Enclosure 1

U.S. NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

DIVISION OF SPENT FUEL STORAGE AND TRANSPORTATION

SUPPLEMENT TO THE ENVIRONMENTAL ASSESSMENT AND FINAL FINDING OF NO SIGNIFICANT IMPACT RELATED TO THE CONSTRUCTION AND OPERATION OF THE DIABLO CANYON INDEPENDENT SPENT FUEL STORAGE INSTALLATION

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SUPPLEMENT TO THE ENVIRONMENTAL ASSESSMENT AND FINAL FINDING OF NO SIGNIFICANT IMPACT FOR THE DIABLO CANYON INDEPENDENT SPENT FUEL STORAGE INSTALLATION

1.0 INTRODUCTION

The staff of the U.S. Nuclear Regulatory Commission (NRC) has prepared this supplement to the Environmental Assessment (EA) and final Finding of No Significant Impact (FONSI) for the Diablo Canyon Independent Spent Fuel Storage Installation (ISFSI), at the direction of the Commission, in response to the June 2006 decision by the United States Court of Appeals for the Ninth Circuit [*San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1028 (9th Cir. 2006)]. This supplement to the EA addresses the environmental impacts from potential terrorist acts directed at the Diablo Canyon ISFSI.

1.1 Description of the Proposed Action

By letter dated December 21, 2001, the Pacific Gas and Electric Company (PG&E) submitted an application to NRC, requesting a site-specific license to build and operate an ISFSI, to be located on the site of the Diablo Canyon Power Plant, in San Luis Obispo County, California. In accordance with the National Environmental Policy Act (NEPA), the NRC staff issued an EA for this action on October 24, 2003, in conformance with NRC requirements specified in 10 CFR 51.21 and 51.30, and the associated guidance in NRC report NUREG-1748, "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs." The Commission defines an EA in 10 CFR 51.14(a), as a concise public document that briefly provides sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a FONSI. A FONSI, in turn, is defined as a concise public document that briefly states the reasons why an action will not have a significant effect on the human environment and therefore does not require the preparation of an environmental impact statement [10 CFR 51.14(a)]. Based on the above EA, NRC also issued a FONSI for this action on October 24, 2003.

On March 22, 2004, the NRC staff issued Materials License No. SNM-2511 to PG&E, pursuant to 10 CFR Part 72, authorizing PG&E to receive, possess, store, and transfer spent nuclear fuel and associated radioactive materials resulting from the operation of the Diablo Canyon Power Plant (DCPP) in an ISFSI at the site for a term of 20 years. PG&E has begun construction of the Diablo Canyon ISFSI and currently plans to start transferring spent fuel to the ISFSI in mid-2008.

1.2 Purpose of this Supplement

In May 2002, during the NRC licensing review for the Diablo Canyon ISFSI, the San Luis Obispo Mothers for Peace (SLOMFP) and other citizens' groups petitioned NRC to hold a hearing to address a number of contentions. One of these contentions argued that NRC must consider terrorist acts in assessing the environmental impacts of the ISFSI, in order to comply with NEPA. On December 2, 2002, NRC's Atomic Safety and Licensing Board (ASLB) denied

this contention and referred it to the Commission for review. On January 23, 2003, the Commission affirmed the ASLB's denial of the terrorism contention.

After the March 2004, issuance of the Part 72 license for the Diablo Canyon ISFSI, SLOMFP and other parties filed a petition for review in the United States Court of Appeals for the Ninth Circuit, asking that NRC be required to consider terrorist acts in its environmental review associated with this licensing action. In its decision, dated June 2, 2006, *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1028 (9th Cir. 2006), the Ninth Circuit held that NRC could not categorically refuse to consider the consequences of a terrorist attack under NEPA and remanded the case to NRC.

In response to the Ninth Circuit decision, the Commission issued a Memorandum and Order on February 26, 2007, directing the NRC staff to prepare a revised EA addressing the likelihood of a terrorist attack at the Diablo Canyon ISFSI site and the potential consequences of such an attack. In response to the Commission's direction, the NRC staff issued a draft supplement to the EA for the Diablo Canyon ISFSI on May 29, 2007. Additionally, the staff published a notice in the Federal Register on May 31, 2007 (72 FR 30398), requesting public review and comment on the supplemental EA and draft Finding of No Significant Impact (FONSI) for the Diablo Canyon ISFSI. The staff's responses to the public comments on the supplemental EA and draft FONSI are provided in the Appendix to this supplement.

1.3 Purpose and Need for the Proposed Action

The DCPP, owned and operated by PG&E, consists of two Westinghouse-type pressurized water reactor units, each rated at a nominal 1,100 Megawatts-electric; each unit has its own spent fuel storage pool. The Diablo Canyon ISFSI is needed to provide additional spent fuel storage capacity to ensure that the two DCPP units can continue to generate electricity beyond the time when the storage capacity of the spent fuel pools is reached. The additional temporary spent fuel storage capacity provided by the proposed ISFSI will enable PG&E to operate both units until the current operating licenses expire (September 2021 for Unit 1, and April 2025 for Unit 2).

2.0 SUMMARY OF DIABLO CANYON ISFSI EA

On October 24, 2003, the NRC staff issued the EA and FONSI for the construction and operation of the Diablo Canyon ISFSI.

2.1 Summary of Impacts Considered in the EA

In the EA, the NRC staff concluded that the construction, operation, and decommissioning of the Diablo Canyon ISFSI will not result in a significant impact on the environment. In reaching this conclusion, the staff considered the impacts from normal operations and from postulated accidents. The staff determined that construction impacts of the ISFSI will be minor, and limited to the small area of the ISFSI site and the excavated-material disposal sites.

The staff also determined that there will be no significant radiological nor non-radiological environmental impacts from routine operation of the ISFSI. The ISFSI is a passive facility; no liquid or gaseous effluents will be released from the storage casks during normal operations. The dose rates to members of the public during normal operations will be limited by the design

of the spent fuel storage casks, so that the cumulative dose to an offsite individual will be a small fraction of the 100 millirem estimated annual dose received from naturally occurring terrestrial and cosmic radiation in the vicinity of the DCPP. The impacts from decommissioning the ISFSI, which will not occur until the spent fuel is removed, were determined to be much less than the minor impacts of construction and operation.

For hypothetical accidents, the calculated dose to an individual at the nearest site boundary was found to be well below the 5 rem limit for accidents set forth in 10 CFR 72.106(b) and in the U.S. Environmental Protection Agency's protective action guidelines. The NRC staff did not consider the potential impacts of terrorist acts on the ISFSI in the initial EA.

