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STATE OF NEVADA

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'84 NUCLEAR WASTE PROJECT OFFICE

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OFFICE OF THE GOVERNOR

Capitol Complex  
Carson City, Nevada 89710  
(702) 885-3744

August 10, 1984

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Mr. Robert E. Browning, Director  
Waste Management Division  
Office of Nuclear Material Safety & Safeguards  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Browning:

Enclosed, per your request, is a copy of Nevada's comments on the draft Mission Plan.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Robert R. Loux  
Director

RRL:sk  
Encl.

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PDR WASTE  
WM-1 PDR

July 6, 1984

Mr. Charles R. Head, Acting Director  
Operations Division  
Office of Civilian Radioactive Waste Management  
U.S. Department of Energy, RW-13  
Forrestal Building  
1000 Independence Avenue  
Washington, D.C. 20585

Dear Mr. Head:

Enclosed please find specific comments from the State of Nevada, including those of this office, the Nevada Legislature, and affected local governmental entities on the draft Mission Plan.

In general, we have found the draft Mission Plan to be inadequate. It doesn't appear to be a plan or a planning guide and doesn't meet the intent of Section 301 of the Nuclear Waste Policy Act of 1982. This document is a mere compilation of various actions, activities, and alternatives without any attempt to integrate systems, processes, or events. In fact, the "Plan" is riddled with numerous inconsistencies, conflicting dates and schedules, and inaccuracies. For example, in numerous places the dates for certain events to occur change from section to section, the description of the same events are different in different locations, and in many instances, these discrepancies directly conflict with other sections. The schedule, with alternatives, are totally unrealistic - all directed at meeting the 1998 date for commencing repository operation at all costs. In statements throughout the document, and in statements made by DOE officials, the commitment has been made that the schedule will not compromise the technical program or the institutional process. However, this document clearly compromises both in the Department's zeal for the 1998 date.

Specifically, the State of Nevada believes that the 60-day review time on the draft environmental assessment is totally inadequate, believing that a minimum of 90 to 120 days is necessary. We have written to DOE on this issue previously, with no response. We also believe that the site recommendation decision should be opened to allow state and public review of the methodology to make that decision and to allow review of the

decision itself prior to its finalization and submission to the Secretary. We have written to DOE about this issue as well, with no DOE response.

Finally, due to the number of issues, events and concepts contained in this "Plan", the State of Nevada reserves the right to provide additional comment to DOE on these matters at such future time as the opportunity is present to do so.

It is obvious and unfortunate that the Department of Energy has elected not to utilize the Mission Plan as a tool to promote the needed confidence of the public on the ability of the Federal government to carry out this most critical program. This document, in fact, adds to the concerns of an already skeptical public that the Department has no better idea about how to proceed with this program now than they did ten years ago. Another opportunity for the Department to demonstrate its commitment to technical excellence and meaningful involvement in the institutional process has been missed.

Should you have any questions regarding these comments or other issues, please do not hesitate to contact me.

Sincerely,

Robert R. Loux  
Director

RRL:sk  
Encls.

## STATE OF NEVADA SPECIFIC COMMENTS

### MISSION PLAN VOLUME 1

PAGE 1-1 The second program objective is not a true objective. The Nuclear Waste Policy Act indicates that if a determination of need is made, then a proposal for development of a monitored retrievable storage facility is to be submitted to Congress. If Congress authorizes the development, then DOE will site, license, construct and operate the facility.

In addition, the State believes another program objective must be "to promote public confidence in the safety of disposal of radioactive waste".

Page 1-2, last paragraph The Mission Plan in and of itself cannot demonstrate conformance to the requirements of the Act. The Mission Plan should show how conformance will be demonstrated.

Page 2-1 First paragraph needs further clarification as to the storage of waste in the event of a delay in the repository schedule. Will the storage be interim storage at the reactor, monitored retrievable storage, or lag storage at the repository site?

Page 2-2 Table II suggests there is no "ramp up" of waste acceptance for the second repository. We endorse the ramp up concept for first repository and suggest it be incorporated into the second repository waste acceptance schedule.

Page 2-3 In the discussion of defense radioactive waste, no mention is made of the impact of defense waste on transportation, waste handling or processing and the safety implication of additional waste. There must be some impacts since it is stated that commercial acceptance schedules will not be changed for acceptance of defense wastes. How does the additional 10,000 MTU of defense waste impact the limit of 70,000 MTU per repository as specified in the Act?

Page 2-4, last paragraph DOE schedule for site characterization for the second repository is unrealistic. Congress cannot approve the second repository in the "early 1990s" because:

1. Selection of the first repository is scheduled for 1990, therefore alternatives cannot be considered for second repository prior to 1990.
2. Recommendation of second repository sites for characterization will not occur before 1989, to be followed by years of characterization, EIS preparation and review; therefore, selecting the second repository site in mid-to-late 1990s, not early 1990s.

Page 2-5, paragraph 1 Last sentence states that planning and analysis of additional repositories will be periodically undertaken. The Act does not specifically cover this activity. Who will be responsible for the costs?

Page 2-5 The Mission Plan fails to adequately define conditions which will trigger the construction of an MRS facility. Page 2-5 lists two conditions, but additional caveats found on page 2-9 lead to the conclusion DOE has no real criteria at all. It appears DOE has the leeway to do whatever it considers most expedient with respect to an MRS at any particular time.

Page 2-6, first paragraph Text gives the erroneous impression that DOE proposed hearings on the guidelines. All guidelines hearings were a direct result of concern by the states, affected tribes, and interested groups that their comments on the guidelines were not being addressed by DOE. Even proposed public hearings on the draft environmental assessments are a direct result of State demands for public input. It is likely these demands for public hearings will increase as the program intensifies.

Our request for additional hearings partially stems from what we view as a DOE-contrived plan to minimize substantive comment by scheduling public review of major decision documents as short as possible. We have pressed and continue to press for 120 days for review of major program documents such as the draft environmental assessment. The 45 days or 60 days announced by DOE is not acceptable and does not support the notion of public involvement put forth in the plan.

Page 2-6 Paragraph 3 discusses site characterization activities. Since there could be five years, according to the reference schedule, between SCP hearings and DEIS hearings, we request DOE commit in the Plan to yearly hearings to inform the public on plans and progress of site characterization and receive comments.

Page 2-6 Paragraph 4 does not address the State impact analysis called out in the Act and how this analysis will impact the DOE EIS process.

Page 2-8 Under item d, who determines what is full participation and what financial assistance will be provided?

Page 2-8 The Mission Plan states the Test and Evaluation Facility (TEF) will be directed at verifying the repository final design and confirming site performance. This is distressing since rocks under consideration may not be homogeneous over large distances. For this reason, it is not desirable to conduct all performance confirmation in the TEF. It would be preferable to perform most of the confirmation work at various locations in the actual repository itself as well as in the TEF. A comparison of results could then be conducted and a confidence level assigned

to results from the TEF.

Page 2-12 Under the section on federal interim storage, the Plan states that DOE will discuss potential sites with states and affected Indian tribes. What is the process here? Will states and affected tribes have input prior to identification of sites?

