AFFIDAVIT OF ROBERT R. LOUX

I, ROBERT R. LOUX, do hereby swear that the following matters are true and correct based on my personal knowledge:

1. I am the Executive Director of the Nevada Agency for Nuclear Projects ("Agency"), the Agency vested by state law to carry out all of the duties and responsibilities imposed on the State of Nevada ("State"), by the Nuclear Waste Policy Act ("NWPA"), as amended. 42 U.S.C. 10101, et seq. I have been the Executive Director of the Agency since 1983.

2. The primary responsibility of the Agency is to oversee and evaluate the U.S. Department of Energy’s ("DOE’s") programs to characterize or otherwise study the proposed Yucca Mountain site in southern Nevada for the purpose of assessing its suitability as repository for high-level nuclear waste ("Yucca Mountain Project"). In my capacity as executive director, I hire and supervise consultants and scientists to assist and oversee DOE’s evaluation of the Yucca Mountain site. My position also involves regularly tracking and evaluating the Yucca Mountain Project. That is the basis of my personal knowledge of the matters stated in this Affidavit.

3. If constructed, the Yucca Mountain Project would rank among the largest and most irreversible public works projects in history. The expected cost of the project (which government sources currently estimate at over $60 billion), the enormous risk to the State’s environment and economy, and the potential risks to public health for many thousands of years make this project unique among those presently proposed for the State and the country.
4. Under the NWPA, three federal agencies—the Environmental Protection Agency ("EPA"), the U.S. Nuclear Regulatory Commission ("NRC"), and DOE—share responsibility for and assessment of the potential development of the proposed repository.

5. The NWPA, as amended, is a unique and complex piece of legislation. The process by which the Yucca Mountain site is to be evaluated, recommended, and ultimately selected for development as a geologic repository involves a series of sequential steps involving the President, DOE, NRC, the State of Nevada, and both houses of Congress. It is a sequence where actions taken at each step predetermine and condition the actions to be taken in subsequent steps, and where actions once taken have ramifications that are not amenable to revision. For example, once the Secretary of Energy recommends to the President that Yucca Mountain be developed as a repository, and the President has sent that recommendation to Congress, the State of Nevada has only sixty days to exercise its right to object under Section 116 of the NWPA. Once Congress receives notice of disapproval from the State, it must enact any resolution of repository siting approval within the first period of ninety calendar days of continuous Congressional session. Once the Congress has overridden the State’s notice of disapproval, even if the Congressional decision is based on a flawed and incorrect recommendation from the Secretary of Energy, DOE will proceed with development of the repository by submitting a license application to the NRC. Accordingly, it is imperative (due to the sequence of steps which will promptly follow it) that the recommendation by the Secretary of Energy be reasonable appropriate, and not contrary to law.

6. The 1982 NWPA invited DOE to construct implementing guidelines that were consistent with the Act. In 1984, DOE did so, promulgating its guidelines at 10 CFR 960. Consistent with the NWPA, DOE’s Guidelines recognized that its judgment as to the suitability of any site would rest primarily upon the site’s geologic characteristics. As stated in Section 112
of NWPA, “such guidelines shall specify detailed geologic considerations that shall be primary
criteria for the selection of sites.”

7. In 1988, DOE published its Site Characterization Plan (“SCP”), in which it set out
the detailed criteria that DOE would employ in characterizing the Yucca Mountain candidate site
and in assessing its suitability for use as a geologic repository for high-level nuclear waste.
Consistent with the NWPA, DOE described its own SCP as follows: “The SCP is a 9-volume
document, more than 6,000 pages long, that describes in considerable detail the activities that
will be conducted to characterize the geologic, hydrologic, and other conditions relevant to the
suitability of a site for a repository.”

8. On August 4, 1994, DOE published a notice in the Federal Register, in which it
reiterated its reliance upon the 10 CFR 960 Guidelines for its suitability assessment (by now well
underway) at the Yucca Mountain candidate site. DOE said: “The Department has decided that
it will not amend the siting guidelines. Therefore, in making suitability decisions that are
required at this stage of the siting process, the Department will use the guidelines as they are
currently written.”

