

NOV 20 1980

MEMORANDUM FOR: William J. Dircks
Executive Director for Operations

FROM: John G. Davis, Director
Office of Nuclear Material Safety
and Safeguards

SUBJECT: TRANSMITTAL OF COMMISSION PAPER RESPONDING TO SENATOR
JENNINGS RANDOLPH'S QUESTIONS ON S. 2189 (EDO 09751)

Discussion: In a letter to the Chairman dated September 30, 1980, Senator Jennings Randolph requested information on the impact that the recently Senate-passed bill on radioactive waste management (S. 2189) would have on the Nuclear Regulatory Commission's radioactive waste management activities, if it were to become law. The proposed response to Senator Randolph presented in the Commission Paper:

- (1) States that the long-term retrievable storage facility concept directed to be undertaken by DOE in S. 2189 would affect the Commission's current development of regulations for waste storage and disposal for high-level wastes;
- (2) Notes that the Commission staff is presently evaluating the comments received by the Commission on the proposed retrievability requirements contained in the advance notice of proposed rulemaking, and will consider this issue before 10CFR60 is published for public comment;
- (3) Provides comments that the Commission has received on its proposed retrievability requirement;
- (4) Indicates that DOE has the primary programmatic responsibility for determining the technological alternative by which high-level radioactive wastes will be disposed of, and that in the time allowed for response, the Commission had neither the time nor resources to provide a substantive comparison of the feasibility and costs of retrieving wastes from a surface or subsurface storage facility with the feasibility and costs of retrieving radioactive wastes from a deep geologic storage or disposal facility and

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- (5) Concludes that the Commission's current licensing authority would generally be unaffected by S. 2189. In the case of long-term storage facilities, however, S. 2189 would narrow the Commission's discretion by barring the consideration under NEPA or the Atomic Energy Act of any alternative to the design criteria set forth in the bill.

Coordination: The Office of Standards Development concurs in the proposed response and the Office of the Executive Legal Director has no legal objections.

Signed by
Richard E. Cunningham

John G. Davis, Director
Office of Nuclear Material Safety
and Safeguards

Enclosures:

1. Commission Paper
2. Proposed Reply to
Senator Jennings Randolph

DISTRIBUTION: In relation to EDO 09751

WMPI rf
Subject file
WM r/f
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JGDavis

11/13/80

OFFICE	WMPI	WMPI	WM	NMSS
SURNAME	JJSurmeier:prh	JOBunting	JBMartin	JGDavis
DATE	11/13/80	11/14/80	11/20/80	11/22/80

DISCUSSION DRAFT

ROAD MAP "B"

SENATE BILL S.2189

September 5, 1980

ROAD MAP "B"
SENATE BILL S. 2181

Phase I: National Screening

Activity:

Literature studies; definition of geologic regions
Time Frame: 6-9 Months

Federal Organization
and Activities:

- DOE notifies Governors, legislative leaders, and Tribal leaders of all 50 States and Tribal Nations regarding national screening program.
- DOE and USGS coordinate on definition of regions and literature surveys.
- DOE and DOT sign generic Memorandum of Understanding (MOU) defining responsibilities and interactions on transportation issues.
- DOE and DOI sign generic MOU defining responsibilities and interactions on land withdrawal issues.

State Organization
and Activities:

States and Tribal Nations establish contact points for consultation.

Agreements:

No need at this phase.

Conflict
Resolution:

No need at this phase.

Phase II: Regional Studies

Activity:

Broad studies of geologic regions including literature surveys and field mapping. Definition of areas of interest within States (100-1,000 square miles). First entry into State. Time Frame: 6-9 Months

Federal Organization and Activities:

- DOE and USGS coordinate on assignments for initial exploratory activity.
- DOE consults with all affected States/Tribes in the geologic region regarding field mapping plans and results.
- DOE provides funds for travel, conferences, and staff to monitor studies.
- DOI provides funds for State/Tribal participation in Province Working Groups.

State Organization and Activities:

- State/Tribe contact point continues to serve policy coordination role.
- State identifies technical personnel to monitor or participate in DOE/USGS surface explorations (e.g., State geologic survey).