Page 3-A-3 The Mission Plan states "in evaluating the suitability of sites, engineered barrier systems will be considered to the extent necessary to meet the performance requirement specified by the NRC and the EPA...but will not be relied on to compensate for significant uncertainties in the natural system". While it is true the multibarrier approach allows performance standards to be developed for both the releases from the waste package and the repository itself, DOE's statement that engineered barriers will not compensate for site uncertainties is incorrect. 10 CFR 60 states in the July 1983 version that "An engineered barrier is required to compensate for uncertainties in predicting the performance of the geologic setting, especially during the period of high radioactivity. Similarly, because the performance of the engineered barrier system is also subject to considerable uncertainty, the geologic setting must be able to contribute significantly to isolation". What DOE should be saying is that engineered barriers will not be used to compensate for site deficiencies. The wording on this page should be changed to reflect the true purpose of engineered barriers.

Page 3-A-5 First sentence should be revised as follows:  
"By January 1, 1985, the Secretary is to recommend, with State or affected Indian tribe input, three of the nominated sites to the President for characterization."

The discussion on Page 3-A-5 relative to site characterization is incomplete. In addition to the development of site characterization plans, plans should also be developed and provided for public review on environmental, socioeconomic, and transportation issues. The description of activities in paragraph 3 should include proposed environmental, socioeconomic and transportation activities.

Page 3-A-5 Paragraph 4 states that the President is to recommend the first repository site to Congress by March 31, 1987. The reference repository schedule shows this action taking place in June, 1990.

Page 3-A-9 In section (a) Siting, how do the two basic questions on site suitability relate to DOE's preliminary determination of site suitability? Will the preliminary determination answer these questions?

Page 3-A-9 Under the section on site screening, the Plan states that the second screening approach was to evaluate lands dedicated to nuclear activities and owned by DOE and in that context reviewed Hanford and Nevada Test Site. Why were other

DOE-owned sites dedicated to nuclear activities (Idaho and Savannah River) not evaluated?

Page 3-A-15 In the section on Systems, define the term "parametric sensitivity analysis" in layman's terms.

DOE proposes to establish a national peer review panel to review aspects of performance assessments. Describe this panel in more detail: who are the members, what is the panel's charter, how will their input affect the program and this Plan?

Under the section on Systems, the Plan states that DOE is currently conducting preliminary performance assessments based on pre-site characterization data. The May 14, 1984, revisions to the DOE siting guidelines would suggest that prior to characterization there will not be sufficient technical data to perform a reasonable performance assessment. The quantity and quality of data before characterization varies widely among sites, making valid comparisons among sites based upon performance attributes inappropriate at best.

Page 3-A-16 First paragraph states "Conceptual design studies for surface and subsurface facilities in tuff at Yucca Mountain will begin in 1984". This statement prejudices the site characterization decision by implying that Yucca Mountain has been selected for characterization and repository design has been initiated.

Page 3-A-17 In the section on the Test and Evaluation Facility, the role of the TEF as envisioned in the Act is falsely stated. The role of the TEF is to conduct research in the geologic disposal of radioactive waste, not to conduct site verification activities.

Page 3-A-20 Description of the recommendation for site characterization process is very skimpy. What will be the siting criteria and methodology used in the process? What will be the degree of public involvement?

Last paragraph states that site characterization activities will begin following site approval. No site characterization activities, particularly the sinking of the exploration shaft, can begin prior to development of a site characterization plan, review by the public, and acceptance by the NRC.

Page 3-A-21 Excavation of a large diameter second shaft is not supported by health and safety concerns. Mine safety laws do not support this position. The only logical reason for a large diameter second shaft is to shorten the repository construction schedule. This is an obvious attempt to bypass NRC regulatory review.

In the last paragraph, the Plan states that preliminary (Title 1) designs will support preparation of the site selection report, the EIS, and the construction authorization application. This is

unacceptable. Final (Title II) designs must be presented with the construction authorization application so a full and complete review can be performed. Complete technical information must also be presented in the site selection report and the EIS so meaningful, informed decisions can be made.

Page 3-A-22 Paragraph three states that a memorandum of understanding with the NRC on the co-located test and evaluation facility will be prepared and signed. What is the State involvement in this process?

Page 3-A-22 and 3-A-23 In the section on Licensing it appears DOE has not done its homework relative to the NRC licensing process. From our understanding of NRC licensing and the history of NRC licensing decisions, NRC will not grant site construction approval based upon preliminary designs. We believe NRC will require the submittal of final designs prior to a detail review of any construction authorization application.

Separately, we have safety concerns in the repository operational area with the simultaneous underground excavation of waste emplacement rooms with handling and emplacement of waste in previously excavated rooms. It appears little thinking has gone into how this can be accomplished safely.

Page 3-A-26 Under the section on Consultation and Cooperation, specific plans include (c) consultation on the decision process for recommending sites for detailed characterization. Nevada agrees and supports a plan for consultation on the decision process for recommending sites, however, discussion with top DOE personnel and various presentations and testimony by DOE officials indicate there will be no consultation with states on the decision process. This conflict needs to be resolved.

Page 3-A-27 Last paragraph states that DOE will incorporate comments as appropriate. In the minds of the public affected by repository siting, all comments are appropriate. It is suggested that DOE plan to summarize these comments and include this summary as an appendix to the EAs.

Page 3-A-28 Table III-A-1 should include the following milestones: 1) State/tribe/public interaction points; 2) Congressional approval of site for development; 3) NRC licensing of sites to accept waste. Two points: Notice of site disapproval by states or tribes and Congress overrides disapproval, are based on DOE judgment of the process only. Site disapproval is an option granted to the states and may or may not be exercised. Table gives the impression the notice of disapproval is mandatory.

Page 3-A-29 In Table III-A-2 (Alternatives for Completion of First Repository), there are many other alternatives which could be considered. How were these alternatives selected? The Plan is silent. What is the most reasonable and realistic alternative given the various testing and delay scenarios described in the



Plan? The Plan is again silent.

Page 3-A-30 Alternative case 1-A identifies six months from issuance of final guidelines to the recommendation of three sites for characterization to the President. Such a schedule would require that a site recommendation report for three sites be prepared prior to finalization of the environmental assessments for nomination of five sites. Given that schedule, what effect will public comment on the environmental assessments have on the siting decision process? This schedule suggests very little.

Page 3-A-31 Phase 2 states that DOE will complete the process of obtaining applicable state and/or local permits after issuing site characterization plans. It is unlikely that the states and/or local government will issue any permits prior to acceptance of the site characterization plan by the NRC.

Page 3-A-32 Case 2-A is not realistic. It assumes 1) DOE can obtain variances from all state and/or local government permits, and 2) there will be no comments on site characterization plan. Also, it is unlikely that any state and/or local governments will grant any permit variances prior to approval of the SCP by NRC.

Page 3-A-37 Under Reference Schedule - First Repository the Plan states the reference schedule was selected from the alternatives presented in the Plan. This statement is false and misleading. In fact, it appears the reference schedule was developed by selecting parts of the alternatives which allowed DOE to meet the dictates of the Act.

Page 3-A-39 There appears to be a conflict in dates. Plan indicates President will approve the recommended sites by March 1985, however, the next paragraph indicates a site characterization plan will be issued for basalt in January 1985. Separately from the issue of prejudging that a basalt site will be recommended and approved for characterization, the Plan indicates that a basalt SCP will be issued prior to Presidential approval. This violates the letter and spirit of the Nuclear Waste Policy Act (sec. 112(f)).

