

NOTE TO: Dan Garner
Spiros Droggitis
Linda Stoloff
Maria Lopez-Otin
John Montgomery

FROM: R. E. Browning

SUBJECT: REPORT OF DOE ADVISORY PANEL ON WASTE MANAGEMENT

Enclosed for your information and review is a copy of the AMFM Panel's final draft report, which was received by us on December 5. As explained in a recent information paper, also enclosed, we intend to review this final draft as the basis for providing comments on DOE's report to Congress, which we do not expect will differ substantially from the Panel report.

The Chairman has indicated that consultation to DOE on the AMFM study will be limited to an examination of how NRC's regulatory role would be affected by the Panel's recommendations. The staff review will be limited accordingly.

Robert E. Browning

Enclosures: 2, as stated

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REVIEW OF THE DRAFT REPORT BY THE DOE
ADVISORY PANEL ON ALTERNATIVE
MEANS OF FINANCING AND MANAGING
RADIOACTIVE WASTE FACILITIES
(AMFM REPORT)

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INTRODUCTION

A review of the report cited above was conducted in order to determine the impact on NRC's regulatory role if one of the following management organizations takes the place of the Office of Civilian Radioactive Waste Management (OCRWM): (1) an enhanced OCRWM, (2) an independent federal agency or commission, (3) a federally chartered corporation (FEDCORP), (4) a mixed (government/industry) corporation, and (5) a private corporation. Hereafter, the use of the term FEDCORP will mean FEDCORP and the non-governmental entity alternatives discussed in the AMFM report, unless otherwise noted. When the NRC role in relation to a corporate entity is not covered by NWA or 10 CFR 60, reference is made to the Atomic Energy Act of 1954, as amended (42 USC 2011), and the National Environmental Policy Act (42 USC 4321).

Areas of concern to NRC are:

- the National Environmental Policy Act (NEPA),
- additional licensing,
- punitive actions,
- anti-trust,
- financial protection, and
- post-closure considerations.

These areas are discussed in the following sections of this report.

I. NEPA CONSIDERATIONS

A. Major Issues

This section will discuss how the implementation of the FEDCORP alternative would significantly alter the NRC role in complying with the National Environmental Policy Act (NEPA) and would modify the basic NEPA conformance strategy of the Nuclear Waste Policy Act (NWPA). The major change in the NEPA role would be NRC's assumption of full responsibility for the NEPA process and EIS adequacy for repository development. These concerns will be discussed in section I.B. below. NWPA NEPA conformance strategy would be changed in two ways. First, NEPA evaluation of environmental factors and public input to such evaluation prior to the choice of the site for the first repository would be eliminated. Second, the scope of the NRC EIS would be curtailed in comparison to the NWPA section 114. These topics are addressed in section I.C. In addition, section I.D. will discuss why NRC would assume additional NEPA responsibilities for the Monitored Retrievable Storage facility, certain Interim Storage facilities and the Test and Evaluation facility under the FEDCORP alternative.

The NEPA concerns discussed below will be lessened only if Congress carefully structures FEDCORP's charter to adopt the present NWPA NEPA role. As will be noted in section I.C.1, other non-governmental entities initiated by Congress (e.g., U.S. Postal Service, Synfuels Corp., Amtrak) have not automatically assumed full NEPA responsibilities for their actions.

B. NRC Role

NWPA now requires DOE to hold hearings, prepare the draft and final EIS, and comply with NEPA prior to the choice of the site for the first repository and the Construction Authorization Application (CAA). NRC is directed to adopt, to the extent practicable, the DOE EIS in connection with the issuance of the construction authorization and license for the repository (NWPA section 114(f)).

NEPA requires Federal government agencies to consider the environmental implications of actions prior to decisionmaking. The activities of non-governmental entities are not subject to NEPA until Federal agency decisionmaking is involved. The point of NEPA compliance for FEDCORP would be the NRC construction authorization decision. Under the FEDCORP, the CAA submitted to NRC would contain an environmental report prepared in accordance with NRC regulations for environmental protection (10 CFR 51). NRC would be responsible for preparing an EIS (based on the FEDCORP environmental report) and providing the appropriate notifications, hearings, and reviews.