9. On September 14, 1995, DOE published another notice in the Federal Register,
again reconfirming its reliance on 10 CFR 960: “The U.S. Department of Energy (DOE), Office
of Civilian Radioactive Waste Management (OCRWM), today gives notice of the rationale for
its recent announcement that it will use the General Guidelines for the Recommendation of Sites
for the nuclear waste repositories [10 CFR Part 960], as they are currently written), in its
evaluation of the suitability of the Yucca Mountain site in Nevada for development as a
repository. As announced, the use of the Guidelines in this evaluation will be consistent with the
Nuclear
Waste Policy Act of 1982, as amended (NWPA), including the programmatic changes and reconfiguration provided for in the 1987 amendments to the NWPA, the presentation of this information is in response to a commitment made to the DOE to stakeholders at the public meetings held to discuss the DOE’s proposed process for evaluating the suitability of the Yucca Mountain site.”

10. As DOE progressed in its site characterization of the Yucca Mountain candidate site, enormous questions were raised within DOE itself, by NRC, and by third-party stakeholders such as the State of Nevada, with respect to the suitability for a repository of the geologic and hydrologic characteristics found when the Yucca Mountain candidate site was put under scrutiny. Accordingly, DOE now finds itself in a position where adherence to its Congressional mandate contained in the NWPA and implemented under 10 CFR 960 would likely result in DOE having to acknowledge the unsuitability of the Yucca Mountain site for a geologic repository. At the same time, due to DOE’s failure to meet its 1998 deadline for the provision of a waste repository for spent fuel accumulated at the nation’s nuclear power plants, court decisions have placed DOE in line for liability to nuclear power plant owners for as much as an estimated $50 billion in damages. DOE has now reacted to these developments by an eleventh-hour promulgation of a “cure-all” new Guideline—one which would abandon the Congressional mandate of the NWPA, and its heretofore implementation by DOE under 10 CFR 960.

11. DOE has now promulgated 10 CFR 963 as a final rule (the “Guideline”), which became effective December 14, 2001. The new Guideline would effectively erase the requirement for an independent assessment by DOE of the suitability of the candidate Yucca Mountain site—both geologically and hydrologically—as a repository for high-level nuclear waste. Under 10 CFR 963, the sole focus of DOE’s assessment of the candidate site would
become the site’s licenseability under EPA and NRC regulations. While compliance with EPA’s emission standards and NRC’s health and safety standards is necessary and appropriate, for DOE to render it the sole issue in its assessment of the suitability of the Yucca Mountain candidate Site is a total abdication of its legal duty under the NWPA.

12. Prior to DOE’s issuance of 10 CFR 963 as a final rule on November 14, 2001, the State of Nevada, acting through its Agency for Nuclear Projects, submitted written and oral comments to DOE in response to its publication of the new rule in proposed form in the Federal Register. Oral comments were submitted on February 3, 2000, in Las Vegas, Nevada. Written comments were submitted February 29, 2000. Those written comments are attached to this affidavit as Exhibit A. Nevada pointed out—to no avail—that the proposed rule did not conform to the Congressional mandate contained in the NWPA, as amended, requiring DOE to assess the suitability of the Yucca Mountain candidate site as a primarily geologic location in which to isolate nuclear waste.

13. The new DOE Guidelines would apply a “Total System Performance Assessment” to the candidate site, under which man-made or “engineered” barriers would be considered as an integrated group with the natural barriers, in order to assess the ability of the entire conglomerate to control or prevent the emission of radionuclides from the candidate site. Such an assessment of the “Total System Performance” would be calculated to mask the fact that the Yucca Mountain candidate site itself is not suitable, and that DOE is relying almost entirely (more than 99.7% reliance) upon the man-made waste package to secure the high-level waste.

14. While DOE’s rationale is seductive—what difference does it make whether the site itself is suitable, so long as the high-level waste is stored in a secure waste package—the distinction is one of great importance to the people of Nevada (where the waste is proposed to be stored in an unsuitable geologic setting), and to the people of the forty-three states through
which thousands of shipments of high-level nuclear waste would be transported by truck or rail with the concomitant risk of exposure to terrorist attacks on its way to Nevada. Peak radiation dose rates from the radioactive waste placed into the repository are not even expected for well over 100,000 years.