2.2 Summary of Alternatives Considered in the Environmental Assessment

The alternatives PG&E considered, and the NRC staff addressed in its EA, included the shipment of spent fuel offsite, other methods to increase on-site spent fuel storage capacity, and the no-action alternative. In the first category, the alternatives of shipping spent fuel from Diablo Canyon to a permanent Federal Repository, to a reprocessing facility, or to a privately owned spent fuel storage facility were determined to be non-viable alternatives, since no such facilities are currently available in the United States, and shipping the spent fuel overseas is impractical in light of the political, legal, and logistical uncertainties, and the high cost. Shipping the DCPP spent fuel to another nuclear power plant was also determined to be a non-viable alternative, because the receiving utility would have to be licensed to store the DCPP spent fuel, and it is unlikely that another utility would be willing to accept it, in light of its own limitations on spent fuel storage capacity.

Other on-site storage alternatives PG&E considered included increasing the capacity of the existing spent fuel pools by reracking or spent fuel rod consolidation, or construction of a new spent fuel storage pool. These alternatives were considered infeasible, because of the high costs associated with necessary plant modifications or new construction, coupled with the significantly higher occupational exposures that would result from the extensive fuel-handling operations necessary to support these alternatives.

The no-action alternative could result in the extended or permanent shutdown of both DCPP units many years before the expiration date of their current operating licenses, once the current capacities of the units' spent fuel pools are reached. The electrical generation capacity lost would most likely be replaced by fossil-fueled plants, which could result in greater environmental impacts and higher costs for electricity. In the short-term, the shutdown of the DCPP would have a negative impact on the local economy and infrastructure. For these reasons, the no-action alternative was not considered a practical alternative.

In the EA, the NRC staff concluded that there are no significant environmental impacts associated with the proposed Diablo Canyon ISFSI, and that other alternatives were not practical or viable, because of a combination of significantly higher costs and significant additional occupational exposure, or the unavailability of off-site storage options. In this supplement to the EA, the NRC staff has considered potential terrorist acts against the ISFSI, and after such consideration, has concluded that the construction and operation of the ISFSI will not result in a significant effect on the human environment.

3.0 NRC SECURITY REQUIREMENTS FOR INDEPENDENT SPENT FUEL STORAGE INSTALLATIONS

NRC has established requirements and has initiated several actions designed to provide high assurance that a terrorist attack would not lead to a significant radiological event at an ISFSI. These include: (1) the continual evaluation of the threat environment by NRC, in coordination with the intelligence and law enforcement communities, which provides, in part, the basis for the protective measures currently required; (2) the protective measures that are in place to reduce the chance of an attack that leads to a significant release of radiation; (3) the robust design of dry cask storage systems, which provides substantial resistance to penetration; and (4) NRC security assessments of the potential consequences of terrorist attacks against ISFSIs, that inform the decisions made regarding the types and level of protective measures. Over the past 20 years, there have been no known or suspected attempts to sabotage, or to steal, spent fuel from spent fuel casks at ISFSIs, or to directly attack an ISFSI. Nevertheless, NRC is continually reevaluating the threat environment, to determine whether any specific threat to ISFSIs exists.

3.1 General Security Considerations

In response to terrorist attacks in New York and Washington, DC, on September 11, 2001, and to intelligence information subsequently obtained, the U.S. government initiated nation-wide measures to reduce the threat of terrorism. These measures included numerous security enhancements to prevent terrorists from gaining control of commercial aircraft, such as: (1) more stringent screening of airline passengers and baggage by the Transportation Security Administration; (2) the increased presence of Federal air marshals on many flights; (3) improved training of flight crews; and (4) hardening of aircraft cockpits. Additional measures have been imposed on foreign passenger carriers and domestic and foreign cargo carriers, as well as charter aircraft. Beyond these measures directed at reducing the potential for terrorists to gain control of an aircraft, the Federal government has greatly improved the sharing of intelligence information and the coordination of response actions among Federal, State, and local agencies. NRC has been an active participant in these efforts; it now has regular and frequent communications with other Federal, State, and local government agencies and industry representatives, to discuss and evaluate the current threat environment, to assess the adequacy of security measures implemented at licensed facilities, and, when necessary, to recommend additional actions.

NRC expanded its existing Threat Advisory System after the September 11, 2001, terrorist attacks, to include a broader range of licensees, including ISFSI licensees. NRC has incorporated the threat condition levels used in the Department of Homeland Security's Homeland Security Advisory System into its own Threat Advisory System. The NRC threat assessment staff reviews, analyzes, coordinates, and disseminates threat and intelligence information relevant to its licensees, at both strategic and tactical levels. The threat assessment staff also serves as NRC's liaison and coordination staff with other organizations and agencies, including the intelligence and law enforcement communities. Through these improved coordination and communication functions, NRC is able to efficiently develop and transmit advisories to the appropriate licensees, who are then able to take prompt action. Thus, the broad actions taken by the Federal government and the specific actions taken by NRC since September 11, 2001, have helped to reduce the potential for terrorist attacks against NRC-regulated facilities.

3.2 Requirements for ISFSIs

NRC has historically considered the potential impacts of terrorist acts in the development and implementation of its 10 CFR Part 73 security requirements. NRC's strategy for protecting public health and safety and the environment focuses on ensuring that its safety and security requirements, as implemented by licensees, in combination with the design features of dry cask storage systems, are effective in protecting against successful terrorist attacks on ISFSIs.

NRC security requirements for ISFSIs are directed at assuring that terrorists cannot successfully carry out an attack against an ISFSI. These requirements, which apply to on-site security measures, are part of a multi-layered Federal security strategy that also consists of on-going threat assessment, in coordination with other Federal agencies such as the Department of Homeland Security, and measures to identify and preempt potential terrorist attacks. NRC reviews and approves facility security plans, in evaluating the adequacy of these on-site measures. As part of the licensing review for the Diablo Canyon ISFSI, the NRC staff evaluated and approved revisions to the Diablo Canyon site security plan that incorporated features of the proposed ISFSI. In that review, transmitted by letter dated February 4, 2004, the NRC staff determined that the proposed security plan revisions and facility design features met the requirements of Part 73, "Physical Protection of Plants and Materials," which were the same requirements for ISFSIs that were in effect before September 11, 2001. The details of specific security measures for each facility are designated as Safeguards Information, in accordance with Section 147 of the Atomic Energy Act and 10 CFR 73.21, and, for that reason, cannot be released to the public. However, key features of the security programs for ISFSIs include: (1) physical barriers; (2) surveillance; (3) intrusion detection; (4) a response to intrusions; and (5) offsite assistance from local law enforcement agencies, as necessary.