Specifically, NRC would be required to issue a Notice of Intent to prepare an EIS, schedule scoping meetings for public input to draft EIS (DEIS) preparation, compose the DEIS, distribute the document, hold public hearings on the DEIS, consider comments on the DEIS in the preparation of the final EIS (FEIS), distribute the FEIS and prepare a Record of Decision. This additional NEPA compliance responsibility would signify a major modification of the NEPA public input and compliance framework established by NWPA.

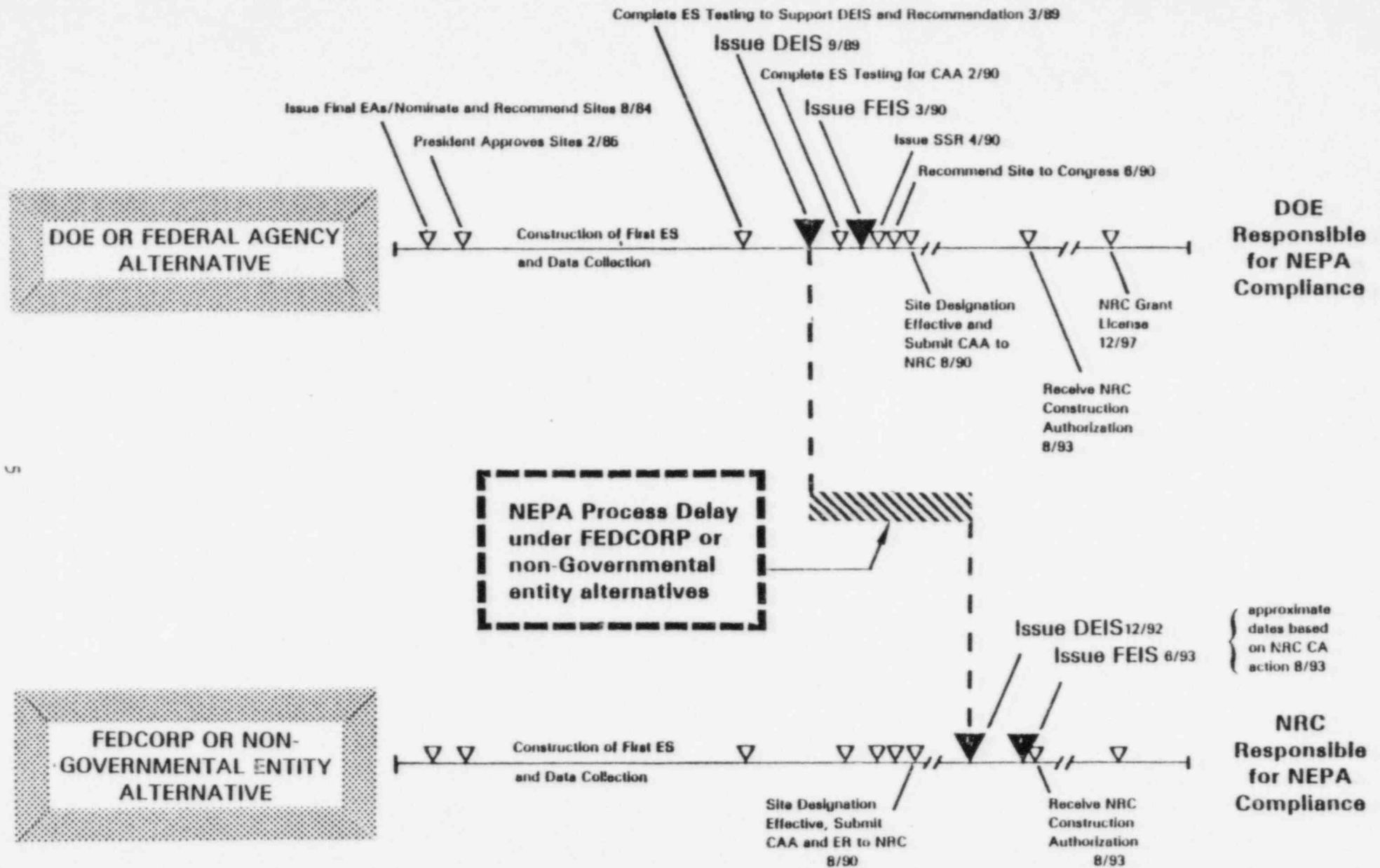
C. Modifications of Basic NWP NEPA Conformance Strategy