15. In adopting the new Guidelines, DOE attempts to shed itself of nearly two decades of its own interpretation of the NWPA as embodied in its prior guidelines, 10 CFR 960. The new Guidelines violate the explicit directives of Congress specified in the NWPA. Based upon the wording of the Guidelines themselves, the Secretary of Energy will make the recommendation to the President (with respect to the nomination of Yucca Mountain as the first repository for high-level nuclear waste) based upon the provisions of 10 CFR 963, while abandoning the provisions of DOE’s own long-standing prior guideline and the mandates of the NWPA, with which the new Guidelines are inconsistent. That is, DOE’s actual site suitability analysis is based on 20 years of study under Part 960, but its recommendation to the President is based solely on two months of assessment under Part 963.

16. The DOE’s recommendation to the President concerning the Yucca Mountain candidate site is expected no later than February 28, 2002, and may come earlier. The President is expected to make a site recommendation to Congress shortly after DOE has made its final recommendation. The State of Nevada, acting under Section 116 of the NWPA, would have the opportunity to issue a Notice of Disapproval regarding the Presidential recommendation, with an accompanying statement of reasons. If Congress overrides a Nevada Notice of Disapproval in accordance with Section 115 of the NWPA, DOE would then submit a license application to the NRC to obtain a license to construct the repository.

17. The NWPA contains strict provisions concerning the process that Congress must follow in reviewing and acting upon the State’s Notice of Disapproval. These provisions, set
forth in Section 115 of the NWPA, provide distinct and strict limitations on the time and manner in which Congress must act in response to any State Notice of Disapproval filed by Nevada. For example, Section 115(d)(4)(B), the provision governing Senate votes, states that “a motion to reconsider the vote by which such resolution is agreed to or disagreed to shall not be in order.” Likewise, Section 115(e)(4), the provision governing House votes, states that “no amendment to any such resolution shall be in order, nor shall it be in order to move to reconsider the vote by which such resolution is agreed to or disagreed to.” Taken together, these provisions appear to prevent both branches of Congress from reconsidering a State Notice of Disapproval once a resolution has passed, overriding that notice.

18. A recommendation by the Secretary of Energy to the President that fails to meet the underlying duties prescribed for DOE by the NWPA would necessarily prejudice and taint the Presidential and Congressional determinations relying thereon.

19. The numerous decisions that are scheduled to be made in quick succession regarding Yucca Mountain in reliance upon the Secretary of Energy’s anticipated recommendation highlight the complications that will be present if these decisions are made based upon site suitability guidelines that are ultimately invalidated. If any parts of these guidelines are subsequently overturned, serious legal, political and social questions would emerge throwing into question the entire site-selection process, including a presidential recommendation and any subsequent congressional determination, spawned by the improper and ultra vires reliance of DOE upon 10 CFR 963.

20. If the Secretary of Energy triggers the foregoing sequence of actions through a recommendation to the President predicated upon 10 CFR 963, the State of Nevada will be irreparably harmed by having been denied its opportunity to challenge these unlawful guidelines, unless that challenge is made and judicially decided prior to that sequence of events. This is
Nevada’s only effective opportunity to challenge 10 CFR 963. It is erroneous to suggest that Nevada will still have the opportunity to make its challenge at the time of the NRC licensing proceeding. NRC’s concern will be the licenseability, not the suitability of the site. DOE has two independent responsibilities in connection with the establishment of a nuclear waste repository—establishing the suitability of the “site” and the licenseability of the “repository.”

This dual responsibility—abandoned by DOE’s promulgation of 10 CFR 963—was articulated by DOE itself in the words of John W. Bartlett, former Director of DOE’s Office of Civilian Radioactive Waste Management:

. . . I want to distinguish between “suitability” and “licenseability,” and how they relate to the issues surrounding the evaluation and selection of a site for development as a repository. The decision on the suitability of a site for recommendation to the President for development as a repository is the responsibility of the DOE under the provisions of the Nuclear Waste Policy Act, as amended. The decision on the licenseability of a recommended site, once approved by the President and Congress, belongs to the Nuclear Regulatory Commission. The repository siting guidelines adopted in 1984 in response to the Act reflect this distinction. [Emphasis in original.]

