

## CALIFORNIA ENERGY COMMISSION

JAMES D. BOYD  
COMMISSIONER and VICE CHAIR  
1516 NINTH STREET MS 34  
SACRAMENTO, CA 95814-5512  
(916) 654-3787  
(916) 653-1279 FAX



December 12, 2006

Dr. Jane Summerstone  
EIS Document Manager  
Regulatory Authority Office  
Office of Civilian Radioactive Waste Management  
U.S. Department of Energy  
1551 Hillshire Drive M/S 010  
Las Vegas, Nevada 89134

Mr. M. Lee Bishop  
EIS Document Manager  
Office of Logistics Management  
Office of Civilian Radioactive Waste Management  
U.S. Department of Energy  
1551 Hillshire Drive M/S 011  
Las Vegas, Nevada 89134

RE: *DOE's Amended Notice of Intent to Expand the Scope of the Environmental Impact Statement for the Alignment, Construction and Operation of a Rail Line to a Geologic Repository at Yucca Mountain, Nye County, NV. (DOE/EIS-0250F-S2 and DOE/EIS-0369)*

*DOE's Supplement to the Final Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, NV. (DOE/EIS-0250F-S1)*

Dear Dr. Summerstone and Mr. Bishop:

I am writing to provide comments on the two U.S. Department of Energy (DOE) Notices of Intent (NOIs) in the October 13, 2006, Federal Register: (1) to expand the scope of DOE's rail alignment draft environmental impact statement (EIS) and (2) to prepare a supplement to the final Yucca Mountain EIS. These comments supplement those provided in my letter to you on October 31, 2006, and those of Barbara Byron, Senior Nuclear Waste Policy Advisor, that were submitted for the public meeting on November 27, 2006, in Reno.

If you have any questions regarding these comments, please contact me or Barbara Byron at 916-654-4976.

Sincerely,

A handwritten signature in black ink, appearing to read "James D. Boyd".

JAMES D. BOYD, Vice Chair and  
California State Liaison Officer to the U.S.  
Nuclear Regulatory Commission

Attachment

cc: Governor Schwarzenegger  
Brian Prusnek, Deputy Cabinet Secretary  
Mike Chrisman, Secretary for Resources Agency  
California Congressional Delegation  
Ward Sproat, Director, OCRWM

**STATE OF CALIFORNIA'S COMMENTS ON  
THE U.S. DEPARTMENT OF ENERGY'S AMENDED NOTICE OF INTENT  
TO EXPAND THE SCOPE OF THE YUCCA MOUNTAIN RAIL ALIGNMENT  
DRAFT EIS AND PREPARE A SUPPLEMENT TO THE FINAL YUCCA  
MOUNTAIN EIS**

(Federal Register/Vo. 71, No. 198, Friday, October 13, 2006, 604-60490)

The proposed actions generally described in the NOIs pose significant potential new impacts for California that have not been previously analyzed. Preliminary estimates indicate that the proposed new Mina rail route could result in 10 to 50 percent or more of the rail shipments to the Yucca Mountain Repository being routed through California. Considering such major potential transportation impacts, the Supplemental Environmental Impact Statement (SEIS) should identify the most likely rail, truck, and barge shipment routes from each of the sites, and identify the most likely cross-country routes from reactor sites to the repository, for both the Caliente and Mina rail line spurs. The SEIS must include a full and comprehensive analysis of the safety and security risks associated with these shipments. Communities along likely corridors in California should be provided sufficient information and opportunity to comment on these NOIs. Our comments are provided below.

**1. DOE has not responded to California's request that DOE allow sufficient time for public comment and schedule public EIS scoping meetings in California.**

On October 31, 2006, we requested that DOE extend the public comment period by a minimum of 90 days and schedule additional public EIS scoping meetings in California, including meetings in Sacramento and Lone Pine. Although DOE extended the public comment period deadline from November 27, 2006, to December 12, 2006, the time allowed for public comments falls far short of the time needed for meaningful public and stakeholder review and comment on the completely new rail route and the significant spent fuel handling and management implications from the proposed actions. Because the new Mina rail route could result in significant numbers of spent fuel shipments through Southern and Central California, we are also requesting that public meetings be held in these regions as well, particularly in the heavily populated Los Angeles area and Central Valley, as well as in Barstow.