1. EIS Timing

Under the FEDCORP alternative, the NEPA process would be initiated after the choice of the first repository site and the CAA has been made due to the reasons cited above. The FEDCORP alternative would have the effect of deferring the pre-site designation EIS mandated by Section 114 of NWP until after site designation and the CAA. There would be no EIS to be included as part of the statement of basis of site recommendation to the President as provided for in Section 114(a)(1)(D) of NWP. There would be no formal NEPA document-related public participation, hearing, and comment opportunities to provide the environmental input to the site designation decision. Figure 1 illustrates that there could be a substantial delay in the issuance of a draft and final EIS (assuming DOE draft Mission Plan timing). Such a situation may place additional pressure and importance on the role of the Advisory Siting Council (ASC) in assuring consideration of public input and on the viability of the consultation and cooperation process of NWP Section 117(c). The AMFM report recommendation on the mandate and tenure for the ASC may have to be reconsidered or clarified in view of the added burden. An ASC that is removable by the FEDCORP board without provision for alternative NEPA public input may be perceived as contrary to an open siting process. The severity of the problem of reduced public input would depend to a degree on the extent to which FEDCORP and stakeholders enter into and abide by consultation and coordination agreements provided for under 117(c).

FEDCORP may voluntarily agree to assume the full DOE EIS responsibilities under NWP. This would not be without precedent. The U.S. Postal Service has made it policy to voluntarily comply with NEPA where compliance is consistent with fulfilling the primary

Figure 1. Alternative NEPA Compliance Schemes for NWPA



CAA- Construction Authorization Application	EA- Environmental Assessment	FEIS- Final Environmental Impact Statement
CA- Construction Authorization	ER- Environmental Report	SSR- Site Selection Report
DEIS- Draft Environmental Impact Statement	ES- Exploratory Shaft	

purpose of the Postal Service (see 39 CFR 775.1 and Higgins v. U.S. Postal Service - 449 F. Supp. 1001). However, the United States Synthetic Fuels Corporation (SFC) does not prepare EISs prior to granting of funds for private synfuels projects. Instead, it is the permit or license granting agency for the SFC funded project that is required to be responsible for NEPA compliance. Amtrak, which was mentioned in the AMFM Report as being similar to the mixed corporation alternatives, does not consider itself subject to NEPA.

2. EIS Scope

The shift in the EIS responsibility to NRC, as a result of implementation of the FEDCORP alternative, may result in the production of an EIS that is somewhat different from the EIS envisioned in the NWA Section 114(f) because of the limited nature and timing of the NRC decision. NRC's decision at the time is not which of the three proposed sites should be licensed, but whether or not a license shall be granted for the single designated site. Therefore, an NRC EIS would include consideration of alternative sites only to show that "no obviously superior site has been identified."¹ The only comparative evaluation under NEPA would be the analysis in the environmental assessments issued well in advance of site characterization. The detailed site characterization information developed at the three candidate sites would not be evaluated in any NEPA document prior to site designation.

This deficiency appears contrary to the intent of NWA which states that the EIS should contain an "analysis of the consideration

¹ Preamble to final NRC Environmental Protection regulations 10 CFR 51, 49 FR 9354, March 12, 1984.

given by the Secretary to not less than three candidate sites for the first repository" as required by Section 114(a)(1)(D) of the NWA. As mentioned above, the problem could be diminished if the implementation of the FEDCORP alternative included provisions that FEDCORP adopt the NEPA role conferred on DOE in NWA in spite of the FEDCORP's non-governmental stature. NRC could then implement the current licensing and NEPA responsibilities mandated by NWA with FEDCORP as the license applicant and the party responsible for NEPA compliance.

D. Additional NEPA Responsibilities

1. Monitored Retrievable Storage (MRS)

The authorization of construction of a Monitored Retrievable Storage (MRS) facility would expand NRC's NEPA compliance role for the FEDCORP alternative. DOE is required to prepare an EIS for the construction of the MRS under the present language of NWA section 141(c)(2). Since NEPA applies only to the decisionmaking of Federal agencies, FEDCORP would not prepare the EIS. The point of Federal decisionmaking would be the NRC licensing decision. NRC would be the lead Federal agency for MRS NEPA compliance.

2. Test and Evaluation Facility

The NRC could be involved in assuring NEPA compliance for the test and evaluation facility. NWA section 217(g) requires DOE to prepare an EIS prior to conducting tests with radioactive materials at the test and evaluation facility. Under the FEDCORP, the NEPA responsibility would be passed to the NRC. NRC would be required to prepare the appropriate NEPA documentation to support its decision on whether to license such an activity (see Section II of this letter report for further discussion of NRC's licensing role for use of

radioactive materials at the test and evaluation facility). The responsibility would be new in that, as NWPA is now written, the test and evaluation facility would be unlicensed and NRC would have no NEPA role.