After the September 11 terrorist attacks, the Commission initiated prompt and comprehensive actions to address both immediate and longer-term security measures for NRC-regulated facilities. In the months immediately after the attacks, the Commission issued numerous safeguards and threat advisories to its licensees, to strengthen licensees' capabilities and readiness to respond to a potential attack on a nuclear facility. As part of the longer-term efforts, NRC conducted a comprehensive review of the Agency's security program. This review examined specific threats, such as a land-based vehicle bomb, ground assault with the use of an insider, and water-borne assaults, which have led to the imposition of additional requirements, through orders and rules, affecting many categories of licensees, including ISFSIs.

On October 16, 2002, the Commission issued orders to all licensees of operating ISFSIs to make mandatory the voluntary actions taken by those licensees in response to the Commission's advisories, and to implement additional security enhancements identified in NRC's ongoing comprehensive review of its safeguards and security programs and requirements. This same order, imposing additional security measures, was issued to PG&E, for the Diablo Canyon ISFSI, on May 5, 2005. These measures, which are to be fully implemented before the initial movement of spent fuel to the ISFSI, include: (1) increased security patrols; (2) augmented security forces and weapons; (3) additional security posts; (4) heightened coordination with local law enforcement and military authorities; (5) enhanced screening of personnel; and (6) additional limitations on vehicular access. Collectively, these measures further reduce the already low probability of a successful terrorist attack on an ISFSI, by establishing a substantial deterrent to an attack; by providing high assurance that an

attempted attack could be detected and effectively resisted; and by mitigating the extent of damage and the potential radiological consequences if an attack were successful.

Based on its ongoing consideration of safeguards and security requirements, its review of information provided by the intelligence community, and the implementation of additional security measures at the Nation's ISFSIs, the NRC has high assurance that public health and safety and the environment, and the common defense and security, continue to be adequately protected in the current threat environment.

4.0 CONSIDERATION OF ENVIRONMENTAL (RADIOLOGICAL) IMPACTS FROM TERRORIST ACTS

The NRC staff has considered the potential radiological impacts of terrorist acts on spent fuel storage casks, even though the staff considers the probability of a malevolent act against an ISFSI that results in a significant radiological event to be very low. By design, dry cask storage systems are highly resistant to penetration. To be licensed or certified by NRC, these systems must meet stringent requirements for structural, thermal, shielding, and criticality performance, and confinement integrity, for normal and accident events. Consequently, spent fuel storage casks are extremely robust structures, specifically designed to withstand severe accidents, including the impact of a tornado-generated missile such as a 4000-pound automobile at 126 miles per hour. The massive HI-STORM 100SA storage casks to be used at the Diablo Canyon ISFSI are made of inner and outer cylindrical carbon steel shells, filled with 30 inches of concrete, and weighing up to 170 tons when fully loaded with spent fuel. Each cask surrounds an internal multi-purpose canister, which safely confines the spent fuel in a completely sealed, welded stainless steel cylinder. The spent fuel is further protected by the metallic zircaloy cladding surrounding the fuel pellets in each fuel rod of a spent fuel assembly. Finally, the nuclear fuel itself is in the form of solid ceramic pellets of uranium dioxide; this means that a large amount of the radioactive material would remain in solid form and in the immediate vicinity of the ISFSI, even if a terrorist act were successful in breaching the multiple layers of protection. Thus, only a small fraction of the radioactive material released would be in the dispersible form of fine particulate material or radioactive gases with the potential to be transported offsite. Also, the location and low profile of the Diablo Canyon ISFSI make it a difficult target for a large commercial airliner. Based on these facts, and the results of the security assessments of ISFSIs (discussed below), NRC has determined that the current design features and additional security measures in place provide high assurance that the spent fuel stored in an ISFSI is adequately protected.

Because of the uncertainty inherent in assessing the likelihood of a terrorist attack, NRC recognizes that, under general credible threat conditions, although the probability of such an attack is believed to be low, it cannot be reliably quantified. NRC has adopted an approach that focuses on ensuring that the safety and security requirements, and other security measures, are adequate and effective in countering and mitigating the effects of terrorist attacks against dry cask storage systems. To provide high assurance that a terrorist act will not lead to significant radiological consequences, NRC has analyzed plausible threat scenarios and required enhanced security measures to protect against the threats, and has developed emergency planning requirements, which could mitigate potential consequences for certain scenarios. As stated above, all these actions have been taken without regard to the probability of an attack. This protective strategy reduces the risk from a terrorist attack to an acceptable level.

Following issuance of the 2002 security orders for ISFSIs, NRC used a security assessment framework as a screening and assessment tool to determine whether additional security measures, beyond those required by regulation and the security orders, were warranted for NRC-regulated facilities, including ISFSIs. Initially, NRC screened threat scenarios to determine plausibility. This screening was informed by information gathered through NRC's regular interactions with the law enforcement and intelligence communities. For those scenarios deemed plausible, NRC assessed the attractiveness of the facility to attack by taking into account factors such as iconic value, complexity of planning required, resources needed, execution risk, and public protective measures. Separately, NRC made conservative assessments of consequences, to assess the potential for early fatalities from radiological impacts from those plausible scenarios. NRC then looked at the combined effect of the attractiveness and the consequence analyses, to determine whether additional security measures for ISFSIs were necessary.

In conducting the security assessments for ISFSIs, NRC chose several spent fuel storage cask designs that were representative of most currently NRC-certified designs. Plausible threat scenarios considered in the generic security assessments for ISFSIs included a large aircraft impact similar in magnitude to the attacks of September 11, 2001, and ground assaults using expanded adversary characteristics consistent with the design basis threat for radiological sabotage for nuclear power plants. The resulting generic assessments formed the basis for NRC's conclusion that there was no need for further security measures at ISFSIs beyond those currently required by regulation and imposed by orders issued after September 11, 2001.

The NRC staff reviewed the analyses done for the ISFSI security assessments, and compared the assumptions used in these generic assessments to the relevant features of the Diablo Canyon ISFSI. Based on this comparison, the staff determined that the assumptions used in these generic security assessments, regarding the storage cask design, the source term (amount of radioactive material released), and the atmospheric dispersion, were representative, and in some cases, conservative, relative to the actual conditions at the Diablo Canyon ISFSI. In fact, because of the specific characteristics of the spent fuel authorized for storage at the Diablo Canyon ISFSI (lower burnup fuel), and the greater degree of dispersion of airborne radioactive material likely to occur at the site, any dose to affected residents nearest to the Diablo Canyon site calculated using site-specific parameters will be much lower than doses calculated using the assumptions made for the generic assessments. More specifically, NRC staff performed a dose calculation using source term and meteorology inputs from the generic assessments. This resulted in a projected dose of less than 5 rem for the nearest resident. Using the Diablo Canyon site-specific meteorology, as opposed to the generic meteorology, reduces the projected dose consequences by a factor of 10 to 100. Use of a site-specific source term for the Diablo Canyon spent fuel would reduce this projected dose even further. Based on these considerations, the dose to the nearest affected resident, from even the most severe plausible threat scenarios – the ground assault and aircraft impact scenarios discussed above – would likely be well below 5 rem. In many scenarios, the hypothetical dose to an individual in the affected population could be substantially less than 5 rem, or none at all. In some situations, emergency planning and response actions could provide an additional measure of protection to help mitigate the consequences, in the unlikely event that an attack were attempted at the Diablo Canyon ISFSI.

