BOB MILLER
Acting Governor

STATE OF NEVADA

ROBERT R. LOUX
Executive Director

AGENCY FOR NUCLEAR PROJECTS
NUCLEAR WASTE PROJECT OFFICE
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January 12, 1990

Mr. Samuel Rousso
Acting Director
United States Department of Energy
Office of Civilian Radioactive
Waste Management, RW-1
1000 Independence Avenue, S.W.
Washington, D.C. 20585

Dear Mr. Rousso:

RE: REPORT TO CONGRESS ON REASSESSMENT OF THE CIVILIAN RADIOACTIVE WASTE MANAGEMENT PROGRAM, DOE/RW-0247, November 30, 1989.

Governor Bob Miller has asked that I respond to Secretary Watkins' November 29, 1989, letter in which he requested that the Governor forward comments to you on the proposed schedules contained in this Report.

Given the significance and scope of the Secretary's Report and plan for restructuring the Department's high-level nuclear waste program, and his having "concluded that the program cannot be effectively executed in its present form," I have taken the liberty to provide comprehensive comment on the Report, rather than limiting Nevada's comments to the schedules, as requested. You will find Nevada's detailed comments attached to this letter.

The Secretary's stated goals in developing the plan contained within the Report are as follows:

* Protecting public health and safety and the quality of the environment in the management and disposal of spent fuel and high-level waste.

* Developing an NRC-licensed geologic repository for the permanent disposal of spent fuel and high-level waste.

* Beginning the operation of the waste-management system as soon as practicable in order to be able to accept spent fuel and high-level waste for disposal at a significant rate during the early years of operation.

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* Establishing public confidence that the management of radioactive waste is not an obstacle to the nuclear energy option.

The Report describes the plan the Secretary has developed to achieve these goals. There are three stated major elements of the plan:

* Developing and implementing a new management structure.

* Gaining access to the Yucca Mountain candidate site and initiating comprehensive scientific investigations as the focus of site characterization.

* Developing options for ensuring the timely acceptance of spent fuel through the establishment of monitored retrievable storage (MRS).

In the course of reviewing the Report, we also reviewed the Department's December 20, 1989, presentation to the Nuclear Regulatory Commission, by Leo Duffy, Special Assistant to the Secretary for Coordination of DOE Waste Management. In this presentation he described the Secretary's plan to the Commissioners and elaborated on certain regulatory aspects of the plan, as they relate to required NRC facility licensing for waste management and disposal.

The Secretary's plan provides a partial framework for implementing an entirely new high-level nuclear waste management and disposal program under the Nuclear Waste Policy Act, as amended. However, the success of the plan appears to rely primarily on a number of elements that are not within the control of the Secretary. These include Congressional action to remove existing linkages between repository siting and MRS facility siting and development for interim spent nuclear fuel storage; licensing and regulatory deferrals and modifications by the NRC and Environmental Protection Agency; and DOE prevailing in litigation against Nevada for access to the Yucca Mountain site. In fact, the only major point of reliance that is within the control of the Secretary is the planned restructuring of the program management within the Department of Energy.

Mr. Duffy's presentation to the NRC was most revealing in its bold and blatant suggestion that "there is a need for a fresh look at the regulatory framework." His further remarks clearly indicate DOE's concerns that NRC and EPA licensing regulations could "undermine" the DOE's ability to develop a nuclear waste repository, and that prescriptive health and safety and environmental protection regulations are premature "until such time as we learn more about the capabilities of the entire waste isolation system, particularly the site."

In addition to openly suggesting to the Commission that its and EPA's licensing regulations be molded to fit the Yucca Mountain site, there was the further, equally astounding proposal for "collaborative interaction" among DOE, the electric utilities, the State of Nevada, and the NRC in developing repository licensing regulations and criteria as well as interpretation of the regulations.

Taken as a whole, the DOE's approach to resolving the known and expected technical inadequacies of the Yucca Mountain site and their fatal impact on repository licensing is nothing less than an arrogant invasion of regulatory objectivity and integrity, with the goal of compromising otherwise required health and safety and environmental protection standards. This hidden DOE agenda only serves to discredit and undermine the Secretary's lofty statements of his goals in the Report.