Agreements:

- States/Tribes negotiate agreement with DOE to:
 1. Define planned activities and studies to be carried out during site identification phase, and
 2. Identify spokesmen and procedures for consultation and information exchange.

Conflict Resolution:

- Procedural disputes only, since little substantive knowledge available.
- Negotiations at lowest levels of authority, with appeal by Governor or Tribal Council Chairman to Secretary.
- If negotiations fail, DOE Secretary decides to:
 1. Impose a moratorium on exploration activities,
 2. Terminate exploration activities, or
 3. Overrule State objections.

Phase II: Area Studies

Activity:

Preliminary boring and geophysical testing.
Definition of site locations. DOE prepares
site characterization plans for submission to
NRC. Time Frame: 12-18 Months.

Federal Organization
and Activities:

- Secretary notifies Governor, State legislature,
and Tribal Council of intention to study an
area as a possible site.
- DOE and NRC develop siting criteria
- NRC consults with DOE on preparation of
regulatory guides.
- DOE holds public hearings to explain
program plans and invite public comment.
- DOE provides funds, if State desires, to
support State policy and technical reviews.
- DOE complies with State and Federal permit
regulations for drilling and other planned
activities.
- DOE consults with States/Tribes regarding
exploratory drilling plans and results.
- NRC consults with States/Tribes on DOE site
characterization plan and solicits comments.

State Organization
and Activities:

- State legislature, or Governor, establishes
repository review panel to represent State
in its relations with Federal Government.
- Tribal organization has same rights as
repository review panel. Review panel
also has Tribal representation.
- ~~State/Tribe establishes, through legislative
or executive action, a policy review group
to coordinate political subdivisions and to
serve as focal point for negotiations with
Federal agencies.~~
- ~~State establishes a technical review board
to monitor drilling activities, evaluate
siting criteria, and comment on site
characterization plans. Affected Tribes
and neighboring States participate on
board.~~

Phase III: Area Studies (Continued)

Agreements:

- Repository review panel negotiates cooperative agreement with DOE identifying procedures for consultation and concurrence during the planning, siting, development, construction and operation of the repository. Such agreement shall include: procedures for sharing technical and licensing information, facilitating permitting, joint project review, surveillance and monitoring, and resolution of State objections.
- ~~Update-agreement-(or-negotiate-new-agreement)~~
~~defining-planned-activities-to-be-carried-out~~
~~during-remainder-of-site-identification-phase.~~
- ~~Federal/State/Tribal-agreement-on-siting-criteria.~~

Conflict
Resolution:

- Largely procedural disputes, but potential for substantive disagreements on interpretation of drilling results and other siting activities
- Secretary solicits, receives, and evaluates concerns and objections of review panel on an ongoing basis.
- Secretary works cooperatively to resolve such concerns and objections.
- ~~Negotiation-at-lowest-levels-of-authority~~
~~with-appeal-by-Governor-to-Secretary.~~
- Secretary-decides-to:
 1. ~~Impose-a-moratorium-on-exploration-activities,~~
 2. ~~Terminate-exploration-activities,-or~~
 3. ~~Overrule-State-objections.~~

Phase IV: Location Studies and Initial Site
Characterization (Feasibility Studies)

Activity:

DOE prepares Environmental Assessment (EA) on decision to commence site characterization work. Prepares Detailed Site Characterization Plan (DSCP) for submission to NRC. Acquires necessary property interests in site and/or enters a cooperative agreement with BLM on land withdrawal. Time Frame: ____ Years.

Federal Organization
and Activities:

- DOE and NRC interact on detailed site characterization plan.
- DOE establishes project office inside State to manage project and facilitate State/Tribal consultations.
- DOE contracts with technical support groups, makes commitment to significant expenditures.
- DOE consults with State and holds public hearings on EA.
- DOE and NRC solicit State/Tribal comments on DSCP.
- DOT consults with State on transportation issues.
- DOI consults with DOE and State/Tribe on land withdrawal issues.
- DOE provides supplementary funding for State review board to increase its technical review capabilities, including an independent socio-economic analysis.