5.0 AGENCIES AND PERSONS CONSULTED

No additional consultations with outside agencies or persons were conducted in the development of this supplement to the EA. Comments submitted from state governmental agencies, citizens organizations, and members of the public in response to the issuance of the draft supplement have been considered by the NRC staff in preparation of this final supplement to the EA. Those comments and the staff's responses are summarized in the Appendix to this supplement. It should be noted, as discussed in Section 3.1 of this EA, that NRC interacts continuously and extensively with many Federal, State, and local agencies on a broad range of security matters, and will continue to do so.

6.0 CONCLUSION

The NRC staff concludes that the construction, operation, and decommissioning of the Diablo Canyon ISFSI, even when potential terrorist attacks on the facility are considered, will not result in a significant effect on the human environment. NRC security requirements, imposed through regulations and orders, and implemented through the licensee's security plans, in combination with the design requirements for dry cask storage systems, provide adequate protection against successful terrorist attacks on ISFSIs. Therefore, a terrorist attack that would result in a significant release of radiation affecting the public is not reasonably expected to occur.

7.0 FINAL FINDING OF NO SIGNIFICANT IMPACT

The environmental impacts of the proposed action, namely, the approval of a site-specific license to build and operate an ISFSI, to be located on the site of the DCPP, in San Luis Obispo County, California, have been reviewed in accordance with the requirements of 10 CFR Part 51. As set forth in the Supplement to the Environmental Assessment above (which this final finding incorporates by reference), NRC has considered the potential for terrorist attacks on the facility, and has determined that the storage of spent nuclear fuel at the Diablo Canyon ISFSI will not have a significant effect on the quality of the human environment, based on the facility design features and the mitigative security measures incorporated as part of the NRC licensing action and in response to NRC security orders. These design features and mitigative security measures will provide high assurance that substantial environmental impacts will be avoided and thereby reduced to a non-significant risk level. Therefore, in accordance with 10 CFR 51.31, NRC has determined that this action does not warrant the preparation of an Environmental Impact Statement, and has further determined that a final Finding of No Significant Impact is appropriate. A Notice of availability of this supplement to the EA and final FONSI will be published in the *Federal Register*.

Documents related to this action, including the original Diablo Canyon ISFSI EA and FONSI, and the Diablo Canyon ISFSI license, are available electronically at NRC's Electronic Reading Room at http://www.nrc.gov/reading-rm/adams.html. From this site, you can access NRC's Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. The ADAMS accession number for the Diablo Canyon ISFSI EA is ML032970337, and for the ISFSI license and related documents, the number is ML040780107. If you do not have access to ADAMS, or if there are problems in accessing the documents located in ADAMS, contact NRC's Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737, or by e-mail, to pdr@nrc.gov. These documents may also be viewed electronically on the public computers located at NRC's PDR, O1-F21, One White Flint

North, 11555 Rockville Pike, Rockville, MD 20852. The PDR reproduction contractor will copy documents for a fee.

8.0 REFERENCES

1. "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs." NUREG-1748. U.S. Nuclear Regulatory Commission. August 2003.

2. *Environmental Assessment and Finding of No Significant Impact Related to the Construction and Operation of the Diablo Canyon Independent Spent Fuel Storage Installation (TAC No. L23399*). U.S. Nuclear Regulatory Commission. October 24, 2003. NRC ADAMS Accession No. ML032970337.

3. *Issuance of Materials License No. SNM-2511 for the Diablo Canyon Independent Spent Fuel Storage Installation (TAC No. L23399)*. U.S. Nuclear Regulatory Commission. March 22, 2004. NRC ADAMS Accession No. ML040780107.

4. Diablo Canyon Independent Spent Fuel Storage Installation License Application - Environmental Report, PG&E. December 2001 and Amendment 1, October 2002. NRC ADAMS Accession Nos. ML020180196, ML020180173, and ML022950304 (p.150-186).

5. Nuclear Reactors, Materials, and Waste Sector Critical Infrastructure and Key Resources Sector-Specific Plan as input to the National Infrastructure Protection Plan, May 2007.

6. Orders Requiring Implementation of Additional Security Measures (ASMs) for the Diablo Canyon Independent Spent Fuel Storage Installation (ISFSI) dated May 5, 2005. (Orders are **unclassified**; the attached ASMs are designated **SAFEGUARDS INFORMATION**.)

7. "Results of a Large Airplane Impact into a Field of Holtec HI-STORM Spent Nuclear Fuel Storage Casks." Smith,J.A., et al. Sandia National Laboratories, Albuquerque, NM. 2004. (This document is **classified CONFIDENTIAL National Security Information**.)

8. "Response of the HI-STORM Spent Nuclear Fuel Storage Cask to a Large Explosive Charge Blast." Kipp, M.E., et al. Sandia National Laboratories, Albuquerque, NM. 2004. (This document is **classified CONFIDENTIAL National Security Information**.)

9. "NRC Spent Fuel Source Term Guidance Document." Yoshimura, R.H., et al. Sandia National Laboratories, Albuquerque, NM 2004. (This document is **classified CONFIDENTIAL National Security Information**.)

10. Design Basis Threat, Final Rule, 10 CFR Part 73, USNRC, dated March 13, 2007.

11. U.S. Nuclear Regulatory Commission Report to Congress on the National Academy of Sciences Study on the Safety and Security of Commercial Spent Nuclear Fuel Storage, dated March 2005.

12. Nuclear Regulatory Commission (NRC) Review of “Reducing the Hazards from Stored Spent Power-Reactor Fuel in the United States,” dated August 19, 2003.

13. “Protecting Our Nation – Since 9-11-01,” U.S. Nuclear Regulatory Commission, NUREG/BR-0314, September 2004.

14. Homann, S.G., 1994: HOTSPOT Health Physics Codes for the PC, UCRL-MA-106315, Lawrence Livermore National Laboratory, California.

APPENDIX
PUBLIC COMMENTS ON THE SUPPLEMENT TO THE ENVIRONMENTAL ASSESSMENT FOR THE DIABLO CANYON ISFSI

Background:

The U.S. Nuclear Regulatory Commission (NRC) staff published a notice in the Federal Register on May 31, 2007 (72 FR 30398), requesting public review and comment on 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). As described in the notice, the NRC issued this supplemental EA to address the environmental impacts from potential terrorist acts against the Diablo Canyon ISFSI. The notice established July 2, 2007, as the deadline for submitting public comments on the supplemental EA and draft FONSI. Approximately 32 individual comment documents (i.e., letters, facsimiles, and e-mails) were received by the NRC.