The Report states that a detailed discussion of the plan will be presented by DOE in a revised program Mission Plan, which will be issued for public review and comment by June 1990. The Nuclear Waste Policy Act requires that a comprehensive Mission Plan for the entire waste management and disposal program be submitted to Congress prior to DOE's implementation of its program. No such plan has been submitted by DOE since before Congress adopted the 1987 amendments to the Nuclear Waste Policy Act, which among other things singled out the Yucca Mountain site as the only site to be investigated for high-level nuclear waste disposal. The lack of a valid Mission Plan, coupled with the enormity of the implications of the Secretary's Report as evidenced above, requires that DOE submit a new, comprehensive program Mission Plan, as provided by the Act, before proceeding with implementation of the Secretary's new plan.

Furthermore, since the Secretary's plan restructures DOE's planned site characterization program at Yucca Mountain, the existing Site Characterization Plan should be considered invalid until a revised program Mission Plan has been accepted by Congress, and a new, conforming Site Characterization Plan has been drafted and submitted for public review, as required by the Nuclear Waste Policy Act.

Nevada firmly believes that it is imprudent and unlawful for the DOE to continue to pursue siting and developing a high-level nuclear waste disposal facility at Yucca Mountain. As you are aware, Governor Miller informed Secretary Watkins on November 14, 1989, as this Office has informed DOE in the past, that sufficient information exists about the Yucca Mountain site for it to be disqualified under the DOE's own repository siting guidelines. This and Nevada's belief that State legislative actions have resulted in a successful veto of the Yucca Mountain site, under the Nuclear

Waste Policy Act, are issues in a lawsuit filed against the Secretary of Energy this month by the Nevada Attorney General.

Notwithstanding our position regarding the invalidity of Yucca Mountain as a potential repository site, we are providing the attached comments on the Secretary's report and plan in the interest of furthering the Nation's future ability to resolve its ever-increasing nuclear waste problems. The intent of these comments is to point out that this latest DOE approach to developing a national nuclear waste management and disposal program is incomplete, misdirected, and demonstrates an arrogant and willful misunderstanding of the regulators' proper role in protecting health and safety and the environment. In its conception, the approach represents nothing more than yet another patchwork attempt by DOE to "fix" the most obvious, while ignoring the most fundamental problems of the program.

Governor Miller has informed me that he looks forward to Secretary Watkins' response to the comments provided in this letter and attachment.

Sincerely,

Robert R. Loux
Executive Director

RRL:cs
attachment

cc: Governor Bob Miller
Admiral Watkins
Nevada Congressional Delegation

COMMENTS OF THE STATE OF NEVADA
REGARDING THE UNITED STATES DEPARTMENT OF ENERGY

REPORT TO CONGRESS ON REASSESSMENT OF THE
CIVILIAN RADIOACTIVE WASTE MANAGEMENT PROGRAM
DOE/RW-0247, November 30, 1989

JANUARY 12, 1990

The Report to Congress on Reassessment of the Civilian Radioactive Waste Management Program of the Department of Energy opens by stating, "[T]he Secretary has initiated a management action plan that contains three major elements:

* Developing and implementing a new management scheme.

* Gaining access to the Yucca Mountain candidate site and initiating comprehensive scientific investigations as the focus of site characterization.

* Developing options for ensuring the timely acceptance of spent fuel through the establishment of monitored retrievable storage (MRS)."

The principle elements of the plan, many of which are discussed in this review, are described in the reassessment report. In sum, the Secretary of Energy has laid a framework for implementing an entirely new high-level nuclear waste management and disposal program under the Nuclear Waste Policy Act, as amended. The Secretary's report, together with official statements of top-level Departmental representatives relative to the report, reveals that the successful implementation of this new program relies primarily on a number of elements that are not within the control of the Secretary. These include statutory amendment, regulatory modification, and DOE prevailing in litigation against Nevada for access to the Yucca Mountain site. In fact, the only major point of reliance that is within the control of the Secretary is the restructuring of the program management within the Department of Energy.

If the restructuring plan is to be implemented, and the Department intends to proceed with site characterization at Yucca Mountain (an action which Nevada does not believe to be justified under current circumstances), the Secretary must commit now to two near-future actions.