Also on the same page the duration of testing to support the environmental impact statement (more correctly site characterization) is identified. However, what is not stated is whether these durations consider the impact of excavation of a second shaft or if the durations are based on a single shaft concept.

Page 3-A-40 DOE believes that it is not necessary to have three suitable sites at the end of site characterization. The State of Nevada believes that three suitable sites are required at the end of characterization. We believe the Act and NEPA Regulations support our position. We also contend the NRC will be unable to adopt the DOE EIS because of the lack of three viable alternative sites. Delays are inevitable on this issue.

Page 3-A-41 Case 4-A does not identify the process to be utilized to resolve potential licensing issues. Also, the discussion does not consider intervenor action in the licensing process. History has shown intervention of interested groups has occurred in practically all nuclear licensing proceedings; waste proceedings will be no different. Such intervention will cause further delay.

Page 3-B-1,2 As currently worded, the DOE will offer a proposal to Congress on the MRS at generic sites, and if approved by Congress, site selection activities would take place. This suggests states would not have the opportunity to conduct a technical review of the proposal prior to Congressional approval nor to participate in formulating the site selection criteria. The states should be able to review the MRS proposal at the same time the EPA and NRC reviews take place; prior to Congressional authorization.

Page 3-B-9 In Section c. Environmental Assessment, DOE will prepare a draft environmental impact statement, not a final.

Page 3-C-1 In the section on Transportation, the last two bullets provide for definition of technical requirements, working with industry, and establishes the management structure and procedures for operation of the transportation system. When will development of these activities occur? Will specific plans be formulated? Who will be involved in the process?

Page 3-C-3 Text states "the most efficient model mix for commercial waste shipments depends upon factors which must be continually addressed over the next several years. This includes carrier deregulation, repository design and location, on-going studies on model cost and risk impacts, and the development of new technologies for equipment such as transportable storage casks." What is the reference for these statements? Implicit to this statement is that DOE has used some assumptions in transportation planning to date. What are these assumptions?

Second paragraph discusses prenotification of nuclear waste shipments and identifies a joint DOE/DOT study of prenotification. What is the schedule for that study? A comprehensive study should include input from states and local governments. It is Nevada's position that prenotification is a state prerogative, and not a decision by the Federal government.

Page 3-C-4 Under Federal Level Coordination, what is the schedule for developing procedural agreements with other Federal agencies?

Section on State, Local and Tribal Coordination is extremely weak. What are the plans for coordinating transportation issues with states, tribes, and local governments?

Page 3-C-5 A major issue identified in the previous draft of The Mission Plan was whether or not there would be a sufficient supply of transportable casks. In the current draft, however, only the type of cask to be used is discussed. Does this mean DOE no longer considers the supply of casks to be an issue?

Page 3-C-6 Under Section c Long Term Requirements, DOE's preliminary draft of the Defense Waste Plan does not discuss how defense waste will be shipped. How does transportation of defense waste interact with the civilian transportation program? What is the plan to integrate the two?

Page 3-C-7 Text indicates first draft of transportation business plan will be available for public review in the spring of 1984. The State of Nevada has not seen this document.

Page 3-C-8 What is the "well established" transportation operational management system? The State requests a review of that system, plus any future plans.

Page 3-D-4 Pertaining to the section on Dry Cask Storage, the following comments require resolution:

1. Why are dry cask storage tests on Federal sites unlicensed?
2. Successful execution of this demonstration program assumes initial consultation with the affected state, as envisioned by the Act.
3. We understand only Federal sites in the west are being considered for this program. Why were not eastern sites, close to the source, considered?
4. Nevada is on record as being opposed to this demonstration program within its borders.

Page 3-E-1 Section E is titled Systems Integration; therefore the section should tie all the loose, nebulous items of the Civilian Radioactive Waste Management Program together. It fails.

Page 3-E-6 What are the plans for completing the Systems Design Description document? What is the schedule? Will the document be reviewable by the states?

Last paragraph makes reference to additional supplementary studies which may be conducted; provide examples of some of these supplementary studies.

Page 3-E-7 Three systems integration activities are identified: Program Research and Development Announcement, Supplementary Studies, and System Design Description. What are the documents connected with these activities? Are they reviewable by the states?

Page 4-2 The Civilian Radioactive Waste Program has been in existence for 18 months since the passage of the Nuclear Waste Policy Act in 1982. It is difficult for the State to believe

that during this period 1) no program-wide planning and control system is implemented and 2) no fund management system is implemented. What was the program planning guidance and system control for the last 18 months? The lack of planning at DOE/HQ is exemplified by the lateness of the Mission Plan and the inability to finalize siting guidelines within 180 days after passage of the Act. This section gives little confidence future planning will be different than previous "planning".

The second paragraph identifies the Mission Plan as the foundation for integrated planning and control. However, the third paragraph indicates that project control mechanisms that existed before passage of the Act will be incorporated into the control system. This contradicts the intent of the Nuclear Waste Policy Act.

Last sentence indicates that a single, integrated control system will be employed with the field offices. When will this be accomplished? Is it reviewable?

Page 4-9 Text states AMFM Panel meetings are open. However, the states and affected Indian tribes are not provided meeting minutes or other documents on the progress of the Panel. Draft of the Panel's report and the Secretary's response should be provided to interested organizations for review and comment.

Appendix A, Page A-1,2,3 The time schedule represented on these figures indicates Title II Design for the repository will not be complete until after construction authorization has been received by DOE for three out of four of the alternatives proposed. However, it is our understanding the NRC has requested Title II design to be "substantially complete" before any applications are submitted for construction authorization in order to have sufficient information to make an informed decision. How will this conflict be resolved, and what effect will this have on the time schedule?

STATE OF NEVADA SPECIFIC COMMENTS

MISSION PLAN  
VOLUME II

PAGE 1-4 The DOE states the boundaries of the engineered barrier systems cannot be accurately defined until after site characterization. In this case, what boundaries does DOE intend to use for the performance assessments which must take place prior to site characterization? How much validity will these initial boundaries have, especially since the performance assessments will be used in the decision to nominate sites?

Page 1-9 Issue 1.5 does not consider the prediction of higher ground water levels in the future at unsaturated zone sites.

Page 1-11 Issue 1.7 considers future igneous activity or tectonic processes. However, the discussion ignores igneous activity completely and centers on tectonic processes.

Page 1-12 Issue 1.8 fails to consider future value of natural resources.

Page 1-18 Issue 3.2 fails to identify transportation routes which conflict with other critical uses and avoids population centers.

Page 1-22 Issue 4.5 does not consider igneous activity.

Page 2-2 The statement is made "Other tasks (regulatory and institutional activities, land acquisition, test facilities, program management, financial assistance) are treated in less detail (see Section 2.7) because they are not directly aimed at the resolution of outstanding scientific or engineering issues." We believe the other activities (tasks) are just as important in repository siting as scientific or engineering activities and should be treated with the same depth.

Page 2-2 In the geologic and hydrologic studies described in Section 2.2 Site Investigations (pages 2-2 to 2-16) we have identified 10 major studies which are planned to be completed in FY 84, FY 85, or FY 86. In our view, this number is unrealistic given the accuracy, thoroughness, and completeness that the studies must achieve.

Page 2-3 Site investigations do not consider transportation studies as a major element. In our view, transportation issues are as critical to site characterization as geologic, hydrologic, environmental, or socioeconomic studies.

