TESTIMONY FOR PUBLIC HEARINGS
on
PROPOSED NOMINATION OF SITES IN SALT DEPOSITS
for
DETAILED SITE CHARACTERIZATIONS RECOMMENDATIONS
on
ISSUES TO BE ADDRESSED IN THE ENVIRONMENTAL ASSESSMENTS AND SITE CHARACTERIZATION PLANS

FROM: The Utah High Level Nuclear Waste Policy Group
PRESENTED BY: Gary R. Tomsic, Chairman

May 3 and 4, 1983
Monticello and Salt Lake City, Utah

DOE Environmental Assessment Scoping Meeting

Monticello, Utah

May 3, 1983

Presented by Gary R. Tomsic, Chairman

Utah High Level Nuclear Waste Work Group

Let me begin by placing the importance of this meeting within the over-all context of the events and activities that will ultimately lead to a decision to site this nation's first high level nuclear waste repository.

The environmental assessment we are discussing tonight, together with the final "Guidelines for Recommendation of Sites for Nuclear Waste Repositories", will serve as the information base and the criteria by which the Secretary of the Department of Energy will select the three sites that will undergo further characterization.

There are presently seven salt sites proposed for nomination in four states: Texas, Mississippi, Louisiana and Utah. Five sites will be nominated - from these five, one will be recommended for further study. That site, along with two other sites in different geologic media, will undergo site characterization. Consequently, for the salt site states the environmental assessment has utmost importance because in it is required a "reasonable comparative evaluation" of sites and locations from which four sites will be dropped and only one will move on for further study. The environmental assessment and the comparative evaluation of all nominated salt sites becomes an extremely crucial document that requires thorough treatment by DOE and affected state and local governments.

With this as the background against which the winnowing process will occur, I offer several general thoughts about the scope and use of the environmental assessment. In addition, I will address several specific issues which should be included in the EA.

In his March 14, 1983 testimony on the proposed Nuclear Waste Policy Act guidelines, Governor Matheson stated, "Any comments on the guidelines must be viewed within DOE's efforts to expediate the process timetable...This compressed time schedule cannot be allowed to compromise the integrity of the process or the final siting decision."

We are still very concerned that the fast track on which DOE is moving toward site characterization may jeopardize sound decisionmaking. In fact, our concerns have been heightened in recent weeks.

The initial time frame has already slipped in several instances. Yet, changes to segments of the schedule, though in some instances conducive to better decisionmaking, have been disjointed and confusing. We are now in a position of not knowing how the pieces of this complex puzzle fit together and in what time frame and sequence they will occur. These changes are reflections of overly optimistic thinking on the part of DOE planners who have not accurately anticipated issues and events. The most recent example of this is the failure of DOE to finalize the siting guidelines before the environmental assessment process begins. We believe this will continue unless more time is allowed.

Another important concern is that the expediated time schedule is likely to result in the transfer or deferral of analysis and related decisions from the nomination phase to the site characterization phase.

Past time schedules have reflected a sense of urgency to move quickly into site characterizations. The time allowed to complete and review important activities and events, i.e. the guidelines and environmental assessments, is compressed on the front end in order to allow more time for site characterization. Yet the front-end decisions are as important for the salt states as those resulting from site characterization. In addition, the Act requires a more comprehensive treatment of issues during the nomination phase than in the site characterization phase. The environmental impact statement required to begin the site characterization phase deals almost solely with the impacts and activities associated with the exploratory shaft. The EA required in the nomination phase takes a comprehensive view of the entire project, including the repository, transportation plans and other related issues.

Our concern is that the quality of the environmental assessment will be jeopardized by the use of site characterization as an excuse to delay or defer activities and analysis that should rightfully occur in the Environmental Assessment. In fact, the discussion in the draft siting guidelines seems to create a loophole which DOE justifies and will allow inadequate treatment of important issues in the EA. The draft guidelines state: "The DOE recognizes that it may not be possible in preparing the environmental assessment to provide a complete evaluation of the site against all siting guidelines."

However, the law does not provide for such a loose and expansive interpretation of deficiencies in the EA. Specifically, Section 112(b)(e)of the document "Recommendation by Secretary to the President" tells the DOE exactly what should be in the EA. In particular, subsection (ii) requires

> "an evaluation by the Secretary as to whether such site is suitable for development as a repository under each such guideline that does not require site characterization as a prerequisite for application of such guideline."

In other words, all issues not dependent upon the sinking of an exploratory shaft for the gathering of data must receive in-depth study and analysis in the Environmental Assessment. Noting the deficiencies and pledging in-depth treatment in the subsequent site characterization phase is absolutely contrary to the letter and spirit of the law and is unacceptable to the State of Utah.