In the public notice, the NRC staff provided a summary of the supplemental EA and draft FONSI, as well as information on how to access or obtain copies of the document. An electronic version of the supplemental EA and draft FONSI, and background information (e.g., the NRC staff's initial EA for the Diablo Canyon ISFSI) were made accessible through the NRC's web site at (http://www.nrc.gov/waste/spent-fuel-storage/diablo-canyon-isfsi.html) and through the NRC's Agencywide Documents Access and Management System (ADAMS) database on the NRC's web site. The Diablo Canyon ISFSI web page also provides a listing of all public comments received, which are available through ADAMS.

Comment Review:

The NRC staff reviewed each comment document and considered whether the comments warranted a revision to the supplemental EA. Of the 32 comment documents received, 12 were nearly identical letters, and many other comments related to the same issues raised in those letters. As a result, the staff has grouped the comments on similar topics and issues together, and developed 17 general comment areas. This appendix identifies each of these 17 general comment areas, along with the NRC staff's corresponding responses. If a comment has prompted the staff to revise the supplemental EA, that is noted in the staff's response. In cases where a comment does not warrant a detailed response, the NRC staff provides an explanation as to why no further response is necessary. The NRC staff considered all comments received during the public comment period. One additional comment was received on July 31, 2007; it was essentially identical to the 12 nearly identical letters previously received.

Major Issues and Topics of Concern:

The majority of the comments received specifically addressed the reviews, analyses, and issues contained in the supplemental EA, including security, safety, and the NRC's environmental review process. A number of commenters were concerned about the quality of the EA supplement and its findings; most disagreed with the FONSI and stated that an Environmental Impact Statement (EIS) should be prepared; one commenter agreed with the FONSI. Several other comments addressed topics and issues that were not part of the review

process for the proposed action. These included comments about the U.S. government's policies regarding terrorism; radiological and other environmental impacts and vulnerabilities of nuclear power plants and spent fuel pools; emergency planning concerns not unique to the Diablo Canyon ISFSI; and the potential for storage of spent fuel from other sites (which would require a separate NRC licensing action and its associated environmental review). Because these issues did not directly relate to the environmental effects of the proposed action and were outside the scope of the NEPA review of the proposed action, the NRC staff did not prepare detailed responses to these comments.

Summarized below are the comments and NRC responses. The complete comment letters are available as a matter of public record from NRC's public document room, which is accessible online at http://www.nrc.gov/reading-rm/adams/web-based.html. Select the "Begin ADAMS Search" link. Type in the accession number for the desired document from the table below in the Search box, and select "Search." Table 1 provides a list of the public comments received during the supplemental EA comment period and the ADAMS Accession Number for each document. Alternatively, these comments can be accessed from the same table on the NRC's web page at: http://www.nrc.gov/waste/spent-fuel-storage/diablo-canyon-isfsi.html , by clicking on the highlighted accession number for the desired document.

Table 1: Public Comments Received on the May 29, 2007, Supplemental Environmental Assessment for the Diablo Canyon Independent Spent Fuel Storage Installation

Comment Number	NAME	Affiliation	ADAMS Accession Number
1	Jill ZamEk	Member of the Public	ML071780044
2	Cheryl VonderAhe	Member of the Public	ML071780048
3	Richard Keller	Member of the Public	ML071780050
4	Lynne Harkins	Member of the Public	ML071780051
5	Russell Hodin	Member of the Public	ML071780053
6	Steven Zamek	Member of the Public	ML071780054
7	Frances Scafidi	Member of the Public	ML071780055
8	Mark R. Phillips	Member of the Public	ML071780056
9	Jordan Ek	Member of the Public	ML071780060
10	Sherri Danoff (Gooding)	**Avila Valley Advisory Council**	ML071780057
11	Henriette Groot	Member of the Public	ML071780061
12	June Cochran	Member of the Public	ML071780065

Comment Number	NAME	Affiliation	ADAMS Accession Number
13	Judith B. Evered	Member of the Public	ML071780066
14	Barbara Scott	Member of the Public	ML071830445
15	Susan Biesek	Member of the Public	ML071830447
16	Gene A. and Linda C. Nelson	Members of the Public	ML071830448
17	Betty McElhill	Member of the Public	ML071830453
18	Robert R. Loux Joseph C. Strolin	**State of Nevada**	ML071870031
19	Michele Boyd	**Public Citizen**	ML071870032
20	Elie Axelroth	Member of the Public	ML071870033
21	Marina Bethlenfalvay	Member of the Public	ML071870036
22	Diane Curran	**San Luis Obispo Mothers For Peace**	ML071870143
23	Dianne R. Nielson Denise Chancellor	**State of Utah**	ML071870037
24	Lucy J. Swanson	Member of the Public	ML071870038
25	Joseph Mangano	**Radiation and the Public Health Project**	ML071870039
26	Phillip Musegaas	**Riverkeeper, Inc.**	ML071870135
27	Loulena Miles	**Tri-Valley CAREs**	ML071870137
28	Kevin Kamps	**Nuclear Information and Resource Service**	ML071870138
29	Linda Gunter	**Beyond Nuclear/ Nuclear Policy Research Institute**	ML071870140
30	Rochelle Becker	**Alliance for Nuclear Responsibility**	ML071870142
31	Rochelle Becker	**Alliance for Nuclear Responsibility**	ML071870146
32	Andrew Christie	**Sierra Club**	ML071870149

Comments and Responses:

Comment 1: Commenters stated that the supplement to the EA does not meet National Environmental Policy Act (NEPA) requirements, expressing their belief that the supplement was simplistic and inadequate. Commenters cited concerns that no analysis was done by the staff specifically for the supplement, that the discussion is overly generic, and that the source term (released material) is not disclosed in the supplement. The commenters also stated that the staff should have identified the sources or references for its conclusions and consulted with other agencies.

NRC Response:

The original EA issued for the Diablo Canyon ISFSI addressed all environmental impacts with the exception of those potentially resulting from terrorism. Therefore, the supplement alone is not intended to comply with all NEPA requirements; the supplement must be read in conjunction with the original EA. The supplement addressing terrorism is premised on analyses of the potential consequences of a terrorist attack on an ISFSI. The staff cannot provide specific details of the analyses (such as the source term used), nor the supporting background documents, due to the sensitive nature of the information. However, some of these reference documents have been listed in the final EA supplement in response to these comments (and are also listed at the end of this appendix). These analyses were begun following the September 2001, terrorist attacks to evaluate whether the existing security requirements and the security measures subsequently imposed by orders were sufficient to provide adequate protection against successful terrorist attacks on nuclear facilities. These analyses, which are the security assessments referred to in the EA, were begun in 2002 and completed in 2006, when the NRC determined that the security measures (imposed by regulations and orders) in place for ISFSIs were adequate.