Page 2-3 The statement is made "The plans for geologic and hydrologic studies at the salt sites are based on the assumption that only one of the three sites recommended for detailed characterization (January 1985) will be a site in salt". What is the basis for assuming only one characterized site will be in

salt? Is DOE prejudicing the siting process? A justification for the statement is required.

Page 2-5 Figure 2-1 Integrated Logic Diagram suggests that final testing results will not be presented in EIS but will be presented in CAA. In our view, all testing must be completed and all results analyzed before a viable site can be recommended to the President for repository development, well before submittal of CAA to NRC.

On the same figure (2-1) Performance Assessment Input is identified in four places. Which will be the final input? We view that the final performance assessment must be included in the EIS.

Page 2-7 In the section on Tuff the Plan states that there are many active faults in the region and postulates that other faults could become active in the future. How will this future fault activity affect repository integrity? What will be the criteria used to identify future activity on faults? Faults are known to occur at the proposed site. What is known about their activity? The text gives the impression that a site in a geologically and tectonically complex area with numerous active faults and seismicity is suitable and viable. We view this impression with much skepticism.

Page 2-10 and 2-11 Sections on Erosion and Paleoclimatology identify that summary reports will be prepared at the conclusion of tuff studies. A summary report is unacceptable. A satisfactory review of these studies necessitates the development of comprehensive reports.

Page 2-12 The first sentence regarding previous exploration and mineral potential in tuff is misleading. The absence of previous exploration in and of itself is not indicative of a lack of minerals or other energy resources. This same statement could be said about most sites at one time or another. There are many reasons that previous exploration could be limited such as access problems and more attractive areas elsewhere. In addition, a statement is made regarding effects of inadvertent "wildcat" exploration. The term "wildcat" refers to a specific part of petroleum exploration; it is not applicable to mineral resource exploration.

Page 2-12 Text states potable ground water exists beneath the tuff site but extensive development is unlikely because of rugged terrain and poor soils. The discussion is misleading and prejudices the conclusion of the FY 87 study. Southern Nevada is an arid environment, potable water is in high demand both now and in the future. Many plans to increase the water resources will be researched, analyzed, and developed in the future. Direct water transfer is a viable scheme. When considering the 10,000-year "hazard-life" of the repository, consumptive use of potable ground water in the vicinity of the tuff site is likely.

Page 2-15 A preliminary model of flow in the tuff unsaturated zone is proposed to be developed in FY 89. Section 2.3.3 on Exploratory Shaft Testing indicates testing will be complete by mid-FY 89. This overlap of dates suggests a preliminary model and a final model will be developed in the same time period; not a technically-sound procedure.

Page 2-16 Description of the environmental studies for tuff is extremely general. Text indicates environmental studies were initiated in 1980. Surely more data has been developed than suggested in this brief discussion.

Page 2-16 and 2-17 Section on Exploratory Shafts does not consider the period required to review, comment and resolve issues on the site characterization plan. We expect that no exploratory shaft activities will begin until all issues are resolved and NRC has approved the Plan.

Page 2-19 Will the plan for excavation of exploratory shafts and tunnels and test plan be submitted to Federal OSHA and State Mine Inspector for their review?

Page 2-20 Last paragraph of Section 2.3.2 Construction conflicts with Section 2.3. Section 2.3 indicates two shafts will be excavated at all sites selected for characterization, but Section 2.3.2 indicates that the need for a second shaft in tuff remains to be established. Will the second shaft in tuff be excavated or not?

The use of two shafts at NTS must be carefully evaluated. Circulation of air between the shafts may allow excessive drying in the drifts used for measuring unsaturated permeabilities and soil moisture potentials. Unless provisions are made for this problem, the measurement of these parameters could be incorrect.

There appears to be a discrepancy in the construction and testing schedules presented here and the EIS schedule presented elsewhere in the Plan. Our analysis indicates the final EIS will be issued five months before site characterization testing is complete.

Page 2-22 In the section on Exploratory Shaft Testing in Tuff the first five "tests" in the construction phase and the first two "tests" in the in-situ phase are not tests. These are data gathering tasks - no testing is involved.

Only 31 months have been allocated for the entire testing program for tuff. In order to meet this schedule it will be necessary to conduct many tests concurrently. However, care must be taken to arrange both the temporal and spatial placement of certain tests to ensure there will be no cross interference. The time allotted may not be sufficient to do this.

Page 2-26 Text indicates Title II design will begin in FY 90 to support construction startup. It is our understanding NRC will require Title II design for review prior to approval of the

construction authorization. Therefore, Title II design must be completed by FY 90, according to the reference schedule in the Plan.

There is extensive discussion of engineering tradeoffs and cost-effectiveness of the repository design. How will safety influence design tradeoffs and cost effectiveness?

Page 2-35 Why is copper being evaluated as an alternative canister material? It is an inappropriate material for a repository in tuff. The unsaturated zone is an oxidizing environment.

Page 2-38 Section 2.5.4 discusses in-situ testing of waste packages. The discussion is brief. Is such testing "state-of-the-art" or experimental? How will two years of testing obtain sufficient data to assess the containment capability of the waste package for 300-1000 years?

Page 2-39 In Section 2.6.1 tradeoff studies need further definition. How will safety influence tradeoff studies?

Page 2-39 Text indicates performance assessment input for the EIS and the PSAR will be based upon preliminary data and designs. In our view, the Nuclear Waste Policy Act requires a determination of site suitability after characterization. The assessment of site performance is critical to that suitability determination. That determination cannot be based upon preliminary data and designs.

Page 2-41 Figure 2-6 indicates a long-term performance assessment for the repository will be finalized and submitted with the license application to accept waste. This is unacceptable. The complete assessment of the long-term performance of the site must be included in the DEIS so a final determination of site suitability can be made. There must be confidence that the repository selected by the President is based upon sound technical analysis of all data, not partial, preliminary or assumed data.

Page 2-42 and 2-43 Text has an extensive discussion of computer codes. There is no discussion about the confidence DOE has that these codes accurately model site conditions and repository performance. Are these codes state-of-the-art?

Page 2-49 Concerning estimated total cost, text states that regulatory and institutional activities are assumed to occur from 1983 through 1997. This is not realistic. The regulatory process will never stop, certainly not before the operating permit is issued and final closure is agreed to. Following the issuance of an operating permit, new information will constantly develop as new tunnels are opened, waste canisters are emplaced, backfilled and performance assessed. Allowances should be made for the continuation of this activity through the final closure of the repository.



Page 3-1 First paragraph states that DOE is in the process of formulating plans for the resolution of potential financial, political, legal, and institutional problems. Section 301(a) of the Act requires these plans to be formulated and completed at the time of submittal of the Mission Plan.

Page 3-4 Section 3.2.2 indicates DOE will adjust document review schedules to address state "start-up time delays". Published EA public draft review schedules now in circulation conflict with DOE's proposed commitment. The State of Nevada, as well as other states and interested groups, have repeatedly requested 90 - 120 days to properly review the EA, but DOE has steadfastly stated that 60 days is sufficient time. These kind of statements give little confidence that DOE intends to cooperate and interact in the reasonable fashion envisioned by the Act.

Page 3-6 In Section 3.4.2 on Plans for Resolution of State and Local Permit Requirements, it is unrealistic to assume that state and local permit problems can be resolved through the consultation and cooperation agreement process.