First, the Plan states a "draft" of a revised Mission Plan, describing how DOE intends to implement the new program, will be issued for public review and comment by June 1990. This should be a complete revision of the Mission Plan, rather than one that is only revised for selected topics, as has been DOE's past practice.

The Department has not finalized any Mission Plan since Congressional adoption of the 1987 amendments to the Nuclear Waste Policy Act, which made many fundamental policy changes, including naming Yucca Mountain as the single site for characterization. With the broad range of changes in the program, including this latest so-called restructuring plan, it is necessary to describe and evaluate the DOE's current comprehensive plans for program implementation in the context of all of the statutory requirements for the contents of the Mission Plan, as laid out in Section 301(a) of the Nuclear Waste Policy Act. This is especially important in light of the gravity of the Secretary's conclusion "that the program cannot be effectively executed in its present form." If, indeed, the program is planned to be executed according to this redirected and restructured approach, there must be a new, comprehensive Mission Plan which fully describes all aspects of the DOE's new program. Of course, the agency and public comment, and DOE response provisions, in Section 301(b), also should govern, considering the Congress and DOE have cast an entirely revised program since 1987.

The Congress did not change Section 301 of the Nuclear Waste Policy Act in its 1987 amendments. Therefore, it must be interpreted that there remains the congressional intent that a valid mission plan, providing "an informational basis sufficient to permit informed decisions" (Sec. 301(a)), be presented to the Congress and the public before the DOE's planned program is acceptable for execution. In view of this, it is premature for DOE to seek changes in the statute, as announced in the restructuring plan, prior to their being evaluated in a Mission Plan, as required in the Nuclear Waste Policy Act. Also, implementation of the new program pursuant to the Nuclear Waste Policy Act, as amended, and according to the restructured plan, without benefit of a valid Mission Plan, does not conform to the requirements of the Nuclear Waste Policy Act.

Second, in view of the fact that a major element of implementation of the restructured plan is DOE's new schedule for site characterization, which involves the reevaluation of surface-based test plans as well as the earlier decisions regarding location and other aspects of the Exploratory Shaft Facility (ESF), the current Site Characterization Plan for the Yucca Mountain site should be considered invalid until an acceptable Mission Plan is adopted. At that time, the DOE's new plans for characterization of the Yucca Mountain Site should be developed to conform with the accepted program, as defined by that Mission Plan. The revised Site Characterization Plan should be submitted for public and NRC review as required by the Nuclear Waste Policy Act and NRC regulations.

While the need for a new definition of the DOE's program in a valid Mission Plan and a revised Site Characterization Plan does not preclude implementation of surface-based scientific investigation of the site, as contemplated in the restructured

plan, it is advisable that such a program not begin until two fundamental concerns are resolved. First, the Exploratory Shaft Facility plans should be sufficiently developed to provide assurance that surface-based testing and ESF development do not interact in a manner that would compromise the ability to collect needed site characterization data, or the validity of that data. And second, the ESF and surface-based testing plans should be evaluated to assure that, together, they do not result in impacts that may compromise the site's potential waste isolation capabilities. In past planning, these two concerns, and others, have led DOE, with the agreement of the Nuclear Regulatory Commission staff, to employ the rationale that surface-based testing should not begin until its relationship to ESF development is defined and the expected impacts are identified and considered acceptable.

A growing body of information in the record, including Special Assistant Duffy's December 20, 1989, presentation to the Nuclear Regulatory Commission, suggests that the DOE is experiencing increasing difficulty in developing its plans for demonstrating to the NRC that the Yucca Mountain Site conforms with the requirements of the NRC's repository licensing rule, 10 CFR Part 60, and the Environmental Protection Agency's yet to be promulgated standards for environmental protection at a repository, 40 CFR Part 191. Mr. Duffy made the statement to the Commission that "there is a need for a fresh look at the regulatory framework in the program."

