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June 29, 2007

Chief  
Rulemaking, Directives and Editing Branch  
Mail Stop T6-D59  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

***RE: State of Nevada Comments on NRC's Notice of Availability of Supplement to the Environmental Assessment (SEA) and Draft Finding of No Significant Impact for the Diablo Canyon Independent Spent Fuel Storage Installation (Docket No. 72-26)***

To whom it may concern:

In response to NRC's Federal Register Notice of May 31, 2007, the State of Nevada has reviewed the "Notice of Availability of Supplement to the Environmental Assessment and Draft Finding of No Significant Impact for the Diablo Canyon Independent Spent Fuel Storage Installation" and offers the following comments. As detailed below, the present analysis is insufficient to meet the NEPA requirement identified in the decision that precipitated this assessment, *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1028 (9<sup>th</sup> Cir. 2006), cert. denied 127 S. Ct. 1124 (2007).

While Nevada concurs that it is difficult to precisely quantify the likelihood of a successful terrorist attack on Diablo Canyon – or another NRC licensed facility, the risk of an attack that results in the release of radioactive material and subsequent human and environmental contamination is not zero. As *San Luis Obispo Mothers for Peace* has already held, that risk is not so "remote and speculative" that it can stand without effective NEPA analysis. 449 U.S. at 1028. Assessing and understanding the consequences of such an occurrence in a way that reflects actual impacts to people and

the environment are essential elements of any NEPA analysis and require a more thorough and detailed analysis than that contained in the Diablo Canyon SEA.

### **The SEA Is Insufficient As A NEPA Analysis**

The cursory SEA, which largely discusses broader security considerations and contains less than two pages of very general discussion of the project site (pages 6, 7), cannot satisfy NEPA's mandates to consider "every significant aspect" of the project's environmental impacts, and to disclose that information to the public. *San Luis Obispo Mothers for Peace*, 449 F.3d at 1016. In evaluating the consequences of a successful terrorist attack at Diablo Canyon, NRC apparently did no site-specific or original analyses. Instead, NRC merely extrapolated information from previously done independent spent fuel storage installation (ISFSI) security assessments and, using an unspecified methodology, "compared the assumptions used in these generic assessments to the relevant features of the Diablo Canyon ISFSI." We note that the SEA references (page 8) do not include a listing of "the generic security assessments for ISFSIs" referred to in the SEA (on pages 6, 7). Based solely on that analysis of unidentified documents, the NRC staff summarily determined that the impacts of a terrorist attack would be negligible.

NRC's terrorism analysis for Diablo Canyon is not an impact assessment at all. It is more akin to a literature review, with select elements of certain unidentified generic analyses cobbled together and used to arrive at an unsubstantiated finding (assertion would be a more appropriate description) that "the dose to the nearest resident from even the most plausible threat scenarios ... would likely be below 5 rem ... or none at all." Such finding is not substantiated with any data or information contained in the SEA.

The source term (i.e. released materials) is not reported in the SEA. The SEA does not discuss any meteorological parameters for analysis and suggests that the calculated atmospheric dispersion would be conservative without noting what analytical means produced these findings and what assumptions were used in the analysis. At a minimum the details (i.e., what computer code/program was used, what assumptions went into the modeling, specifics on the fuel, what the critical variables were set at, etc.) should have been reported so that independent analysis of the findings could be undertaken.

The SEA apparently considers the 5 rem or less dose finding to be reflective of the only impact a successful terrorist attack would have. This approach is wholly inadequate and ignores potentially significant impacts both on and off site. For example, what are the health and environment consequences (impacts) of the 5 rem dose in the context of a nearby community? What are the health effects to exposed individuals? Assuming a 5 rem dose to a person well outside the boundaries of the site, what does this imply for the level of radioactive contamination and radiation doses occurring on-site? An attack resulting in a 5 rem dose at 2,400 meters (1.5 miles) could reasonably be expected to result in doses well in excess of 100 rem within 160 meters (one tenth of a mile). What are the potential health impacts to workers and emergency personnel? What

implications do high levels of radiological contamination have for short and long-term environmental conditions on-site and for initial and future clean-up and remediation? How do radiation levels and off-site contamination impact land uses in the area, contaminated infrastructure, etc.?

In addition to the direct radiological impacts of a successful terrorist attack (i.e., exposures, contamination, health effects, etc.), an occurrence that might result in off-site doses up to 5 rem would certainly cause other off-site environmental effects every bit as important as the radiological health effects. According to the EPA Manual of Protective Action Guide and Protective Actions for Nuclear Incidents (1992, p.2-5), “evacuation of the public will usually be justified when the projected dose to an individual is one rem.” Further, the EPA manual states (1992, p.2-7) that sheltering of the affected off-site population “should always be implemented in cases where evacuation is not carried out at projected doses of 1 rem or more.” What would be the impacts, for example, of evacuations (either spontaneous or mandated), and/or mandatory sheltering orders, that would certainly accompany news of a successful terrorist attack on a major nuclear installation such as a power plant?

In sum, the present analysis cannot satisfy NEPA, and does not come close to the “top to bottom” security review referenced in previous NRC statements and in *San Luis Obispo Mothers for Peace*, 449 F.3d at 1031.

### **Nevada’s Further Concern**

Nevada is concerned that the inadequate and unlawful approach used by NRC to assess potential impacts of terrorism at Diablo Canyon will set precedent for how the assessment of terrorism impacts would be implemented for Yucca Mountain, should DOE ultimately be successful in submitting a license application for that project and should NRC initiate a licensing proceeding. As detailed above, Nevada considers the cursory approach to impact assessment contained in the SEA to be inadequate and not in keeping with the letter and spirit of the requirement imposed by the Ninth U.S. Circuit Court of Appeals in *San Luis Obispo Mothers for Peace*.

Nevada can make no comment on the accuracy of the narrow and limited conclusions NRC drew from its generic review with respect to Diablo Canyon. However, Nevada takes exception to the grossly inadequate methodology NRC employed to assess terrorism impacts in the SEA. Because Yucca Mountain will be subject to the Ninth Circuit Court’s terrorism assessment mandate, Nevada will insist that a full and complete assessment of impacts resulting from a successful terrorist attack at the Yucca Mountain site be conducted by NRC as part of its NEPA responsibilities for licensing.

Nevada has no doubt that a fully adequate assessment of the environmental impacts of terrorist acts an ISFSI can be accomplished with reasonable effort. In the case of Diablo Canyon, the NRC Staff seems to have devoted insufficient effort and produced an analysis that is incomplete, unsupported, and unnecessarily opaque to outside scrutiny. As a general matter, Nevada supports the safe, long-term storage of spent fuel on reactor

sites. But the public in the vicinity of those sites deserves more by way of responsible analysis and public disclosure of environmental impacts than NRC Staff has provided here.

Thank you for the opportunity to provide comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert R. Loux". The signature is fluid and cursive, with a large, sweeping flourish at the end.

Robert R. Loux  
Executive Director

RRL/cs

cc Marta Adams, Deputy Attorney General  
Joe Egan, Egan, Fitzpatrick, Malsch & Cynkar, PLLC  
Barbara Byron, California Energy Commission