Page 3-7 The statement is made that two states have enacted legislation which adversely affects the geologic repository program. Many states have statutes that are legal and constitutional and must be adhered to which could adversely affect the repository program. That does not mean state statutes are unconstitutional. The tone of Section 3.5 leaves the impression that DOE is unwilling to work within the framework of state or local laws to resolve conflicts. Section should be rewritten in a positive tone, to give states and public confidence that DOE is willing to work with state and local governments to resolve differences.

Page 3-9 Text states DOE will develop a program-wide public information plan. Nevada requests the opportunity to review a draft of the plan.

Page 3-11 Section 3.10.2 states "The first component of this effort is to conduct site-evaluation activities in a technically thorough and rigorous manner, thereby allowing selection decisions to have a sound and defensible basis". In our view, the DOE guidelines for siting repositories do not lend confidence that site selection decisions will have a sound and defensible basis. According to the guidelines, siting decisions relative to selection of potential acceptable sites, nomination of sites and recommendation of sites for characterization will be based on findings made on factors which do not require characterization (i.e. site ownership, population density, offsite installations, and environmental quality). All technical factors require characterization before a finding of qualification or disqualification can be made, thus the siting process will be narrowed to three sites before technical data can affect siting decisions. This is hardly a technically sound, defensible siting process.

Page 3-12 Waste will be transported through a number of states. This will create additional financial demands on those states. Decisions must be made concerning mode, routes, financial implication, time of travel, notification, escorts, emergency response, liability and financial assistance. Institutional problems may arise from complexity of coordinating all Federal, State and local agencies that are concerned with the issues. All these items need discussion.

Page 3-13 We agree with DOE that a major first-of-a-kind national program could generate delays through changing licensing criteria and modifications of designs or systems. It also means that the NRC is not likely to look favorably towards any type of expedited authorization or licensing process and, in fact, should require extra time to ensure the safety of this first-of-a-kind facility.

Page 3-16 Statement is made "there is uncertainty regarding adequate levels of funding to ensure full participation of states and affected Indian tribes". What is certain is that as the process grows more complex and delays occur, grants to states must increase many fold.

Page 5-1 Chapter 5 discusses the significant results and the implication of research and development programs on the repository program. It fails to discuss any technical problems which have been encountered as a result of research and what plans have been developed to resolve the problems. Also, it is important to know what impacts these technical problems may have on repository siting and program schedules. We believe the discussion of problem areas is implicit in Section 301 (a)(5) of the Act.

Page 5-13,14,15,16,17 Section on the tuff site has few references to back up the technical discussion in the Plan. Are these discussions based upon facts or "conservative assumptions"?

Page 5-14 In the first paragraph the statement is made that a caldera may lie directly beneath the proposed repository. This is a bold statement without further explanation. What is the evidence for this feature? How old is it? What is the potential for renewed activity? How does this feature impact site suitability and isolation capability? Is the caldera a potential target for geothermal exploration? The implications of this statement gives the public little confidence that Yucca Mountain is a safe repository site.

Page 5-14 In paragraph six it is unclear how the 2000 acres relates to repository size and capacity. Is 2000 acres sufficient size to contain 70,000 MTU? Also, the text makes the optimistic statement that mining through the fracture zone is not a serious obstacle. It appears little data has been developed which might support such a statement. If a fault is present, it may be a ground water barrier. It is our understanding water

table levels are substantially higher to the north.

Page 5-16 The second paragraph discusses the potential for repository disruption by volcanism. What is the probability for eruption in Long Valley and subsequent blanketing of the area by thick layers of volcanic ash? In view of the USGS warning that such an eruption is probable, has the impact on health and safety during construction and operation been considered?

Paragraph three states that the estimated effect of underground nuclear weapons testing are of less consequence than the effects from probable natural earthquakes. What are the consequences of nuclear weapons testing? Are they significant? Given the high likelihood of occurrence, will these effects be considered in the repository design? How will they be handled during operation? What is the potential of future nuclear weapons testing areas moving closer to Yucca Mountain? Given the proximity of Yucca Mountain to NTS and Nellis Air Force Bombing Range, should the effect of a potential surface nuclear blast resulting from enemy attack or potential missile or plane impact be considered?

Paragraph four states that a fault zone that bounds the west edge of the site contains a small unfractured basalt dike dated as 10 million years old and another part contains unbroken mineral filling dated as more than 20,000 years old. It also states that the existence of a basalt dike at one point along a fault zone does not preclude activity on other parts of the same fault zone. The existence of unbroken mineral filling dated as more than 20,000 years old does not meet the NRC criteria (10 CFR 100, Appx. A) for determining fault capability.

Paragraph five states that there is a major gap in the geologic record between 11.5 million years and 400,000 years ago. If this is the case, then there is no basis for stating that fault movement has been minor since 11.5 million years ago. Without some kind of discernible geologic record, it will be difficult to define the full extent of Quaternary tectonics in the area. What type of studies are being considered to provide this information?

Page 5-31, 5-33, 5-34, 5-35 Text on hydrogeologic system in tuff is devoid of references.

Page 5-33 Text states concepts of the unsaturated zone flow system have been developed and will be tested in future studies. What other concepts were considered and why were they rejected? What tests will be performed to verify the concepts? How will water vapor be treated in these concepts?

Page 5-33 The last paragraph describes downward flow as the most likely path of radionuclide transport. In the geology section (5.2.3), the site is described as layers of tuff rock, heterogeneous vertically but homogeneous laterally. With that in mind, what is the potential for lateral movement of

radionuclides?

Page 5-40 Section 5.4.3 on Geochemistry of Ground Water contains little detail, especially in view of the key site suitability issues on ground water. It appears based on the Mission Plan that the site will be recommended for characterization with little or no information on unsaturated zone hydro-geochemistry. Project appears to be at some risk in proceeding in this fashion.

Page 5-57 Section 5.7 is a summary of the advantages and disadvantages of potential host rocks for the first repository. The first sentence states "Each potential host rock has certain intrinsic advantages and disadvantages". The discussion which follows for each host rock emphasizes only the advantages and minimizes the disadvantages, almost to the point of no mention. Table 5-4 on page 5-62 does not appear to relate to the text discussion. It is important that the Plan give a clear, honest picture of the suitability of the selected host rocks to contain and isolate the waste.

Page 5-58 Discussions adapted from the National Research Council (1983) are misleading and self-serving. The information that is contained in the 1983 report came from DOE and its contractors. The fact that this information is included in a National Research Council report does not necessarily validate the accuracy or completeness of the data.

Page 7-1 In our view, Chapter 7 is given very weak treatment. Nevada is left with the impression DOE does not have firm, detailed plans for site characterization. It is unknown whether there will be one shaft or two, whether testing will include radioactive materials, whether any characterization activities will compromise the isolation capabilities of the proposed sites, and whether site characterization activities will induce any adverse or safety-related impacts. Also, there is no discussion in Chapter 7 of how non-technical factors (i.e. environmental, socioeconomic, transportation) will be treated during site characterization.

Page 7-13 Regarding the site characterization program, it is suggested that an additional statement be made regarding the need for NRC approval of the site characterization plan prior to beginning the actual sinking of the shaft.

