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

Re: Supplement to the Environmental Assessment for the Diablo Canyon Independent Fuel Storage Installation, Docket No. 72-26

Public Citizen submits the following comments to the U.S. Nuclear Regulatory Commission (NRC) regarding the Supplement to the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the Diablo Canyon Independent Spent Fuel Storage Installation (ISFSI), published in the May 31, 2007 issue of the *Federal Register* (Vol. 72, No. 104).

The Supplemental EA is utterly inadequate and does not comply with the National Environmental Policy Act (NEPA), because it is based on unsubstantiated claims, fails to define terms, dismisses credible threat scenarios, and does not actually contain any analysis or methodology. The EA fails to substantiate the NRC's Draft Finding of No Significant Impact. Therefore, the NRC must start from scratch and issue a Supplemental EA that is analytically sound.

Unsubstantiated Claims Do Constitute An Analysis

The EA is rife with unsubstantiated claims that are not referenced to any source. For example,

- The NRC Staff “*considers* the probability of a malevolent act against an ISFSI that result in a significant radiological event to very low” [emphasis added]. What is the basis of this consideration? A random guess? A good feeling?
- The EA states that the casks are “extremely robust structures, specifically designed to withstand severe accidents.” In fact, the NRC does not require full-scale testing for any part of its certification process. None of the casks that are now used in the United States have undergone full-scale testing, including the HI-STORM casks referenced in the EA. Notably, the casks are not licensed to withstand an attack. A 2006 National Research Council study concluded that “dry casks were designed to ensure safe storage of spent fuel, not to resist terrorist attacks.”¹

¹ National Research Council of the National Academies, Safety and Security of Commercial Spent Nuclear Fuel Storage: Public Report, 2006, page 64.

- The NRC claims that “by design, dry cask storage systems are highly resistant to penetration.” What is the basis of this conclusion? Unlike the NRC, the U.S. Army has actually tested a TOW armor piercing anti-tank missile against a cask. The missile pierced the cask wall.
- The EA claims that “in some situations, emergency planning action *could* provide an additional measure of protection to help mitigate the consequences” of an attack [emphasis added]. What is the basis for this conclusion? None of the mitigation measures are actually mentioned and analyzed. While Public Citizen strongly disagrees that these measures should be secret, as the NRC claims, at the very least a summary discussion of the validity of this claim must be part of the EA.
- The EA states that “NRC has determined that the...additional security measures in place provide high assurance that the spent fuel stored in an ISFSI is adequately protected.” What is the basis for this conclusion? The license application for the Diablo Canyon ISFSI does not actually include any additional security measures. In addition, the National Research Council’s 2006 report concluded that “the protection requirements for these installations are lower than those for reactors and spent fuel pools.”²
- Why does the EA only consider “the potential for early fatalities” as the only factor in consequences of a radioactive release? Why is land contamination, one of the biggest impacts from radioactive releases, not considered?

In addition, the reference section is useless, because the three documents in the reference section, which only include the 2003 EA, the license and the license amendment, do not actually contain any discussion of the environmental impacts of an attack. The NRC Staff clearly consulted other documents, such as the 2002 security assessment framework mentioned on page 6 (and probably should have consulted additional sources), but these documents are not referenced.

Vague Terms Do Not Constitute an Analysis

The NRC must define its terms explicitly and clearly.

- The EA concludes that “spent fuel in an ISFSI is adequately protected.” What does “adequately protected” mean?
- What is an “acceptable level” of risk from a terrorist attack?
- How does NRC define a “plausible threat scenario”? (See “NRC Dismisses Credible Threat Scenarios” below)

NRC Dismisses Credible Threat Scenarios

The EA concludes, without any analytical basis, that the only two “plausible threat scenarios” are a large plane crashing into the ISFSI and a ground assault with a very limited number of individuals (significantly fewer than the number of attackers on 9/11). The EA completely ignores realistic, credible threat scenarios that could result in serious environmental impacts. For example, the EA does not consider an attack with TOW missiles, which are the most common anti-tank missiles in the world and can be fired from portable launchers from two miles away. The EA also fails to consider an attack with a missile in conjunction with an

² *Ibid.*, page 64.

incendiary device, which could ignite the zirconium cladding surrounding the fuel pellets in a spent fuel assembly. The resulting fire could cause the large-scale release of radioactivity, such as cesium-137, that could contaminate hundreds of miles downwind for decades.

EA Lacks Analysis

The 1.5 pages comprising the “Consideration of Environmental (Radiological) Impacts From Terrorist Acts” is not a consideration at all. The EA contains no description of methodologies, nor any analysis related to the NEPA requirements. The 2002 analysis is not an adequate basis for an EA, because it is not based on the reasonably foreseeable impacts, as required in a NEPA analysis. The 2002 analysis also appears to be designed to come to a pre-determined conclusion by deciding plausibility before assessing factors that should be considered in determining plausibility, including attractiveness of the facility to attack, complexity of planning required, resources needed and execution risk. Moreover, these terms are not defined.

The NRC vaguely points to “generic security assessments,” which are not referenced, to justify the conclusion that no additional security measures are necessary for ISFSIs. The question that a NEPA document is supposed to analyze – what are the significant environmental impacts – is never actually addressed.

Finally, the NRC jumps to the conclusion that the generic assessments were “representative, and in some cases, conservative, relative to the conditions at the Diablo Canyon ISFSI.” Saying it’s so doesn’t make it so. The NRC must actually prepare a *relevant analysis* in an Environmental Assessment.

NRC Seemingly Had No Intention of Preparing a Thorough Assessment

It is quite clear that the NRC is attempting to avoid doing a real assessment of the environmental impacts of an attack on an ISFSI. First, the Commission Order on February 26, 2007 requires NRC Staff to analyze the environmental impacts of a terrorist attack on the Diablo Canyon ISFSI within only 90 days – an extremely short period of time for a thorough analysis. Second, the Commission limited the analysis to information “already available in agency records” – despite the fact that this is the first time that NRC is doing such an analysis within a NEPA document. Third, the “Consideration of Environmental (Radiological) Impacts From Terrorist Acts” is a mere 1.5 pages of the 8 page document – none of which actually considers the environmental impacts of a terrorist attack (see “EA Lacks Any Analysis” above). Finally, the Commission belligerently refuses to apply the Ninth Circuit decision nationally, concluding that “we continue to believe that NEPA does not require the NRC to consider the environmental consequences of *hypothetical* terrorist attacks on NRC-licensed facilities.” (Does that mean that the NRC is waiting for an actual attack before it considers the consequences?)

It is impossible to conclude, given the serious defects in the EA, that the NRC had any intention of complying with the Ninth Circuit decision in any meaningful way. Nonetheless, the law requires that NRC fully comply with NEPA and with the Ninth Circuit court decision. Therefore, NRC must redo its Environmental Assessment of the impacts of a deliberate attack

on the Diablo Canyon ISFSI, using referenced materials, defined terms, all credible threat scenarios, and descriptive methodology and analysis.

Sincerely,

A handwritten signature in purple ink that reads "Michele Boyd". The signature is written in a cursive, flowing style.

Michele Boyd
Legislative Director, Energy Program