21. Mr. Bartlett was explaining the 10 CFR 960 guidelines for assessing the suitability of the site itself as a geologic repository. These are the guidelines DOE would now replace with 10 CFR 963, guidelines aimed solely at meeting NRC licensing criteria regardless of the geologic suitability of the site itself. The total system assessment methodology advanced by DOE in 10 CFR 963 can easily result in a “repository system” comprised of an array of engineered barriers, being found licensable, even if placed at a site which is scientifically and legally unsuitable. Mr. Bartlett recognized this very vice of the total system assessment methodology, and warned:

This engine [of analysis] will be basically performance assessment methodology adapted to the purposes of site suitability evaluation. Adaptation is necessary because performance assessment models include consideration of engineered barrier system performance, while site suitability evaluation must focus on geologic
barrier performance. The methodology for site suitability evaluation must appropriately separate repository performance and site performance, . . .

22. In DOE’s current unwavering determination to license the Yucca Mountain site without regard to its suitability, DOE is flouting both Mr. Bartlett’s cautionary advice and its own long-standing interpretation of the NWPA. Worse yet, in adopting 10 CFR 963, and abdicating its legal responsibility to make an independent determination as to the suitability of the site for geologic isolation, DOE is breaching the promise that Congress made to the American people in 1982, to select a nuclear waste storage location based upon its geologic fitness to accomplish the mission of permanently isolating the waste. And, on a smaller scale but also important, it has broken the promise made by DOE OCRWM Director Bartlett himself:

. . . [W]e will assure that DOE does not unilaterally make up the rules as it goes along . . . . DOE has responsibility and authority for the site suitability decision. Our approach is designed to provide accountability for how we exercise that responsibility and authority.

23. By adopting 10 CFR 963, DOE is precisely: (a) making up the rules as it goes along; (b) abandoning the responsibility for the site suitability decision; and (c) attempting to evade the accountability for that decision, of which Mr. Bartlett spoke.

24. Pursuant to Section 116 of the NWPA, the State of Nevada has begun to assess the fiscal impacts that are likely to be associated with the proposed repository. The following are just some examples of those impacts:

(a) The greatest threat to Nevada’s economy and way of life from the repository stems from the intense negative perception and stigma associated by the public with a high-level radioactive waste repository, combined with the particular vulnerability of the Nevada economy to changes in its public image, due to its reliance on the tourism and gaming industries;

(b) Each one-percent decline in spending in Clark County could produce an
annual loss of 7,000 jobs and $200 million in income (a conservative assumption in comparison to analogous cases);

(c) Should just one hotel/casino decide not to locate in Nevada in the future, the immediate impact to Southern Nevada could be upwards of 14,200 jobs and almost $500 million lost to the local economy;

(d) The fiscal impact upon Nevada’s state agencies, in year one of a decades-long project, has been calculated conservatively at $486,485,229. (*Fiscal Impacts to the State of Nevada* [August 2000] by Urban Environmental Research, L.L.C.); and

(e) Clark County has investigated the likelihood and extent of property value diminution which would be caused by the stigma resulting from an amplified perception of risk associated with the siting of a nuclear repository in Nevada, and concluded that the range of diminished property values would be from $75.2 million to $526.5 million. The financial impacts resulting from the stigma effect would begin to occur the moment the Secretary of Energy makes an affirmative recommendation to the president, respecting the Yucca Mountain candidate site. Accordingly, irreparable harm to Nevada is imminent, should the Secretary base his recommendation on DOE’s unlawful—and now final—rule, 10 CFR 963.

25. Nevada will suffer irreparable injury if DOE proceeds with the recommendation of the proposed repository based upon siting guidelines that fail to satisfy the legal requisites of the NWPA. The NWPA gives the State of Nevada (and any other state which is the domicile of a repository candidate site) the right to a recommendation from the DOE to the President that is not tainted by reliance on illegal standards or guidelines. That right is denied to Nevada when the Secretary of Energy makes a recommendation based upon an illegal guideline, one not in compliance with the NWPA. Once the recommendation by the Secretary of Energy is made to
the President, the State of Nevada may lose forever the right to have DOE’s statutorily required
recommendation be based upon lawful and reasonable regulatory guidelines.

FURTHER AFFIANT SAYETH NOT.

ROBERT R. LOUX

STATE OF NEVADA §
COUNTY OF __________________ §

SUBSCRIBED AND SWORN to before me, a Notary Public for the State of Nevada,
appeared ROBERT R. LOUX and set his hand to the above document on this _________ day of

________________________________________
Notary Public

My Commission Expires:

________________________