Page 7-13 Section 7.2.1 argues for a two-exploratory shaft site characterization program. From our view, the arguments are weak. From a safety aspect, the Federal Mine Safety Code concerning underground escapeways requires two or more separate, properly maintained escapeways from every producing mine. The Code does not require two escapeways from exploration activities. In addition, it is not mandatory the second escapeway be equivalent in size to the main shaft of the mine. From the economics perspective, it does not appear cost effective to excavate two shafts at each of three characterization sites, when there is the

possibility two of the sites will not be recommended for development. Utilizing DOE's cost figures for exploratory shafts (page 10-4), the program could save \$275-300 million. Also, there is no basis to suggest that a large second shaft will be required to conduct tests perceived necessary for NRC licensing. NRC's review may not necessitate additional testing and surely a large second shaft is not mandatory to conduct the tests.

Page 7-14 The last paragraph concerning the need for in-situ testing to meet perceived NRC requirements is pure speculation designed to argue for a large diameter second shaft. The premise is false that NRC will require tests for performance confirmation design parameter verification, and mining feasibility. If DOE performs a comprehensive and quality technical characterization program, then the requirement for such may be negated. Given that the tests will be required, there is no justification for a large diameter second shaft to support that testing.

Page 7-16 Section 7.3 discusses plans for onsite testing with radioactive materials. The use of radioactive materials for testing purposes will require NRC approval prior to use.

Page 7-17 Under Section 7.6 there is no discussion of restoration of sites not recommended for characterization. That could be as many as six sites for the first repository program.

Page 10-1 DOE states they have been unable to complete cost estimates that are consistent with the current program strategy presented in Volume I. In other words, the cost estimates provided in Volume II are wrong. DOE must correct these estimates before the final version of the Mission Plan is issued.

Page 10-5 Table 10-1 does not identify financial assistance after 1992. The licensing process will continue through construction, operation, and closure of a repository. The states intend to participate fully in that process and will demand funding. Also, we envision independent monitoring of the environment during construction, operation, and closure and will request funds to support those efforts.

Page 10-19 Table 10-3. There is no discussion in Chapter 10 as to the reasons for a repository in basalt to cost \$2 billion more over the design life than repositories in other geologic media. In our view, the isolation capabilities of basalt must be clearly superior to justify the increased cost of the repository.

Page 11-1 Chapter 11 discussion of socioeconomic impacts is weak and incomplete. Chapter fails to identify the critical socioeconomic issues which need to be considered and the plans required to assess impacts and possible mitigation measures. The discussion also fails to consider impacts from site screening or characterization activities. There appears to be the presence of these impacts in Nevada already.



Clark  
County

Department of  
Comprehensive Planning

RICHARD B. HOLMES  
DIRECTOR

JAMES L. LEY  
ASSISTANT DIRECTOR

CLARK COUNTY BRIDGER BUILDING  
225 BRIDGER AVENUE, SEVENTH FLOOR  
LAS VEGAS, NEVADA 89155  
(702) 388-4181

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NUCLEAR WASTE PROJECT OFFICE

July 5, 1984

Charles R. Head, Acting Director  
Operations Division  
Office of Civilian Radioactive Waste Management  
U.S. Department of Energy, RW-13  
Forrestal Building  
1000 Independence Avenue  
Washington, D.C. 20585

DRAFT MISSION PLAN FOR THE CIVILIAN RADIOACTIVE WASTE PROGRAM

The Clark County Department of Comprehensive Planning provides the following comments to the Department of Energy's Draft Mission Plan. The response is divided into two sections; a general section in which we synthesize our major concerns and a section which details our thoughts on specific issues. We have focused our attention on issues of import to Clark County such as transportation, mitigation payment, institutional relations and a diverse array of socioeconomic questions.

1. Transportation

Perhaps the most significant issue to the citizens of Clark County is the transportation of nuclear waste. Given the present transportation network and the routing scenarios being employed by DOE subcontractors, it is conceivable that spent-fuel shipments could traverse the Las Vegas metropolitan area en route to the proposed Yucca Mountain facility, a potentially significant impact to the community. Because of the potential influence of the project, therefore, from a local perspective, it is felt that the Draft Mission Plan only superficially treats or ignores a number of substantive transportation issues. It also almost totally disregards a role for local governments in the process.

Our concerns are that the Mission Plan needs expansion with regard to the following:

- (a) routing
- (b) mode of transport
- (c) institutional arrangements
- (d) carriers
- (e) liability

COMMISSIONERS

Thella M. Dondora, Chairman • Manuel J. Cortez, Vice-Chairman  
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Joseph C. Denny, County Manager • Donald L. "Pat" Shalmy, Assistant County Manager

July 5, 1984

(a) Routing: As noted in 49CFR177-H.M.164, states have the flexibility to designate routes for the shipment of waste. Because of the fact that local communities will ultimately bear the brunt of transportation decisions, however, it is imperative that they be afforded a role in the route-selection process. Local government can more adequately identify local areas of sensitivity, such as areas of high traffic volume or accident potential, density of population, and environmental sensitivity, simply because they are closer to the problems. Likewise local government is closer to the concerns of the affected public. Early involvement of local government in the process can potentially reduce future problems and minimize disruption to residents.

(b) Mode of Transport: The federal government has selected rail or road as being the "prudent" transport mode options to be considered in the program. We question why air transport, which has a lower accident rate per vehicle mile than truck or rail and could potentially avoid some ground transportation issues, was not also selected. The most efficient modal mix should not solely be an economic question, as alluded to in the mission plan, but should weigh heavily environmental impacts and community impacts as well as public attitude issues, the latter often difficult to assign a cost/benefit. The public would probably opt for a mode mix that would minimize its potential contact with the waste and thus its exposure to potential accidents. Again, local input is essential to determining a mode mix formula.

(c) Institutional Arrangements: The DOE has gone to great length to illustrate that an accident that would potentially damage a cask and release radioactivity to the environment is virtually impossible. Despite assurances such as this by DOE, the manner in which the public perceives nuclear waste issues, notably transport, however, as evidenced in part by testimony at the March, 1983 public hearing in Las Vegas, indicates that a sense of distrust still exists. The potential disruption to Las Vegas' main industry, tourism, which could be the result of large-scale shipments of nuclear waste is another issue not totally satisfied by films of trucks being driven into walls and demolished. To allay public suspicions and fears concerning potential accidents, therefore, it is conceivable that additional steps may have to be taken by the federal government in conjunction with local authorities. Such steps should include agreements with states and locals on matters such as:

- 1) Prenotification of waste shipments
- 2) Routing (discussed earlier)
- 3) Timing of shipments
- 4) Vehicle inspection (also see following section on Carriers)
- 5) Escort of vehicles
- 6) Training of emergency response personnel in case of accident
- 7) Other (route modification necessary because of weather, construction, etc.)

An excellent agreement of this type was negotiated between the State of Ohio and a utility in Wisconsin in 1983. Although it is interesting to note that a federal analysis of this agreement viewed it as a "complication", we feel that a comprehensive regulatory system such as this is the only way to reduce public fears, as well as to responsibly deal with a potentially serious problem. We would rather have a "complication" than to trust a system with a potential for breakdown (as has already been demonstrated with the transport of other hazardous waste, notwithstanding comprehensive regulations) or one in which local government and the public have been totally unaware of shipments (as has been the case in Nevada where shipments of high-level spent fuel have been transported in recent years without the full knowledge of the public and local government).