Upon further elaboration, Mr. Duffy suggested that it was premature both for NRC to further interpret how the licensing rule is to be applied, and for the NRC to promulgate additional rules in specific topical licensing areas. He added these ongoing activities by the NRC should be deferred until the DOE has collected more Yucca Mountain Site data. The astounding implication of his suggestion to the NRC is that the repository licensing regulations should be developed to fit the site's characteristics, after DOE has a better understanding of what might be the more troublesome aspects of its required demonstration to the NRC of reasonable assurance that the site's waste isolation performance will meet the regulations. He compounded this arrogant attempted invasion of regulatory objectivity and integrity by further suggesting that there be "collaborative interaction" among NRC, DOE, other federal agencies and boards, the State of Nevada, and the nuclear industry in "joint development of regulatory criteria."

The reassessment report states, "Regarding interactions with the Environmental Protection Agency, the DOE is reviewing the drafts of the revised standards in 40 CFR Part 191, in order to identify any concerns that could undermine DOE's ability to develop a repository or MRS facility." This statement reinforces our observation regarding DOE's newly emerging apparent concerns about the Yucca Mountain Site's ability to comply with regulatory

standards. Throughout the period of DOE's development of the Yucca Mountain Site Environmental Assessment and Site Characterization Plan, when the DOE was questioned about the site's ability to conform with a yet-to-be-promulgated EPA standard, the response was that the site could meet any standard that might be established by EPA. Now, from this current statement, and those of other DOE representatives in the recent past, it appears that there is considerable concern about compliance, to the extent that DOE is seeking, improperly, to assure that the regulations fit what it believes to be the waste isolation performance characteristics of the site, regardless of what independent, objective health and safety and environmental protection criteria might otherwise require.

The presentation of Special Assistant Leo Duffy to the NRC is particularly revealing in this regard, as it relates to regulations involving the engineered barrier system at a repository. His statement on this matter is as follows:

> "The Department believes it would be particularly useful to allow credit for an improved engineered barrier system (EBS) in the regulatory analysis to show compliance with the EPA total system performance standard. Specifically, credit should be allowed for the waste package for a life greater than 1000 years. While it is understood that the present waste package performance requirement in 10 CFR Part 60 could be subject to varying interpretations, it appears that they preclude such a consideration. As stated earlier, it is premature to provide such prescriptive subsystem requirements until such time as we learn more about the capabilities of the entire waste isolation system, particularly the site." (emphasis added).

If, in fact, the DOE believes there is a need to revise the regulatory framework in order to carry out its assignment to site and develop a safe and acceptable high-level nuclear waste repository at Yucca Mountain, the only appropriate vehicle available to the DOE under the Nuclear Waste Policy Act to identify, describe and justify this need is the Mission Plan, as defined in the Act. In making individual, unilateral attempts at compromising regulatory commitment, objectivity and rigor, the DOE is, again, operating in a manner that is counterproductive to its stated goal of improving public confidence in the nation's ability to safely manage and dispose its high-level nuclear wastes.

In the DOE's approach to restructuring its program, the shift to an early emphasis on surface-based investigations is attributed in part to a new DOE responsiveness to suggestions made by the Nuclear Regulatory Commission, the nuclear industry, and the State of Nevada. We are not convinced that the approach represents a response to some of our earlier suggestions along these lines because DOE's actual plans for restructuring of site investigations are not yet available. The DOE's proposed schedule appears to

indicate that a revised approach to surface-based work will be completed in September 1990, with new ESF configuration decisions to follow, in December 1990. Until this new approach is reviewed in its entirety, it is not possible to determine whether such plans conform with acceptable standards of scientific investigation. It seems unlikely that the approach conforms with Nevada's earlier suggestions regarding the need to complete critical and conservative scientific evaluations related to known disqualifying site characteristics prior to initiating the exploratory shaft program. This conclusion is based on the short period of time scheduled, between January 1991 and November 1992, for surface-based testing "aimed specifically at evaluating whether the site has any features that would indicate that it is not suitable as a potential repository site." The period of time scheduled for such work is insufficient to carry out the intense data collection, analysis and evaluation necessary to support any additional potential suitability, or unsuitability, determinations. Furthermore, there is no information in the plan regarding how such a determination will be made prior to DOE's crucial decision to initiate an exploratory shaft.

