865 assemblies. This drop in currently available capacity is attributed to a reevaluation carried out by "14 plants of 20 plants that reported an increase in capacity in 1984."

Plants Lacking Storage

In '83-'84 five facilities were identified as requiring additional storage in the '86-'87 time frame. However because of action on their part and the DOE-VEPCO Dry Storage Demonstration Project none of the five now require additional storage within this time frame. The five facilities and the actions taken to alleviate their expected storage capacity shortfall are:

- Surry 1 & 2 --Additional capacity requirement need in '86 met by licensing of Independent Spent Fuel Storage Installation at Surry.
- Palisades --Filed an application with NRC in February '86 to rerack its pool, which will increase its maximum capacity above 85 reported level.
- St. Lucie-1 --Filed application in July '86 to store fuel at Lucie-2.
- Millstone-2 --Which had previously re-

ported that a storage capacity shortfall would occur in 85, reported an increase capacity that will alleviate any future need until 1994.

Rate of Increase in Capacity Lowered

The projected rate of increase of spent fuel storage requirements over the '90-'93 timetable based on the 1985 data is significantly less than the estimate based

on '84 data. Based on '85 data, the quantity of "spent fuel for which storage capability may not be available is projected to accumulate at the rate of 1,305 MTIHM/year in 2000, and to increase to 2,139 MTIHM/year by 2005 (taking into account the quantities accepted by the U.S. Government for final disposal beginning in 1998.)

Copies of the report should be available from the DOE-Richland Office.

REPORTS OF NOTE (HLW)

World Nuclear Fuel Cycle Requirements 1986, Energy Information Administration (DOE/EIA-0436(86)) from National Energy Information Center, Room 1F-048 Forrestal Bldg., Washington, D.C. 20585. This analysis report presents the projected requirements for uranium concentrate and uranium enrichment services to fuel the nuclear power plants expected to be operating in the United States, Canada, Europe, the Far East, and other countries in the World Outside Centrally Planned Economic Areas (WOCA), as reported in **Comercial Nuclear Power: Prospects for the United States and the World (DOE/EIA-0438(86))**. Projections of spent nuclear fuel discharges and inventories of spent fuel are also presented. Domestic projections are provided through the year 2020. The domestic projections extend further into the future at the request of the Department of Energy's office of Civilian Radioactive Waste Management (OCRWM).

The sensitivities of the nuclear fuel cycle projections to different levels and types of projected nuclear capacity, to different enrichment tails assays, to higher and lower capacity factors, and to changes in nuclear fuel burnup levels are also reported.

IN THE OCRWM

DEFENSE HLW FEE The DOE is delaying the recommendation on the Defense Programs' contribution to the Nuclear Waste Repository Trust fund until after the November elections.

CONTRACT RENEGOTIATIONS The General Accounting Office (GAO) has turned down an appeal filed by Roy F. Weston regarding the June 20 GAO recommendation that DOE reopen discussions with NUS and Weston on the contract award to provide support services to OCRWM. GAO recommends that DOE "obtain best final offers on the basis of the definitized contract documents" (See EXCHANGE, Vol. 15, No. 11). DOE has not yet notified the firms of when renegotiations will begin. In July OCRWM Director Ben Rusche stated that the Department would abide by the GAO recommendation. DOE is, however, not providing information on what is currently underway with regard to new negotiations.

IN THE NRC

REDEFINITION OF HLW: A NRC staff proposed Advanced Notice for Proposed Rulemaking (ANPR) on the redefinition of HLW is in the office of the Executive Director of Operations. The Commission was scheduled to act on the proposal on October 31. But, as of October 30 the EXCHANGE was unable to confirm the impending action. Commissioner's staff had not yet seen the proposal.

IN THE EPA

THE HLW STANDARD Oral arguments in the suit filed by the Natural Resources Defense Council (NRDC) and the states of Minnesota and Texas challenging the Environmental Protection Agency's Final Rule on the HLW Standard were heard by a three judge panel in the Boston First Circuit Court of Appeals on September 10.

Among the arguments presented by NRDC and the states were: the Final Standard violates provisions of the Safe Drinking Act; and, the Agency's decision to limit the groundwater and individual protection

standards to 1000 years is a clear error of judgment and without a rational basis (See EXCHANGE, Vol. 5, No. 5)

Department of Justice lawyers representing EPA countered that the Final HLW Standard does not violate provisions of the Safe Drinking Act, maintaining that it is premature to decide whether the Safe Drinking Act applies to proposed DOE HLW repository actions. They argued that the applicability of the Safe Drinking Act to the HLW standard should be the subject of separate litigation. As for the 1000 year time frame, DOJ lawyers maintained that this was a judgmental call, within the Agency's authority.

The three judge panel gave no indication of when they will issue a final decision. However, some observers feel that final action will be taken before the end of this year or, at the maximum, before the end of the "winter."

AT THE AIF-HLW BUSINESS SEMINAR

The EXCHANGE's "Eyes and Ears" at the Atomic Industrial Forum's (AIF) meeting on the HLW Business (Oct. 19-22, Charleston, SC), reports that the event was more of an "old fraternity" gathering than a frank discussion of the status of the program.

However, the session included at least one rather (in our view) astounding revelation--DOE's Office of Civilian Nuclear Waste Management Director **Ben Rusche persists in maintaining that the program is not in trouble.** Mr. Rusche even put the recent cut in the HLW Appropriations FY'87 budget request in the most positive light dreamable. In his words, this cut of \$270 million, and strict prohibitions on site selection activities, "still means that [DOE] can proceed...cautiously...[that] the political consensus is still to proceed toward implementation of the commitment to the Nation to develop a safe and environmentally acceptable permanent disposal system...." The Director is most assuredly putting the 'best shoe on the worst foot forward' we have seen in some time.

Also of significant note at the session was the remarks made by **former Governor and DOE Secretary James Edwards**. In a luncheon address he emphasized that DOE must do a better job of consulting with the states to establish real communication with the states. In addition he specifically stated that DOE will have to restart the Second Repository program. (Interesting remark from someone that was very close to the HLW program and its current Director.)

admonitions, the only other note of realism about the status of the HLW program was interjected by Dr. John Stucker, formerly of Governor Riley's staff, now with a private consulting firm. Dr. Stucker brought to light current problems facing the program and appeared to provide some rather sound arguments for making midcourse correction through a new Congressional legislative initiative.

In the perception of our "Eyes and Ears," outside of Governor Edwards' realistic

UPDATE

STATUS OF UPCOMING REPORTS AND MILESTONES OF THE OCRWM (10/31/86)

Proposal for Defense Contribution to the HLW Fund -- 11/86.

Submit Amended Mission Plan to Congress -- 11/86(?)

Issue OCRWM Safety Plan -- 11/86.

MRS Proposal -- Submission to Congress prohibited by Court Order. Oral arguments in Sixth Circuit Court of Appeals heard on 7/24. No date set for decision.

Announce Licensing Support System design and release of RFP seeking outside contractor support -- 11/86.

Begin licensing support system document collection -- post 11/86.

Issue Program-Level Financial Assistance Guidelines -- ("New" Draft to be issued 11/86)

Annual update Spent Fuel Storage Requirements Report -- Issued 10/86 (Story this issue.)

Complete annual OCRWM Quality Assurance assessment -- 11/86