State Organization
and Activities:

- State expands technical review capability to undertake full review of health and safety, environmental, and socio-economic impacts.
- Repository review panel evaluates EA and DSCP and informs DOE of comments, recommendations, or objections.
- Repository review panel reviews NRC comments on DOE site characterization plan.

Agreements:

Modification of cooperative agreement, as necessary.

Phase IV: Site Characterization/Feasibility Studies (Continued)

- States/Tribes negotiate detailed agreement identifying procedures for consultation and concurrence during the siting, development, construction, and operation of the proposed repository. Such agreement could include: identification of milestones and key decision points; time frame for State review and comments; and procedures and funding for conflict resolution.

Conflict
Resolution:

- Increasing basis for substantive disputes as technical data base broadens and scope of review increases to include health and safety, transportation and socio-economic issues.
- Every effort to resolve disputes at lowest levels of authority.
- DOE and State may appoint neutral third party review panel to consider State/Tribal objections and make recommendations.
- Secretary decides to:
 1. Accept State objections, or
 2. Reject State objections.
- ~~Secretary decides to:~~
 1. ~~Accept third party recommendations, or~~
 2. ~~Appeal to President to override State objections.~~
- ~~Governor decides to:~~
 1. ~~Accept third party recommendations, or~~
 2. ~~Appeal to the President to override State objections.~~
- ~~President decides to:~~
 1. ~~Accept third party recommendations, or~~
 2. ~~Appeal to the President to override State objections.~~

Phase V: Detailed Site Characterization/
Suitability Studies (Shaft Sinking)

Activity:

DOE issues EIS for banking, land withdrawal and shaft sinking. Sinks exploratory shaft (if necessary or required by NRC) and carries out at depth testing. Prepares Detailed Site Characterization Report (DSCR). Collects data necessary for license application. Time Frame: ____ Years

Federal Organization
and Activities:

- DOE and BLM coordinate under terms of cooperative agreement
- DOE and NRC consult on site suitability experiments to be carried out at depth.
- DOE consults with State review board on experimental program and solicits comments on EIS.
- DOE informs State/Tribe of intention to proceed with shaft construction.
- DOE files application for necessary State/Federal permits.
- NRC reviews test results and informs DOE and State/Tribe of its conclusions.
- DOE solicits State/Tribal comments on DSCR.

State Organization
and Activities:

- State review board comments on EIS.
- State agencies process permit applications and decide whether to issue permits.
- State review board evaluates shaft sinking proposal, reviews and comments on experiments to be carried out, and monitors test results.
- State/Tribe participates with NRC in site inspections, independent studies.

Agreements:

- Modifications of basic DOE agreement as necessary to reflect advancement of technical knowledge and changes in milestone events, time frames, socio-economic impacts, etc.

Phase V: Detailed Site Characterization/
Suitability Studies (Continued)

- MOU with DOI to identify procedures for State participation in DOE/BLM land withdrawal decisions.

Conflict
Resolution:

- Increasing basis for substantive disputes as technical data base broadens and scope of review increases to include health and safety, or transportation and socio-economic issues.
- Every effort to resolve disputes at lowest levels of authority.
- DOE and State may appoint neutral third party review panel to consider State objections and make recommendations.
- Secretary decides to:
 1. Accept State objections, or
 2. Reject State objections.
- ~~Secretary-decides-to:~~
 1. ~~Accept-third-party-recommendations,-or~~
 2. ~~Reject-third-party-recommendations.~~
- ~~Governor-decides-to:~~
 1. ~~Accept-third-party-recommendations,-or~~
 2. ~~Petition-the-Congress-to-support-State objections.~~
- ~~Both-Houses-of-Congress-decide-whether-to-uphold or-override-State-objections.~~

Phase VI: Site BankingActivity:

Site is ready for comparison with other sites. DOE modifies EIS as basis for deciding suitability for banking. DOI decision on land withdrawal for up to 20 years. Time Frame: _____

Federal Organizations and Activities:

- DOE and DOI coordinate on preparation of revised EIS.
- DOI consults with State/Tribe and holds public hearings on land withdrawal decision.
- DOE consults with State/Tribe and holds public hearings on site banking decision.