(d) Carriers: The Nuclear Waste Policy Act of 1982 indicates intended reliance on commercial carriers to transport nuclear waste. From state and local experience in the transport of other hazardous wastes (which has resulted in numerous cases of accidents and other indiscretions), we feel that it is incumbent on DOE to implement the procedures cited in the previous section (c). Items such as inspection will ensure that the regulations are being followed.

The mission plan also did not explain in any detail how it intended to interact with private carriers during the program. Elements such as training of drivers and enforcement of regulations should be discussed in more detail.

With the potential complexities of attempting to coordinate a number of commercial firms, it may be less complicated for the federal government to develop its own capability for waste shipment.

(e) Liability: One issue that has been totally ignored in the Mission Plan is the question of transportation-related liability. While it is understood that Congress is currently addressing this issue in the Price-Anderson Act, this is obviously an important question to state and local government and deserves more comprehensive treatment in the Plan.

## 2. Mitigation Payment

A project of this magnitude can have significant influence on a community's ability to provide services for the influx of anticipated workers and their families. While in the case of the Yucca Mountain site this is especially critical in a small county such as Nye, which has few services, it can also be important in a rapidly-growing county such as Clark, which, without the project, is having problems maintaining services for its burgeoning population.



Aside from the brief mention of mitigation funding as an issue (Volume 2 - Pages 3-11, 12), however, there is almost no substantive discussion in the Mission Plan of such local concerns as the types of mitigation/compensation funding available to a state/community (for example, eligibility for economic impact assistance) and the process(es) by which a locale would initiate requests for funding. Also, in discussions with DOE it has indicated that there is currently no authorization by Congress to enable a government agency to negotiate with a local unit of government for mitigation funding. This issue deserves clarification as well in the Plan.

### 3. Institutional Arrangements

While we are fortunate in Nevada in the sense that state government is sensitive to the need for interaction with affected communities in all aspects of the program, we still don't see this sensitivity reflected in the Mission Plan. Our briefing meeting in Washington, D.C. seemed to reinforce our feeling that the federal government considers local governments as minor actors in the total program. By not considering local government as an integral element in the planning and implementation phase of the program, the federal government is raising the risk of incompletely addressing substantive issues.

### 4. Socioeconomic Impacts

The discussion of socioeconomic issues in the Mission Plan is perfunctory at best. This is in glaring contrast to the comprehensive treatment of various aspects of the on-site investigation process to which the majority of the volume is devoted. If the public is truly to have confidence in the process by which the repository is selected, issues related to the potential impact on the populace in the vicinity of the repository must be addressed in substance.

The socioeconomic discussion as it presently exists is unacceptable. Chapter 11 of Volume 2 of the Mission Plan, for example, is merely a six-page compendium of potential impacts. While this is useful in the context of understanding the problems involved in siting a repository, the discussion is incomplete without an analysis of how the federal government intends on mitigating these potential impacts. This link between problem and solution is important to local government and can have an important influence on community attitudes towards the repository. A suggestion would be to expand each individual section (Economic Impacts, for example) by stating the problem in the beginning and then providing an analysis of the manner in which the federal government will effect a solution.

Charles R. Head

-5-

July 5, 1984

To summarize, the Mission Plan while in general providing a comprehensive analysis of on-site issues related to the repository, is, nevertheless, deficient in those off-site questions important to the public and local government. This may ultimately have great bearing on the acceptance of a repository. While there appears to be a sensitivity on the part of DOE officials in Nevada on the need to interact more closely with local governments and consider their interests, on the Washington level, and as reflected in the Draft Mission Plan, local issues seem to remain a minor concern, subsidiary to detailed technical issues.

Specific comments referenced to pages of the Draft Mission Plan are attached.

Should you have questions regarding our comments, please contact Dennis Bechtel of my staff at (702) 386-4181.

Sincerely,

DEPARTMENT OF COMPREHENSIVE PLANNING



Richard B. Holmes  
Director

RBH:sg  
Attachment

cc: Robert Loux

CLARK COUNTY DEPARTMENT OF COMPREHENSIVE PLANNING

SPECIFIC MISSION PLAN COMMENTS

Volume I

General

1. Page 2-3 The volume of defense-related waste, its timing, etc., at the Yucca Mountain site could influence the magnitude of shipments of nuclear waste and thus be an important transportation issue.

Would the "full cost allocated to permanent disposal of defense wastes..." apply to mitigation monies as well for potential impact up and above that resulting from commercial shipments.

2. Pages 2-4, 2-5 Is 70,000 MTU the absolute capacity of one repository? The wording in paragraph 3, page 2-4 seems inconsistent with that on page 2-5. If 70,000 MTU will handle all commercial waste what about defense-related waste?
3. Page 2-6 (top) Where were the public hearings held on the siting guidelines? Why weren't they held at the potential repository sites?
4. Page 2-6 (top) Will draft assessments be done (released) for those sites not amongst the five selected? If not, will all nine be evaluated in some manner that will permit an understanding of the selection rejection process?
5. Page 2-7 How much time is permitted for a disapproval notice to be filed?

6. Page 2-7 (last paragraph, Page 2-8 (first paragraph)) Does public participation in the consultation and cooperation phase include interaction with local governments (substantive interaction and not merely listening to briefs)? If not, why not?

Also needed to be clarified is the details on how mitigation and "in-lieu-of" monies are to be distributed (timing, etc.)

#### Test and Evaluation Facility

7. Page 2-8 What sort of testing will be performed at a repository site to ensure compliance, etc., if a TEF is not required.
8. Page 2-9 (Federal Storage.....) One or more MRSs?

#### Monitored Retrievable Storage

9. Page 2-10 Possible permanent solution if deep geologic repository concept doesn't work out?

#### Transportation

10. Page 2-10, 2-12 private industry and hauling? I have some problems with that. Given the present difficulties occurring from private haulers transporting hazardous waste it would seem that a more acceptable scheme would be to have DOE totally responsible for shipping the waste. It would be easier to control one carrier rather than a multitude. If private carriers are to be used, however, a strong statement should be made stating the means by which DOE will regulate shipments (including monitoring). A more comprehensive statement is also needed as to how the federal government intends on interacting with local and state government

to "resolve institutional questions in order to gain full public and intergovernmental support (Page 2-11 first paragraph)." needed to be discussed are questions of routing, notification, escort and liability which are of particular concern to local and state governments.

#### Federal Interim Storage

12. Page 2-12 Can a site being considered as a repository be also considered for Federal Interim Storage?

#### Regulatory Requirements for Licensed Repositories

13. Page 3-A-6 (paragraph 2) How are the EPA's standards "limits on radiation exposures, in the general environment outside the boundaries of locations under the control of persons possessing or using radioactive material" defined? Would the standards also extend to the transportation of waste?

14. Page 3-A-7(C) What are the definitions of "disturbed zone" and "accessible environment?"

#### Mission and Objective

15. (d) Institutional relations (last paragraph page 3-A-17). If this is truly important to the federal government then mention should be made of needed interaction with local governments, notably those in the vicinity of the repository which would be in the vicinity of transportation routes and bear the brunt of the transportation of nuclear waste.

The determination of "valid concerns" (last line page 3-A-17), should be mutually agreed upon between federal, state and local governments.