There is a very good reason for this. Without this comprehensive effort, meaningful comparative analysis between the nominated sites will not be possible. Subsection E(iv) of Section 112(b) states that the environmental assessment will also contain "a reasonable comparative evaluation by the Secretary of such site with other sites and locations that have been considered." The comparative analysis is the critical part of the process by which the Secretary rationally winnows the five nominated sites to the three sites he will recommend to the President for site characterization.

One additional problem with compressing the overall time schedule is that it has forced DOE to abandon studies and activities once considered to be important. For the most part, many of the studies associated with the location phase will not now be completed. This is a particular concern because the Nuclear Waste Policy Act seriously restricts DOE in conducting new studies or drilling to gather additional information for the environmental assessment. Rather, DOE must rely on studies that currently exist. Though we are not fully aware of the extent to which DOE is presently pursuing studies, one would have to question why information once needed is now no longer required for good decisionmaking.

Another major concern is lack of a definitive process that describes how both the guidelines and the environmental assessment will be used in decision making. There is not a clear description as to how the DOE will get from point A to point B. This lack of an agreed to decision process is apparent when you consider the purpose of tonight's meeting. How did the Gibson Dome site become proposed for nomination and on what basis will the five nominated sites be selected. This is particularly important when judging one site against another. Neither the proposed guidelines nor the Act's description of the environmental assessment gives a clue to the decisionmaking process.

It is important for the public to know on what basis DOE will make its decision to select at least one salt site from the seven proposed for nomination. It would seem that this issue must be addressed before the guidelines are finalized and the environmental assessments are begun.

My last general comment deals with the need for additional State and local consultation. The accelerated and fluid time schedule, along with the lack of a definitive decision process, compels us to suggest the need for additional check points in the process. We recommend the following:

1) A decisionmaking process, which explains how site recommendations will be made, should be drafted and reviewed with states and local officials.

2. The revised guidelines and proposed rules should not only be republished but another round of public hearings should be held pursuant to the Administrative Procedures Act and prior to the submittal to the Nuclear Regulatory Commission for concurrence.

3. The scoping outline, which identifies the issues to be addressed in the EA, should be reviewed by the states after the guidelines are finalized.

4. The Draft EA, together with the comparative analysis, should be available for public comment. We do not support the idea that public comments be appended in the final EA - but should be incorporated into the final document.

5. A public hearing should be held to explain the decision made to move sites from nomination to recommendation.

Representative Morris Udall, the principal sponsor of the Nuclear Waste Policy Act in the House of Representatives, stated:

> "The Act sets up a roadmap for compliance by the Secretary of Energy with NEPA. Compliance with NEPA is essential if the American people are to feel that the site selection process has been fair and to serve as a crucial tool for federal decisionmaking."

We agree, and suggest that the intent of the Act places the fairness and quality of the decision process above perceived urgencies to move rapidly ahead. Reason, not time schedules, should drive the process.

All of the specific issues I will now address are questions that must receive in-depth study and analysis. These are unresolved aspects which do not depend upon the sinking of an exploratory shaft to gather the necessary data. If DOE fails to make this comprehensive effort in any of these critical areas, the EA will be incomplete and deficient. Consequently, it will be impossible for the Secretary to make the comparative analysis between sites defined by the law.

There are several areas I will highlight this evening. They are transportation, hydrology, environmental and socio-economic issues.

Transportation is an issue that, to our knowledge, has not been thoroughly analyzed. For example, we do not know the method of transporting waste to the proposed site; the nature of the material to be transported; the transportation and utility corridors planned; or frequency of trips into the proposed site.

We are particularly concerned with the limited transportation network into the Gibson Dome region. This area has singular access and the multi-use nature of the routes together with the possibility of inaccessibility needs to be considered.

Lastly we raise the issue of cost. Not only the cost of extending transportation networks to the site, but also those requirements for upgrading existing state and local highways.

Hydrology is another issue which must be addressed in the environmental assessment. Postponing the hydrological analysis to the site characterization phase will not allow a thorough comparative evaluation. Although an exploratory shaft would be an important factor in fully characterizing site hydrology - it alone will not provide the information required to fully characterize the area.

We suggest that the EA present and analyze the information presently known about the location's hydrologic regime and identify any missing information that would be obtained through site characterization activities.

Hydrologic testing appears to be an area where studies, originally necessary for nomination, have now been delayed or stopped to accommodate the internal time schedule and difficulties encountered as a result of the site's proximity to the National Park. Any impacts from further drilling should be addressed in the EA.