State Organization and Activities:

- State review board reviews and comments on revised EIS.
- State/Tribe evaluates site suitability decision and states its objections, if any.

Agreements:

- Modifications to basic agreement as necessary.

Conflict Resolution:

- For DOE, same as Phase V.
- For DOI, every effort is made to resolve disputes at lowest levels of authority.
- State and DOI have access to third party review procedure established by State and DOE.
- DOI Secretary decides to:
 1. Accept third party recommendation, or
 2. Reject third party recommendations.
- No procedure for appeal of Secretary's decision in view of DOI statutory authority to make land withdrawal decisions under the Federal Lands Policy Management Act.

Phase VII: Site SelectionActivity:

DOE selection of one site from among banked sites for licensing. ~~Preparation of site recommendation report.~~ DOE preparation of Proposed Site Report and submission to Congress. Time Frame: Months.

Federal Organizations and Activities:

- DOE solicits comments on Proposed Site Report from SPC, NRC, CEQ, OSTP, EPA, DOI, DOT, and the State Department.
- DOE solicits comments from Repository Review Panel, other interested States, and the public.
- ~~DOE solicits comments from State review board on site recommendation report.~~
- DOE informs State/Tribe of site selection decision.

State Organization and Activities:

- Repository review panel comments on proposed site report.
- ~~State review board comments on site recommendation report.~~
- State/Tribe evaluates site selection decision and states its objections, if any.

Agreements:

Modifications to basic agreement, as necessary.

Conflict Resolution:

Same as Phase V.

Phase VIII: License Application

Activity:

Preparation of license applications, preliminary safety analysis report, and environmental report for submission to NRC. Preparation of Title I and Title II design reports. Preparation of Repository Development Report (RDR) for submission to Congress, including license application EIS, transportation plan, emergency response plan, and impact assistance plan. Time Frame: Years.

Federal Organizations and Activities:

- DOE notifies Repository Review Panel of decision to prepare Repository Development Report.
- DOE coordinates preparation of RDR with SPC, NRC, CEQ, OSTP, DOI, DOT, and the State Department.
- DOE coordinates preparation of RDR with Repository Review Panel, affected States, and Indian Tribes.
- DOE solicits comments on final report from Review Panel, affected States, and Tribes, SPC, and public.
- ~~DOE consults with State review board during preparation of license application, PSAR, and environmental report and solicits its comments.~~
- DOE consults with State on Title I and Title II design reports.
- DOE submits application to NRC.

State Organization and Activities:

- Repository Review Panel comments on repository development report and files objections, if any.
- ~~State review board comments on documents submitted by DOE.~~

Agreements:

Modifications to basic agreement, as necessary.

Conflict
Resolution:

- No specific provision for conflict resolution, but whatever procedure has been worked out between DOE and repository review panel would be followed prior to submitting repository development report to Congress.
- The State objections go to Congress. One House of Congress must pass resolution supporting such objections.
- For defense negotiations, President makes national security determination, both Houses of Congress must support State objections.

Same-as-Phase-V:

Phase IX: NRC Licensing Process -Construction

Activity:

NRC review of license application, preparation of EIS on repository construction. NRC decision whether to authorize construction.

Federal Organizations and Activities:

- NRC reviews DOE's license application.
- NRC consults with States/Tribes, solicits comments, and responds to recommendations.
- NRC holds public hearings on its EIS.

State Organization and Activities:

- State-review-board-comments-on-DOE-license application-and-NRC's-EIS.
- State/Tribe participates in licensing hearings as intervenor.
- State/Tribe participates in licensing hearings, perhaps as ex officio member, with right to question witnesses.

Agreements:

- None anticipated. NRC generic policy statement on State participation needed prior to any repository licensing proceedings.

Conflict Resolution:

- NRC licensing board considers State recommendations and decides to:
 1. Accept these recommendations, or
 2. Reject these recommendations.
- No procedures for appeal of NRC decisions in view of statutory authority to make licensing determinations under the Atomic Energy Act and the Energy Reorganization Act.
- State objections to NRC licensing determination could be raised with DOE prior to DOE decision to commence repository construction.