The ISFSI security assessments are not “one time only” assessments. The NRC has a Commission-approved process to re-assess ISFSI security to address a number of different factors, including (but not limited to) the receipt of a new application for or an amendment to a license or certificate, an occurrence of a relevant operating or security event, and/or a change in the current threat environment. The NRC is continually assessing the threat environment and assessing whether additional security measures are warranted. This process involves continual coordination with other agencies, such as the Department of Homeland Security (DHS). While NRC did not specifically consult with DHS or other agencies on the particular matters addressed in the Diablo Canyon ISFSI supplemental EA, the supplement was provided for public comment and was available to other government agencies. Further, it should be noted that the NRC did engage in consultation with other agencies, including the California Energy Commission, the California Office of Historic Preservation and the U.S. Fish and Wildlife Service, in developing the original EA regarding the Diablo Canyon ISFSI.

In developing the EA supplement, the staff relied on the generic ISFSI security assessment information and also performed specific analyses to account for Diablo Canyon site-specific characteristics. The specific threat scenarios and source terms analyzed are sensitive information that cannot be disclosed publicly. The staff’s analyses comply with the requirements of NEPA to the extent possible without divulging sensitive or Classified Information.

Comment 2: Commenters stated that the methodology used by the NRC to identify all reasonably foreseeable impacts has not been sufficiently explained, that terms used in the EA, such as "plausible," are not adequately defined, and that the supplement relies on unjustified assumptions.

NRC Response:

The details of the NRC's security assessments cannot be disclosed publicly because of the sensitive nature of the information. However, general information about the manner in which the security assessments were performed may be, and was, disclosed (see Section 4.0 in the EA supplement). The threat scenarios considered in the security assessments were selected by NRC, based on intelligence information regarding trends and actual, demonstrated capabilities of potential adversaries, gathered through regular consultations with federal and law enforcement agencies, and the intelligence community. Scenarios which were deemed not reasonable (i.e., not "plausible") based on this information were excluded from further analysis in the security assessments.

Comment 3: Commenters stated that the supplement did not provide a sufficient basis for not preparing an Environmental Impact Statement (EIS). One commenter expressed concern that the approach taken in staff's EA will establish a precedent for the manner in which the staff will approach the assessment of terrorism impacts for Yucca Mountain.

NRC Response:

The NRC requirements at 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," require that an Environmental Impact Statement be prepared for licensing actions that (1) constitute a major federal action significantly affecting the environment, or (2) the Commission has determined should be covered by an EIS (10 CFR 51.20). For actions such as this one, which do not meet either criterion, an Environmental Assessment (EA) is prepared, unless the action falls within the scope of a categorical exclusion as provided in 10 CFR 51.22. When an EA is prepared, there are two possible outcomes: A Finding of No Significant Impact (FONSI), or, the determination that there may be significant environmental impacts, which then requires preparation of an EIS. Simply stated, the EA can be viewed as the first (and possibly only) step in conducting the NRC's environmental review. NRC regulations at 10 CFR 51.31 state, "Upon completion of an environmental assessment, the appropriate NRC staff director will determine whether to prepare an environmental impact statement or a finding of no significant impact on the proposed action." Because the staff determined in the initial EA for this action, and in the supplemental EA regarding terrorist acts, that there would not be any significant environmental impacts from the construction, operation, and decommissioning of the Diablo Canyon ISFSI, the staff did not prepare an EIS.

The staff's environmental review of other licensing actions is separate from and independent of the specific review for the Diablo Canyon ISFSI. The NRC's environmental review for the Yucca Mountain license application, if an application is submitted, will be performed in accordance with the requirements of the Nuclear Waste Policy Act and 10 CFR Part 63. Under

the NWPA, any EIS prepared by DOE must be adopted by the Commission to the extent practicable.

Comment 4: Many commenters indicated that the EA supplement fails to consider broader credible terrorist scenarios having significant environmental impacts, such as a general aviation, bomb-laden aircraft, adversaries using TOW missiles, and a jet fuel fire.

NRC Response:

NRC's choice of scenarios was informed by information gathered through NRC's regular interactions with the law enforcement and intelligence communities, as mentioned in Section 3.1 of the EA supplement. The specific scenarios considered cannot be publicly disclosed, beyond the description in Section 4.0 of the EA supplement, due to the sensitive nature of the information.

Comment 5: Several commenters indicated that they felt the EA supplement failed to address impacts other than early fatalities. The impacts that these commenters wanted to see addressed included land contamination, illness, delayed fatalities, cleanup cost, doses to workers and emergency responders, emergency evacuation, and effects on the economy and infrastructure.

NRC Response:

As explained in the EA supplement, the staff has determined the probability of a successful terrorist attack (i.e., one which results in a significant radiological event), to be very low. Specifically, actions taken since September 11, 2001, both diminish the probability of an attack occurring at nuclear facilities and enhance the response capabilities if an attack were to occur. Further, the probability of such an attack being effectively carried out and leading to a significant radiological event is even lower. Based on this reasoning and the staff's consequence analysis, the staff considers there to be no significant environmental impacts from terrorist acts against the Diablo Canyon ISFSI. This approach, in which the staff assesses the significance of environmental impacts based on the probability of occurrence, is consistent with the manner in which the NRC evaluates the impacts of accidents in environmental analyses. To clear up some apparent confusion, the EA supplement did not consider early fatalities as a measure of environmental impact. For the EA supplement, the staff performed a dose assessment that used a source term derived from the security assessment work, which was based on a hypothetical release resulting from a terrorist attack. The staff also assumed national average meteorological conditions in making an initial estimate of the dose at the location of the nearest resident. Then, the staff applied Diablo Canyon site-specific dispersion parameters, to generate a dose estimate to the nearest resident that was more representative of the actual conditions at the site. That revised dose estimate was used by the staff in assessing environmental impact. The EA supplement has been revised to help clarify this point.

Comment 6: Some commenters stated that the EA supplement fails to address the Department of Homeland Security's (DHS) National Infrastructure Protection Plan (NIPP)

NRC Response:

DHS's National Infrastructure Protection Plan (NIPP) does not impose requirements on participating agencies regarding specific NEPA analyses. As described in the EA supplement, NRC continues to coordinate extensively with DHS, other federal agencies, state and local governments, the private sector, and international partners in developing a framework for reducing risk, fostering cooperation and information sharing related to nuclear Sector Specific Plans (components of the broader NIPP). Therefore, NRC's participation in the NIPP serves, in part, as an ongoing assessment of the adequacy of the Agency's security requirements and programs, which will continue to inform NRC's policy decisions and actions in this area.