Environmental issues associated with air quality, noise, land and visual disturbances, should be completely addressed in the EA. These are primarily surface considerations and are not directly related or dependent upon exploratory shaft activities.

We are interested in air quality monitoring findings in the region; viewshed analysis of the repository; environmental effects of transportation alternatives; noise monitoring and related issues.

In addition, mined salt disposal, storage and transportation should be addressed, as should a description of proposed above ground waste management practices.

The environmental assessment should include a comprehensive socio-economic assessment which addresses both the positive and negative affects of a repository on the area's communities and the economy.

This analysis should specifically speak to a repository's impact on the existing and future economy, particularly that sector involved in tourism and recreation. If there are economic trade-offs, they should be identified and analyzed.

The one issue that will probably receive the most discussion here tonight is the impact of a repository on the area's national parks and recreation areas. As I reviewed the record of previous public meetings, the concerns about impacts on the National Park dominate all other issues - yet, to our knowledge, little has been done to address this concern!

Park proximity is a highly emotional issue with interest that transcends the boundaries of San Juan and Grand Counties and the State of Utah. It is a concern that must be quantified and specifically addressed in the environmental assessment.

The issues related to the Park overlap into each of the other areas I have discussed. Again, this is not a site characterization phase issue. We suggest that the EA devote a comprehensive analysis of this specific concern.

In summary, the importance of the environmental assessment and particularly the comparative evaluation cannot be overemphasized. To the five nominated salt sites, the decisions to be made with this document are very important.

A decisionmaking process must be developed before the guidelines are finalized and the EA is started. If this is delayed, its usefulness to state and local governments will be limited. It is imperative that we know how decisions are going to be made.

We cannot rush through the process toward site characterization and risk the integrity of the process and its final conclusions.

Consultation and review with local and state participants is crucial to ensure the fairness and openness explicit in the Act.

Comprehensiveness and thoroughness in the document's scope is necessary to fully allow all the criteria to be properly used in the decisionmaking process. The site characterization plan cannot be used as an excuse to delay the analysis of certain guidelines. The assessment must openly address areas of strength and weakness.

On behalf of Governor Matheson and his Nuclear Waste Policy Group, I thank you for this opportunity to share some concerns.

	DOCUMENT NAME	05/04/83 COMMENTS/ARCHIVE ID	08:09 AUTHOR/OPERATOR
0000z available		from disk	
0001z available	Produced from DAEDALIA	from disk	List Processing V3.2
0138z available	Produced From DAEDALIA	from disk	LIST PROCESSING V3.2
0139z available	PRACTICE	from disk	
0141z available	Produced From DAEDALIA	from disk	LIST PROCESSING V3.2
0142z available	Produced From DAEDALIA	from disk	LIST PROCESSING V3.2
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0144z available	Produced From CONLOG83	from disk	LIST PROCESSING V3.2
0145z available	Produced From DAEDALIA	from disk	LIST PROCESSING V3.2
0146z available	Produced From APRIL	from disk	LIST PROCESSING V3.2
0147z available	Produced From APRIL	from disk	LIST PROCESSING V3.2
0148z available	KFC	from disk	APRIL DEPOSIT

ATTACHMENT A

TRANSPORTATION

1. Is the waste for the repository to be shipped by truck or rail?

2. Will existing transportation systems require upgrading?

3. Will secondary effects develop from increased rail access in the project area?

4. Are there potential risks to populations adjacent to planned transportation systems?

5. Where do you plan to access material for construction?

6. What is the distance, frequency, volume and terrain of the proposed transportation corridors?

7. What plans do you have for upgrading the transportation system?

8. What are your proposed utility corridors in the area and how will they impact the environment?

9. How safe is your proposed mode of transit into the area and how certain are you of that safety?

10. What are the proposed costs of the alternative transportation modes?

11. What methods are being employed to handle potential accidents either en route to the site or at the site?

12. How do you plan to specifically access the potential archeological conflicts between the repository and potential utility corridors?

13. How do you plan to transport the excess salt from the site if you do not store it on site?

14. What is the proposed surface holding capacity at the site?

15. How long do you plan on storing the waste above ground at the site before it is placed in the repository?

16. How do you plan on protecting the waste above ground before it is deposited in the repository?

17. In what form is the waste being transferred?

18. Where is the reprocessing being done?

19. What are the potential health effects from leaked radiation prior to deposit in the repository?

20. What plans do you have to cope with the singular access of the proposed transportation routes in case they are unaccessible?