Phase X: Repository Construction

Activity:

DOE constructs repository. Mitigation of socio-economic impacts. NRC monitors consultation activity. Preparation of license application for repository operations. Preparation of Repository Loading Report, updating the Repository Development Report, for submission to Congress.

Federal Organizations and Activities:

- DOE obtains necessary permits from States/Tribes.
- DOE informs State periodically of progress of construction.
- DOE consults with State on preparation of operating license application.
- ~~DOE consults with State review board on appropriate impact assistance of other compensation, based on socio-economic study results.~~
- DOE coordinates preparation of Repository Loading Report with Review Panel and affected States.
- DOE solicits comments from Review Panel, affected States, the public, SPC, NRC, CEQ, OSTP, EPA, DOI, DOT and the State Department.

State Organization and Activities:

- Review Panel comments on Repository Loading Report.
- ~~State review board consults with DOE on impact assistance needs, progress of construction, and preparation of operating license application.~~

Agreements:

Modifications of basic agreement, as necessary.

Conflict Resolution:

- Increasing basis for substantive disputes as technical data base broadens and scope of review increases to include health and safety, or transportation and socio-economic issues.

Phase X: Repository Construction (continued)

Conflict
Resolution:

- Every effort to resolve disputes at lowest levels of authority.
- DOE and State may appoint netural third party review panel to consider State objections and make recommendations.
- Secretary decides to:
 1. Accept State objections, or
 2. Reject State objections.

Same-as-Phase-V.

Phase XI: NRC Licensing Process--Operations

Activity:

NRC reviews license application, prepares revised EIS, and decides whether or not to authorize operations.

Federal Organizations and Activities:

- NRC consults with States/Tribes, solicits comments, and responds to recommendations.
- NRC holds public hearings on its EIS.

State Organization and Activities:

- State review board comments on DOE license application and NRC's EIS.
- State/Tribe participates in licensing hearings as ex officio member with right to question witnesses.
- State/Tribe participates in licensing hearings as intervenor.

Agreements:

- None anticipated. NRC generic policy statement on State participation needed prior to licensing proceedings.

Conflict Resolution:

- NRC licensing board considers State recommendations and decides to:
 1. Accept these recommendations, or
 2. Reject these recommendations.
- No procedures for appeal of NRC decisions in view of statutory authority to make licensing determinations under the Atomic Energy Act and the Energy Reorganization Act.
- State objections to NRC licensing determination could be raised with DOE prior to DOE decision to commence repository construction.

Phase XII: Repository Operations

Activity: DOE operates repository. NRC monitors operations.

Federal Organizations
and Activities:

- DOE and NRC coordinate on operation and regulation of repository.
- DOE funds State program to monitor and control off-site radiation releases.

State Organization
and Activities:

- ~~State review board disbanded after initial shakedown period.~~
- Repository review panel disbanded after repository loading report is submitted to Congress.
- State agencies monitor off-site radiation releases.

Agreements:

Modification of basic agreement, as necessary.

Conflict
Resolution:

(TO BE DETERMINED)

Phase XIII: Retrieval DecisionActivity:

NRC decision whether to forego retrieval and commit stored wastes to permanent disposal.

Federal Organizations
and Activities:

- DOE and NRC consult on retrieval decision.
- DOE and NRC consult with State and solicit comments.

State Organization
and Activities:

- State review board reconstituted on an ad hoc basis to evaluate retrieval decision, comment and make recommendations.

Agreements:

Modifications in basic agreement, if necessary.

Conflict
Resolution:

(TO BE DETERMINED)

Phase XIV: Repository DecommissioningActivity:

DOE prepares decommissioning and decontamination plan and submits to NRC. NRC decision to close repository. DOE seals shafts, decontaminates surface buildings, establishes monitoring and site control procedures.

Federal Organizations
and Activities:

- DOE and NRC coordinate on preparation of decommissioning plans.
- DOE and NRC consult with State on decommissioning plan and solicit comments.

State Organization
and Activities:

- State review board reconstituted on an ad hoc basis to review and comment on decommissioning plan.

Agreements:

Modifications to basic agreement, if necessary.

Conflict
Resolution:

(TO BE DETERMINED)