Comment 7: Some commenters stated that the EA supplement fails to address cumulative environmental impacts of fuel stored in the spent fuel pool (SFP). One commenter stated that the SFPs at Diablo Canyon should be reconfigured to reduce the density of the stored spent fuel assemblies.

NRC Response:

Cumulative impact is defined as "the impact on the environment which results from the incremental impact of the action, when added to other past, present, and reasonably foreseeable future actions...." (40 CFR 1508.7). The staff previously considered the cumulative impacts of the ISFSI and reactor operation in the original EA (Section 5.4), concluding that, "The impact of the proposed Diablo Canyon ISFSI, when combined with previously evaluated effects from the Diablo Canyon Power Plant, is not anticipated to result in any significant cumulative impact at the site." The environmental impacts of reactor operation, including those resulting from potential events involving the spent fuel pool, were addressed in the Final Environmental Statement (FES) issued as part of the original licensing process for the Diablo Canyon reactors. Because the staff has determined in the supplemental EA that, based on the overall risk, there would not be any significant environmental impacts resulting from terrorist acts against the ISFSI, the staff's previous determination is unchanged. The question of whether the spent fuel pool at the reactor should be reconfigured to reduce the density of the assemblies in the pool is not a matter within the scope of this NEPA review for the ISFSI. The environmental review for the current configuration was conducted during the staff's review of the operating reactor license amendment that authorized the current density of assemblies in the spent fuel pool.

Comment 8: A few commenters indicated that the EA supplement does not adequately address emergency planning concerns. One commenter expressed concern regarding emergency evacuation routes in the community of Avila Beach, due to limited roads, ongoing construction, and a large tourist population. A few commenters requested an explanation of the emergency planning actions that are credited for mitigating impacts in the EA supplement.

NRC Response:

The issues raised, including the adequacy of evacuation routes, concern the emergency plan for the entire Diablo Canyon site, and are therefore beyond the scope of the staff's NEPA review for the ISFSI. The NRC reviews and approves emergency plans for reactor sites in its review of operating license applications. In accordance with NRC regulations, because the

Diablo Canyon ISFSI is located at the same site as an operating reactor, the previously-approved emergency plan for that reactor site also applies to the ISFSI. As discussed in NRC's March 22, 2004, safety evaluation report, the staff reviewed the proposed changes to the Diablo Canyon emergency plan to incorporate the ISFSI, and found that the revised plan provides reasonable assurance that facility personnel will be able to respond appropriately to any emergency conditions associated with the Diablo Canyon ISFSI. In general, emergency planning issues are considered in the staff's safety reviews and not in the staff's environmental reviews.

The EA supplement does not take credit for emergency planning actions in determining the radiological impact on nearby residents, but merely indicates that emergency planning and response actions could further mitigate (i.e., reduce) impacts in some situations.

Comment 9: Several commenters indicated that the EA supplement does not address alternatives; including design changes to the ISFSI.

NRC Response:

The NRC's requirements at 10 CFR 51.30(a)(1)(ii) require that an EA include "alternatives as required by Section 102(2)(E) of NEPA," which states that "all agencies of the Federal Government shall study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." NRC staff guidance further clarifies this by stating, "alternatives should be considered in an EA (i) if there is some identifiable environmental impact from the proposed action, and (ii) if the objective of the proposed action can be achieved in one of two or more ways that will have differing impacts on the environment. For those actions involving a very small impact, it is reasonable to consider a very limited range of alternatives....At a minimum, the no-action alternative must be addressed," NUREG-1748, Section 3.4.4.

The staff's original EA for the Diablo Canyon ISFSI did consider the no action alternative, and included a discussion of both siting and design alternatives, including several different locations on the DCPP site for the ISFSI. Design alternatives considered included re-racking the spent fuel pools with higher density fuel racks, consolidating spent fuel rods, building a new spent fuel storage pool, and others. The alternatives considered, including off-site shipment of spent fuel, are summarized in Section 2.2 of the EA supplement, and discussed more fully in Section 3.0 of the original EA. The staff's original EA also described PG&E's consideration of several different spent fuel dry cask storage systems. Thus, the staff concludes that the EA sufficiently covered consideration of alternatives.

Comment 10: One commenter indicated that the supplemental EA implies that security requirements for ISFSIs have not been upgraded post-9/11.

NRC Response:

NRC ISFSI security requirements have been upgraded since the events of September 11, 2001. As stated in Section 3.2 of the supplemental EA, PG&E was issued an Order imposing Additional Security Measures (ASMs) for the Diablo Canyon ISFSI on May 5, 2005. PG&E must implement all required ASMs prior to any spent fuel being moved to the ISFSI. NRC will review

and approve any changes to the site Physical Security Plan, as necessary, and will verify implementation of the revised plan by conducting on-site inspections. The detailed ASMs issued to PG&E for the Diablo Canyon ISFSI are designated as SAFEGUARDS INFORMATION (SGI), and are therefore not available to the public.

Comment 11: One commenter indicated that the EA supplement is inconsistent when it states in one place that the probability of an attack cannot readily be quantified, but later states that this protective strategy reduces the risk to an acceptable level.

NRC Response:

The staff does not view these statements as inconsistent. As discussed in Section 4.0 of the EA Supplement, while the probability of an attack cannot be reliably quantified, NRC has implemented measures that provide high assurance that a terrorist act will not lead to significant radiological consequences. Thus the risk, which considers both the likelihood of a successful attack and the potential radiological consequences, can be qualitatively assessed to be acceptable.

Comment 12: A few commenters indicated that the EA supplement fails to consider all activities related to spent fuel storage in the ISFSI, including the need for continued storage beyond the life-expectancy of the casks, the transportation of spent fuel, and the potential for storage of spent fuel originating at other nuclear power plants.

NRC Response:

The original and supplemental EA examine the impacts of the proposed licensing action, specifically for the construction and operation of an ISFSI at DCPP, for a period not to exceed 20 years (the term of the ISFSI license). In addition, the EA considers cumulative impacts from the operating reactor and the spent fuel storage pool (see the response to comment 7), but consideration of spent nuclear fuel from other sites is beyond the scope of the NEPA review for this licensing action. The environmental impacts of offsite transportation of all of the Diablo Canyon spent fuel have been specifically addressed in the previous environmental reviews for initial plant licensing (FES) and for subsequent license amendments for the DCPP, and in other NRC environmental reviews related to spent fuel transportation. Onsite transfer of spent fuel was among the activities evaluated in the staff's safety review of the ISFSI license application, as discussed in the NRC's March 22, 2004, safety evaluation report.

Comment 13: One commenter expressed support for the NRC staff's FONSI determination.