21. What is the weight of the casks that will transport the waste?

GEO-TECHNICAL

1. What is salt depth and thickness at test site?

2. What is the potential for faults and fractures in the disturbed zone?

3. What is potential Quaternary faults in the geologic setting?

4. What is maximum credible earthquake?

5. What is potential for strong subsurface ground motion in a salt foundation?

6. What are potential mineral resources?

7. What are past and future natural changes in hydrogeologic and geochemical regime?

8. What is seismic attenuation in the Colorado Plateau?

9. What is potential for mining induced seismicity?

10. What is potential for differential incision/uplife rates of the Colorado Plateau?

11. What are geomorphic processes that could affect the repository site?

12. What is the stability of subsurface openings (exploratory shaft)?

13. What is the potential for gas in underground excavations?

14. What are hydrogeologic shaft construction considerations?

15. What are the hydrogeologic and geochemical conditions at the Gibson Dome location and understandings of the geologic and radionuclide travel time to the biosphere?

16. What is potential for salt dissolution?

17. What are ground-water resources?

18. What is potential for man induced changes in the hydrologic and geochemical and geochemical regime?

19. Is the mineralogy of the repository layer suitable?

20. What is potential for probable maximum flood?

21. Will the water quality of the Colorado River and surface waters upstream and downstream from withdrawal points be affected?

22. Is adequate water supply available?

23. How will excess salt be disposed of?

24. Will the desert-shrub ecosystem be affected?

25. Are endangered species present in the affected area?

26. Will aquatic ecology be affected?

27. What are the hydrological and geologic and geochemical conditions at the Gibson Dome area and in the entire region? This must include industrial hydrology from all three units from their recharge area to discharge area including flow paths, travel times and discharge areas.

28. What is the potential for salt dissolution and brine pockets?

29. What are the potential interractions of heat, moisture and salt at the site?

30. The area monitored should be the "accessible environment" not the disturbed zone. How do you plan to do this monitoring?

31. Can a generic model adequately predict the impacts of the unique characteristics present in the area?

PROXIMITY TO THE PARK

1. How will the cultural resources in the area be impacted by the proposed repository?

2. Will scenic views near the Gibson Dome location be affected?

3. How will Canyonlands National Park be affected? This should look at the importance of tourism in the area, location of recreation areas, current and projected use of the park and additional impacts from the additional workers in the area from the proposed repository.

4. What will be the visual impacts from the repository in all the surrounding area?

5. What are the potential noise impacts from the repository?

6. Will there be visual pollution at night at the proposed repository sites from lights used to illuminate the area to prevent human intrusion.

7. What is the potential impact on archeological resources from increased traffic in the park?

8. What is the full scope of environmental and socio-economic impacts from proposed drilling in Canyonlands?

9. What impact will the repository have, both environmentally and economically, on the other parts of the federal and state park system in the area?

ENVIRONMENTAL HEALTH

1. The repository as a potential major source polluter under the Clean Air Act will potentially cause conflicts and trade-offs with other potential development in the area. What are these potential conflicts?

2. What are the visual impacts and are they in compliance with the Clean Air Act and the designation of the area as a Class I area site?

3. What will be the potential effects on dedicated land air quality?

4. What will be the noise effects in the area as a result of the proposed repository?

5. What will be the effects from background radiation?

SOCIO-ECONOMIC

1. Is there a complete inventory of all currently known or suspected resources in the area?

2. What is the current and potential use for each known or suspected resource in the area?

3. What is the current value and potential value in the foreseeable future for all known minerals in the area?

4. What is the value of the listed resources for the duration of the project? This should include appropriate discount factors, estimated depletion rates for each resource under the assumption of no repository, and an estimation of potential rise in relative value of a listed resource due to a decline in another resource for which the listed resource is a potential substitute?

5. What is the potential cost trade-offs between potential natural resource development and the repository?

6. From the inventory of recreational resources in the area (i.e. ONWI-471 Socio-economic Analysis Report for Paradox Basin, Utah), what is the current use and potential use of all the recreational facilities, particularly Canyonlands?

7. What share of the local economy is generated by tourism?

8. What is the value both in economic and aesthetic terms of the recreational resources in the area of the repository over the life of the proposed repository?

9. What is the potential economic trade-off from reduced tourism in the area due to the proposed repository?

10. To what degree will the increased tax base from the repository replace the lost opportunity costs in both mineral and recreational development?

11. What is the full range of social and economic impacts of the proposed repository? ONWI-471 Socio-Economic Analysis Report for Paradox Basin, Utah only inventories the existing infrastructure, it does not forecast any impacts or analyze the areas' ability to absorb these potential impacts?

12. How does the DOE propose to mitigate potential negative social and economic impacts?