By all appearances, the rescheduling of surface-based testing and the beginning of ESF construction, at best, reflects DOE's latest estimate of what progress is achievable under the current circumstances of its program planning and status (e.g., availability of site study plans and an acceptable quality assurance program). It does not reflect a new commitment by DOE to dedicated scientific investigation and rigorous evaluation of results prior to a decision to return to its ESF construction initiative. Rather, it suggests that within a 20-month period following the start of surface-based testing, the program will be ready to return to business-as-usual, with the interim period having been applied to some potentially useful data collection that was planned to be accomplished by DOE in any event. In reality, the planned effort involving surface-based work is not likely to provide the DOE with a basis for early determination of potential site suitability that is any better substantiated, or any more meaningful, than the Preliminary Determination of Suitability by the Energy Secretary in May 1986 that accompanied his recommendation of three Candidate Repository Sites in Nevada, Washington and Texas.

The proposed schedule for transportation planning and implementation, including the resolution of institutional issues with affected states and local governments, lacks definition in respect to shipments to a repository. Given the known complexity of the transportation issue, the delayed date for repository operation should not be considered by DOE to be a justification to slow or defer ongoing work and involvement of local governments, including continued consideration of requests by eligible local governments for "affected" status. The period of time for planning transportation to an MRS has been shortened by about four years,

and the plan provides no recognition of this fact and its potential impact on affected states and local communities.

The reassessment report describes the Department's new position on development of a Monitored Retrievable Storage facility, which includes seeking congressional removal of the statutory linkages between repository progress and MRS siting and development, and modification of the MRS capacity limits. Also, it further reinforces the Department's preference for an MRS sited in a volunteer state through the efforts of the Nuclear Waste Negotiator. In any case, the report emphasizes that the Department believes operation of an MRS facility is achievable on a schedule that conforms to the expectations and needs of the utilities. What the report does not reveal, but was stated by Mr. Duffy in his presentation to the NRC is, "Key to [spent fuel] acceptance [at an MRS] in 1998 will be expedited licensing of the simplest possible MRS facility." He suggested that the NRC review its two applicable regulations "to see if the licensing process could be streamlined." Once again, this is a topic that is appropriate for identification, evaluation, and justification in a comprehensive Mission Plan, and certainly should be brought officially to the attention of the Congress prior to any deliberations regarding amending the Nuclear Waste Policy Act provisions regarding MRS linkages to repository program progress. In simplest terms, such a process is critical to informed decision-making, and such perceived needs must be presented and justified by the Department in a form that is accessible to the Congress when it is involved in policy considerations.

Nowhere in the reassessment report is the State of Nevada's and affected local governments' statutory program oversight role acknowledged. Instead, it appears to have been deliberately ignored. The State and local governments are mentioned only as being included among institutional matters with which the Department must deal. The State's legitimate oversight role has been affirmed by federal court action. The DOE must acknowledge this role and permit it to be carried out in a meaningful manner by all affected governmental units.

CONCLUSION

Without question, the reassessment report is intended to outline a fresh start at a failed high-level nuclear waste management and disposal program, yet it does not recognize the full spectrum of the institutional, technical, financial and political complexities of such an undertaking. Interestingly, except the fact that Yucca Mountain has not been removed from repository site consideration, this report could be an initial basis for developing a Secretarial recommendation to Congress regarding how to initiate a nuclear waste management and disposal program.

The proposed schedules, which Nevada was requested to review, are as lacking in comprehensive programmatic bases as the report itself. For this reason, and the numerous reasons incorporated in this review, if it is the DOE's desire to pursue implementing a revised program of waste management and disposal involving the Yucca Mountain Site (which Nevada believes to be an imprudent objective), the Department should make a clean start at such a program. This requires nothing short of first preparing a thorough and comprehensive Mission Plan for the program, and then submitting it for public review and comment and congressional acceptance, as required by the Nuclear Waste Policy Act.

The intent of these comments is to point out that the Secretary's approach to developing a national nuclear waste management and disposal program that, in fact, can be executed is incomplete, misdirected, and demonstrates an arrogant and willful misunderstanding of the regulators' proper role in protecting public health and safety and the environment. In its conception it represents nothing more than yet another patchwork attempt by DOE to "fix" the most obvious, while ignoring the most fundamental problems of the program.