**2. The information provided in these NOIs is insufficient for understanding the full implications of the proposed actions.**

DOE's proposal to develop and implement a new Transport, Aging and Disposal (TAD) canister, if adopted, would result in major changes to the high-level waste disposal program, including changes to the national waste transportation system, the repository surface facilities, and long-term performance of the repository, as well as changes in at-reactor waste handling and management practices. Under the proposed action, utilities with nuclear power plants would seal spent nuclear fuel into canisters at reactor sites. The canisters then could be loaded into casks for

transportation, aging and disposal. Stakeholders and the public must have sufficient information about the full implications of the new TAD canister system to be able to provide a meaningful assessment of the potential impacts of this new

waste management system. For example, the SEIS should assess the implications of the TAD canister approach for waste handling and management practices at reactors where spent fuel already has been transferred to onsite dry cask storage facilities and where onsite waste handling facilities have been dismantled. However, the NOIs do not discuss how this new approach will impact overall waste handling, storage, transportation and eventual permanent waste disposal practices.

Moreover, the implications of the TAD system for the surface facilities at Yucca Mountain and repository performance should be evaluated, since repository performance will, in turn, have major implications for potential groundwater impacts in California from the repository. Therefore, the SEIS should describe how the proposed new TAD approach would affect overall waste handling, storage, transportation and waste disposal practices. In addition, the SEIS should describe how and where fuel in dry storage casks and fuel remaining in the spent fuel pools will be blended to meet the repository's waste emplacement requirements.

**3. The SEIS should evaluate the major potential route-specific and modal specific transportation impacts resulting from the use of the Mina and Caliente rail spurs for shipments to the repository.**

Spent fuel shipments using the proposed Mina rail spur to Yucca Mountain could impact more California communities and result in far greater numbers of shipments than routes previously identified in the EIS proceedings. Preliminary estimates indicate that DOE's potential use of the Mina rail spur for shipments to Yucca Mountain would have national routing implications and could result in exponentially more shipments in California than previously estimated. It is essential that DOE fully assess the potential significant transportation impacts in California from DOE's use of the proposed Mina and Caliente rail spurs for shipments to the Yucca Mountain Repository including the time and resources needed to provide emergency response training and equipment along the lengthy, heavily populated shipment corridors in California. This analysis should include an assessment of the risks of terrorism and sabotage against spent fuel and high-level waste shipments.

California rail lines have dangerous sections with a history of major derailments, hazardous spills, and hazardous materials incidents. For example, a major derailment and toxic spill near Dunsmuir Loop in 1991 poisoned an entire 40-mile section of the Upper Sacramento River, one of two primary water resources for Californians. Major accidents in the state include the derailment near Cajon in 1996, derailments in Barstow, and derailments along the Union Pacific Line over Donner Summit to Reno, including the one occurring earlier last month involving fire and hazardous materials. This route over Donner Summit could be a likely rail shipment corridor to connect with the proposed Mina rail spur.

Shipments to the repository could traverse California's heavily populated and congested regions including Sacramento, the Central Valley, and the Los Angeles regions (Los Angeles is the second largest metropolitan region in the country), the steep terrain and heavily weather-impacted rail and truck routes over the Donner Summit to Reno, as well as corridors through southeastern California, including Barstow, and rail routes over the Tehachapi Mountains to Bakersfield, and up the Central Valley through Fresno, Stockton, and Roseville (Attachment 1). Freight train traffic is steadily increasing along the likely spent nuclear fuel shipping corridors in California due to the increasing flow of imports and goods from Asian countries through the Ports of Oakland, Long Beach and Los Angeles.