3. Interim Storage

The NRC could be involved in NEPA compliance for Federal Interim Storage (FIS) under the FEDCORP. Section 135(c) indicates that provision of 300 or more metric tons of storage capacity at any one Federal site will require preparation of an EIS. Non-Federal agency management of this waste by FEDCORP would require the EIS to be developed by the Federal agency (probably DOE) which allows FEDCORP to store waste at its facility. It is likely that Congress would allow NRC to adopt the Federal agency EIS to the extent practicable in any FIS licensing role similar to the EIS adoption allowed NRC for the repository under NWPA section 114(f) as presently written. This assumes that NRC will have a licensing role in Federal Interim Storage if a non-governmental alternative to DOE is chosen (see Section II of this latter report for a discussion of changes in NRC's licensing role).

II. ADDITIONAL LICENSING CONSIDERATIONS

Licensing is not required for DOE/OCRWM to use radioactive materials in site characterization (10 CFR 60.7(a)) or in a test and evaluation facility (NWPA 217(f)(2)). If any other organization makes such use of radioactive materials, it is presumed that they must be licensed under the appropriate part of Title 10, Chapter I, Code of Federal Regulations. This would signify a new NRC repository licensing role.

It is presumed that any of the organizations would have to license a monitored retrievable storage (MRS) facility under 10 CFR 72. However, the NWPA allows an exception to licensing a Federal interim storage facility (FIS) if it is located at an existing facility owned by the Federal government (NWPA 135(a)(1)(A)(i)). If the facility is operated by a corporation, it appears that NRC licensing would be appropriate, even though the Federal agency owning the facility remains responsible for an EIS if more than 300 metric tons storage capacity is provided (NWPA 135(c)).

III. PUNITIVE ACTIONS CONSIDERATIONS

Enforcement activities by NRC allowed by Section 234 of the Atomic Energy Act, as amended, include license revocation, denial, or suspension and civil penalties levied against the offending person (individual, partnership, or corporation) (42 USC 2236 and 2282; 10 CFR 60.9(c)(i)). In the case of profit-making corporations, such as those with licensed nuclear power plants, such punitive actions are generally effective because of their impact on the bottom line of the utility which has the goal of generating a profit to distribute to its shareholders through declared dividends. Fines levied against OCRWM, the independent federal agency/commission, or FEDCORP would not have a punitive effect because there is no profit motive. (Fines against individual managers of these not-for-profit organizations (not the usual practice of NRC) would likely be effective; however, pinpointing individual management culpability, particularly in the case of the federal commission, would be difficult.) Likewise, revoking the license of a not-for-profit organization would not have the desired punitive effect. Also, it is likely that NRC/NMSS will be required, under the Atomic Energy Act, to take control and operate the facility (a formerly licensed site) in order to protect the health and safety of the public (42 USC 2236).

IV. ANTI-TRUST CONSIDERATIONS

Section 105c of the Atomic Energy Act of 1954 (42 USC 2135), as amended, requires certain anti-trust reviews. While these requirements do not apply to OCRWM or to the independent federal agency/commission, they would apply to FEDCORP which could be operated as a monopoly as defined in the anti-trust acts.

The high-level waste repository is included in the definition of a "utilization facility" as defined by the Atomic Energy Act of 1954, as amended (42 USC 2014(cc)) in that it is "capable of making use of special nuclear material in such quantity as to be of significance to the common defense and security or in such manner as to affect the health and safety of the public." The Act requires NRC to report anti-trust information to the Attorney General who shall advise NRC on adverse anti-trust aspects. NRC must consider the Attorney General's advice in granting the license, along with other factors, to ensure that the public interests are protected.

V. FINANCIAL PROTECTION CONSIDERATIONS

The Atomic Energy Act of 1954, as amended (42 USC 2210), requires, as conditions of construction permits and licenses, that the licensee "maintain financial protection of such type and in such amounts as the Commission ... shall require." Although it is believed that activities under the NWPA would be covered under the Price-Anderson Act, the existing regulation (10 CFR 140)² only

² Under current Part 140, corporate entities are required to furnish financial protection; federal agencies are not subject to this requirement (10 CFR 140.51, note) but instead sign indemnity agreements issued by NRC.

applies to organizations with licenses issued pursuant to Part 50. Therefore, NRC would be required to determine the need for financial protection by the various organizations considered by the AMFM Panel.