16. (1) Consultation and Cooperation (page 3-A-18) While there has been some "information dissemination" in Nevada over the past several years, the "exchange" of information (if that is what the statement refers to) has been virtually non-existent until the past several months. Briefings are not exchanges of information.
  
17. Monitored Retrievable Storage (MRS) (page 3-B-1) Given the probable unpopularity of a permanent, geologic repository anywhere, the MRS looms as a potential permanent solution to nuclear waste disposal. Because there are fewer physical constraints to the development of an MRS site (e.g., the dependence on engineered barriers) institutional constraints would appear to be the only checks to siting a facility anywhere in the country. It is, therefore, imperative that local governments be involved with the states and federal government in all aspects of the MRS siting and implementation issue. This does not mean reviewing information, etc., produced by others but rather being a part of decision-making activities from start to finish.

Volume II

Chapter 3 - Potential Financial, Political, Legal and Institutional Problems

1. 3.1 (Failure to Reach or Implement a Consultation-and-Cooperation (C and C) Agreement) - Page 3-2 - One way to assist in the resolution of issues is to include local affected governments in the C and C process.

Page 3-3 (Last Paragraph) - This sounds ominously like the bottom line is, notwithstanding legitimate concerns by local/state governments, the federal government has the option of forging ahead unimpeded.

2. 3.7 (Public Apprehension and Resultant Public Opposition)

Page 3-8 - To reiterate our concern noted in other sections of the program: while provision of information is helpful, interaction with the public and local governments will lead to the resolution of concerns.

3. 3.10 (State or Tribal Notice of Disapproval)

Page 3-10 - To reiterate our concern noted in other sections of the program: while provision of information is helpful, interaction with the public and local governments will lead to the resolution of concerns.

4. 3.11 (Timing of Impact-Mitigation Grants)

This issue should be expanded to include procedural questions such as definition of mitigation/compensation needs and the process by which local/state governments can obtain funding.

5. 3.12 (Impediments to the Transportation of Waste)

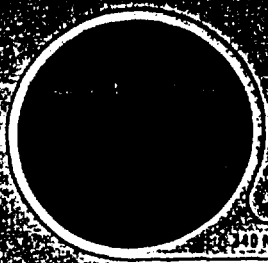
To reiterate our concern noted in other sections of the program: while provision of information is helpful, interaction with the public and local governments will lead to the resolution of concerns.

6. Other issues that should be addressed in Chapter 3:

(a) The Role of Local Governments in the Site-Selection and Implementation Process.

(b) Failure of a deep geologic repository to be implemented resulting in the placement of a long-term MRS in a community (problems and resolution).





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NUCLEAR WASTE PROJECT OFFICE

July 3, 1984

State of Nevada  
Nuclear Waste Project Office  
Office of the Governor  
Capitol Complex  
Carson City, Nevada 89710

ATTENTION: Mr. Robert Loux

Re: Lincoln County/City of Caliente Comments To DOE Draft  
Mission Plan

Dear Mr. Loux:

On behalf of Lincoln County and the City of Caliente, the attached comments to the Department of Energy's Draft Mission Plan for the Civilian Waste Management Program are offered. This letter should be considered a part of the County/City official comments.

Because the Union Pacific Railroad mainline from the eastern United States passes through Lincoln County and the City of Caliente, the County and City are particularly concerned with the manner and extent to which transportation issues will be addressed in siting this nation's first and second nuclear waste repositories.

Clearly, the Mission Plan has fallen short in providing any clear description of how transportation modes and corridors will be evaluated and to what extent such evaluations will be considered in the site selection processes. The Mission Plan suggests that evaluations of transportation modes and corridors will not be a factor in narrowing the nine candidate sites to five and ultimately to three sites for site characterization. In fact, DOE appears to be grossly understating the significance of what ultimately may be the single greatest waste facing the siting process, that being transportation.

These concerns are specified in the attached comments.

State of Nevada  
Nuclear Waste Project Office  
ATTENTION: Mr. Robert Young  
July 3, 1984  
Page 2

Should you have any questions concerning these comments, please do not hesitate to contact this office.

Respectfully submitted,



Mike Baughman  
Project Manager

MB:db  
Enclosure

COMMENTS TO THE DOE DRAFT MISSION PLAN FOR THE CIVILIAN  
RADIOACTIVE WASTE MANAGEMENT PROGRAM

Submitted Jointly by  
Lincoln County and the City of Caliente, Nevada

- Page 1-1 Under Program Objectives #1, text should be changed to read, "To site, license, construct, and operate geologic repositories which allow for safe and environmentally acceptable means for transporting and disposing of radioactive waste".
- Page 1-2 Under Program Objectives - an additional objective #6 should be added to read, "To involve affected states and local governments fully in the siting process".
- Page 2-10 through 2-12. The section on transportation does not mention the extent to which alternate transportation modes will be analyzed to determine their relative environmental, social-health risk, and economic costs or benefits. The text also does not indicate that air transport will be considered when perhaps it offers the fewest negative attributes when compared to transport by truck, rail, or barge.
- Page 3-A-9 Site Screening - The Plan should describe a detailed approach to evaluating transportation mode and corridor alternatives as a major factor in evaluating the suitability of alternate sites.
- Page 3-A-18 Socioeconomic Impacts - This portion of the plan describes what has been done but leaves no clues as to how DOE proposes to assess socioeconomic impacts associated with each site. An approach to evaluating the full range of socioeconomic impacts should be presented in the text. Specifically, DOE needs to document the extent to which the mere proposal of a repository in an area may reduce investments in affected areas thereby impairing efforts to bring about economic diversification.
- Page 3-A-20 Fourth full paragraph - While the text indicates that narrowing of 9 sites to 5 will be based largely upon Environmental Assessments, no basis for a decision to narrow sites from 5 to 3 is offered. The Plan should clearly discuss the basis by which 3 sites will ultimately be chosen from the 5 nominated.

Page 3-A-25 Institutional Strategy - The text indicates that the institutional strategy must be flexible enough so that these issues can be addressed in a comprehensive and timely fashion. A comprehensive review of each of the minimum five environmental assessments (as necessary to draw comparative analysis conclusions) can not be accomplished in the 60-day period presently anticipated by DOE. The Mission Plan should recognize that a 120-day review period is imperative.

Page 3-C-1 Transportation - The Plan seems to concentrate upon waste packaging and handling. Evaluation of alternate transportation modes and corridors is also critical.

Page 3-C-2 Current Issues - The last sentence of the first paragraph should be changed to read, "Specific environmental analyses will be conducted to assess the impacts of alternate transportation modes and corridors. Findings of these analyses will be incorporated into Environmental Assessments, Site Characterization, and Environmental Impact Statements.

In addition, Lincoln County and the City of Caliente, as are other local governments, have implemented ambitious programs to bring about local economic development. The County and City are concerned that the mere possibility that frequent shipments of nuclear waste through the area may occur, is and will continue to act as a psychological deterrent to investment in the County/City area.

The Mission Plan should recognize that this type of preconstruction impact may occur and are a current issue.

Page 3-C-4 Plans to Address Institutional Issues - The Mission Plan does not indicate at what point these plans would be prepared. It is suggested that they be available prior to nomination of sites for characterization to ensure that all appropriate factors are considered in the site narrowing process.

Page 3-E-1 Objectives - First paragraph, third sentence should include air as a possible mode of transportation.