NRC Response:

This comment did not question the adequacy of the staff's review, nor request additional analyses or clarification, therefore no response is required.

Comment 14: A few commenters stated that the casks are not full-scale tested, nor licensed to withstand an attack, and that the cask design provides inadequate protection against terrorist acts.

NRC Response:

Spent fuel casks are subject to comprehensive regulatory requirements intended to ensure the integrity of the spent fuel. All cask designs are subject to extensive review by the NRC as part of the approval process. Although full-scale testing is not required, state-of-the-art computer modeling is used by applicants, and independently verified by NRC, to perform detailed analyses of cask behavior when subjected to a spectrum of postulated events. This process ensures that the casks are robust. The license conditions and security measures for the Diablo Canyon ISFSI ensure that the casks will be under continual surveillance. To mitigate the possibility of a successful attack on storage casks, multiple layers of security measures are provided (dual fences, alarms, closed circuit television cameras, appropriately trained and equipped security guards, patrols, agreements with local law enforcement agencies, etc.). The combination of the spent fuel casks' robust design features and the enhanced security measures in effect at ISFSIs provide the necessary level of protection needed to mitigate a potential terrorist attack.

Comment 15: One commenter indicated that NRC security regulations and orders for ISFSIs provide insufficient protection to mitigate environmental consequences. The commenter noted that ISFSIs are not required to protect against the malevolent use of an airborne vehicle.

NRC Response:

As discussed in the supplemental EA, the staff did consider malevolent use of an airborne vehicle in its security assessments for ISFSIs and in its analysis performed in the supplemental EA, even though licensees are not required to protect against such a scenario. NRC issued an Order imposing additional security measures for the Diablo Canyon ISFSI to PG&E on May 5, 2005. These security measures provide high assurance that ISFSIs are adequately protected against plausible threat scenarios, and that an attempted attack on the Diablo Canyon ISFSI will not result in a significant radiological event. The security assessments confirmed the adequacy of the current safety and security measures in place for ISFSIs.

Comment 16: Two commenters requested an extension to the 30-day comment period for the supplemental EA. One of these stated that the deadline should be extended for at least 30 additional days, and suggested that area residents did not receive adequate notice of the opportunity to comment. This commenter further stated that a public hearing should occur within the extended public comment deadline so that the community will have an opportunity to learn about this important project firsthand. The second commenter requested an extension of two additional months to the comment period, given the vital safety, security, and environmental issues the DCNPP ISFSI proposal raises.

NRC Response:

The NRC published a "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" in the Federal Register on May 31, 2007. In addition, the NRC provided electronic access to the Notice and to the supplemental EA and Draft FONSI on its public website. The NRC issued a press release on May 29, 2007, announcing the issuance of the Notice and the supplemental EA and the opportunity to provide comments, and the story was

covered by the local news media in the San Luis Obispo area. The process for providing comments in response to the Notice was also described at a public meeting held by NRC in San Luis Obispo, California, on June 26, 2007.

The Notice indicated that the NRC staff would consider comments submitted after the 30-day period, if it was practical to do so. Only one late-submitted comment was received by the staff, on July 31, 2007, and that comment was essentially identical to several previous comments. Therefore, the staff believes that adequate notice and opportunity to submit comments were provided.

Comment 17: One commenter indicated that there is an apparent contradiction between statements in the EA supplement regarding dispersion of radioactive material. The commenter cited the statements that, in the event of an attack breaching the casks, "a large amount of the radioactive material would remain in solid form and would not be dispersed beyond the immediate vicinity of the ISFSI," and the observation of "the greater degree of dispersion of airborne radioactive material likely to occur at the site."

NRC Response:

The staff does not believe that the statements are contradictory. The staff maintains that for a postulated scenario where the multiple barriers protecting the spent fuel are breached, most of the radioactive material released would be in solid form, locally deposited in the immediate area of the ISFSI. Only a small fraction of the radioactive material released would be in the form of fine particulate material able to be suspended in air, or in the form of radioactive gases. The atmospheric dispersion factors for the Diablo Canyon site would result in greater dispersion (i.e., greater dilution) for the fine particulates that become airborne and for gases than the dispersion factors used in the NRC's generic analyses, thus any estimated dose to a member of the public would be lower than for the generic analyses. The EA supplement has been revised to help clarify this point.

REFERENCES

1. "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs." NUREG-1748. U.S. Nuclear Regulatory Commission. August 2003.

2. *Environmental Assessment and Finding of No Significant Impact Related to the Construction and Operation of the Diablo Canyon Independent Spent Fuel Storage Installation (TAC No. L23399*). U.S. Nuclear Regulatory Commission. October 24, 2003. NRC ADAMS Accession No. ML032970337.

3. *Issuance of Materials License No. SNM-2511 for the Diablo Canyon Independent Spent Fuel Storage Installation (TAC No. L23399)*. U.S. Nuclear Regulatory Commission. March 22, 2004. NRC ADAMS Accession No. ML040780107.

4. Nuclear Reactors, Materials, and Waste Sector Critical Infrastructure and Key Resources Sector-Specific Plan as input to the National Infrastructure Protection Plan, May 2007.

5. Orders Requiring Implementation of Additional Security Measures (ASMs) for the Diablo Canyon Independent Spent Fuel Storage Installation (ISFSI) dated May 5, 2005. (Orders are **unclassified**; the attached ASMs are designated **SAFEGUARDS INFORMATION**.)

6. "Results of a Large Airplane Impact into a Field of Holtec HI-STORM Spent Nuclear Fuel Storage Casks." Smith,J.A., et al. Sandia National Laboratories, Albuquerque, NM. 2004. (This document is **classified CONFIDENTIAL National Security Information**.)

7. "Response of the HI-STORM Spent Nuclear Fuel Storage Cask to a Large Explosive Charge Blast." Kipp, M.E., et al. Sandia National Laboratories, Albuquerque, NM. 2004. (This document is **classified CONFIDENTIAL National Security Information**.)

8. "NRC Spent Fuel Source Term Guidance Document." Yoshimura, R.H., et al. Sandia National Laboratories, Albuquerque, NM 2004. (This document is **classified CONFIDENTIAL National Security Information**.)

9. Design Basis Threat, Final Rule, 10 CFR Part 73, USNRC, dated March 13, 2007.

10. U.S. Nuclear Regulatory Commission Report to Congress on the National Academy of Sciences Study on the Safety and Security of Commercial Spent Nuclear Fuel Storage, dated March 2005.

11. Nuclear Regulatory Commission (NRC) Review of "Reducing the Hazards from Stored Spent Power-Reactor Fuel in the United States," dated August 19, 2003.

12. "Protecting Our Nation – Since 9-11-01," U.S. Nuclear Regulatory Commission, NUREG/BR-0314, September 2004.