VI. POST-CLOSURE CONSIDERATIONS

The implementation of the FEDCORP alternative may result in a significant problem in the post-closure period. The problem involves FEDCORP taking responsibility for active institutional controls at the repository surface area for an extended time period into the future. The current Environmental Protection Agency (EPA) proposed regulation 40 CFR 191 (December 29, 1982, 47 FR 58196) indicates that active institutional controls including guarding a disposal site, performing maintenance operations or remedial actions at a disposal site, or controlling or cleaning up releases from a disposal site would be an allowable assumption of the repository performance assessment for a "reasonable time period" after repository closure. 40 CFR 191.15 states that EPA believes the reasonable time period should be "no longer than a few hundred years." A more recent EPA interagency review draft of the final 40 CFR 191 regulation (March 1984) states that active institutional controls should not be assumed to prevent or reduce radionuclide releases for more than 100 years. In either case, the responsibility for active controls would extend far beyond the time that major activities of the FEDCORP will have been completed. It is not clear from the AMFM proposals how the active control function would be handled by FEDCORP.

The AMFM report alludes to this problem by stating that the FEDCORP alternative "would probably be less desirable for monitoring after closure, which seems to involve custodial functions best performed by Federal or state agencies whose missions are protection of the environment" (Chapter XI, p. 8). However, the report makes no

specific recommendation regarding the performance of the active control function. In a somewhat similar situation for post-closure activities at privately-owned hazardous waste management disposal sites, EPA has developed detailed financial requirements to assure post-closure measures are implemented. EPA regulation 40 CFR 267 requires that owners of such facilities have adequate post-closure financial resources (through bonds, trusts, insurance arrangements or other mechanisms) to perform monitoring and other active requirements for periods up to 30 years after closure.

NRC requires licensees disposing of low level radioactive waste under 10 CFR 61.7 to remain at the disposal site for a period of 5 years for post-closure observation and maintenance to assure that the disposal site is stable and ready for institutional control. NRC repository decommissioning regulation 10 CFR 60.51 requires the applicant to describe methods "to regulate or prevent activities that could impair long-term isolation of emplaced waste within the geologic repository." If these methods include active controls, it is unclear how FEDCORP would implement such controls for the time period stated in 40 CFR 191. The problem could be alleviated if FEDCORP achieves repository performance goals in compliance with 10 CFR 60 and 40 CFR 191 containment requirements without taking credit for active controls. However, if FEDCORP intends to rely on active controls for the first 100 years after closure, NRC may wish to modify 10 CFR 60 to include provisions that assure that adequate organizational resources are available. Alternatively, the responsibility for implementing the active control measures could be turned over to a Federal government agency after closure.

CONVERSATION RECORD

TIME

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DATE

12/7/84

TYPE

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ROUTING

NAME/SYMBOL

INT

JOB

MSK

MTB

REB

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

Jick Myers

ORGANIZATION (Office, dept., bureau, etc.)

OCRWM

TELEPHONE NO.

SUBJECT

AMFM Study

SUMMARY

Rusche has directed the staff to prepare a transmittal letter from Hodel to Congress, which will transmit the Panel's report. (They won't develop a DOE report.) The letter will summarize the Panel's main conclusions & recommendations, discuss the importance of the siting phase, and state that it would be a mistake to attempt a change in legislation now, and that Congress should wait until the siting phase is complete (first repos. only, evidently) and DOE is assured of getting CA before such changes are considered. This was not based on Hodel guidance, as far as Myers knew. Just Rusche's.

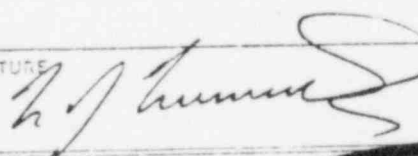
According to Myers (who works w/ Harry Brandt), the Panel now plans to wait until their report is in print (mid-Jan.) before sending it to Hodel. DOE plans to send the final draft (something similar to what we now have) to NRC near the end of December, and give us about 2 weeks with it.

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION

N Numark

SIGNATURE



DATE

12/7/84

ACTION TAKEN

SIGNATURE

TITLE