California's densely populated areas near these rail corridors, increased rail traffic congestion, and dangerous rail segments along rail routes in California that are potentially impacted by these shipments, e.g., routes over the Donner Summit, Tehachapi Mountains, Cajon Pass, etc., all must be factored into DOE's risk assessments for evaluating the potential impacts of repository shipments using the Mina rail spur alternative as well as the Caliente spur.

The SEIS must assess the potential impacts along rail routes for shipments of TAD canisters (and some dual-purpose casks) from the 72 commercial sites and five DOE sites to Yucca Mountain via the proposed Caliente and Mina rail spurs, including major potential access routes in California to these rail spurs. As part of this analysis, the SEIS should identify the likely spent fuel shipment rail and truck routes that will access these rail spurs, as well as communities and resources in California potentially affected by these shipments, so that specific concerns can be identified and adequately addressed. None of these factors are identified in the NOIs nor has DOE provided maps showing the likely access routes to the proposed new Mina rail alignment. This failure does not comport with DOE's responsibilities under the National Environmental Policy Act (NEPA) to provide sufficient information to allow for informed decision-making.

DOE plans to propose a "suite" of rail and truck routes for cross-country shipments to the repository implying that multiple alternate routes are possible. DOE considers this "suite-of-routes" approach to enhance operational flexibility and shipment security and to spread impacts more equitably among regions. The result would be the likely southern and northern cross-country rail routes, as shown in Attachment 1.

Although DOE has selected rail as the preferred shipment mode over truck transport, completion of a rail line to Yucca Mountain would be costly and uncertain and many reactors lack rail access and would need to rely on truck or barge for offsite transport. The SEIS should identify reactor-specific shipping modes and the likely routes from reactors to the repository and identify and evaluate the environmental impacts from and likely locations of intermodal transfer facilities for truck, rail or barge shipments. In evaluating the potential transportation impacts from shipments to the proposed repository, the SEIS should identify the most likely routes from each of the reactor sites to the repository, the likely cross-country routes, the likely routes for intermodal transport from reactors to rail connections,

the likely intermodal transport facilities and locations, and, for reactor sites with no rail access, the highway routes for direct shipment to Yucca Mountain by trucks. These analyses should include descriptions of the anticipated quantities of spent fuel shipped through California via highway, rail and/or barge, the potential routes, and the potential impacts to the public and environment from these shipments.

#### **4. DOE has not adequately addressed concerns raised since 1989 by the State of California.**

Over the past nearly two decades, the State of California has provided input into federal EIS proceedings and policy development programs for DOE 's proposed Yucca Mountain Repository. In 1989, California's Interagency High-Level Waste Task Force, coordinated by the California Energy Commission, provided written comments on DOE's Site Characterization Plan, including plans for evaluating potential groundwater impacts in California from the proposed repository project. We identified as a major concern the potential migration of radionuclide contaminants from the repository into eastern California aquifers, including the Death Valley groundwater basin. We also recommended scientific analyses necessary to evaluate such potential impacts.

In 1995, the California Energy Commission staff, on behalf of the Western Interstate Energy Board High-Level Radioactive Waste Committee, testified before DOE on their NOI to prepare an EIS for the repository at Yucca Mountain. Our testimony emphasized the Western States' concerns regarding the safety of nuclear waste shipments to Yucca Mountain and the need for the EIS to closely examine the varying impacts on states and tribes that such an extended, massive-scale shipping campaign would have. In our testimony, we urged DOE to conduct route and mode-specific analyses of transportation impacts as part of the Yucca Mountain EIS and to fulfill DOE's promise, as stated in DOE's 1986 Environmental Assessment for the Yucca Mountain Project, to conduct in-depth route and mode-specific analyses.

In 2000, the State of California provided comments on the Draft EIS for the Yucca Mountain repository and noted the significant issues and concerns regarding the potential impacts in California from the proposed repository. Thirteen California agencies with regulatory authority and/or expertise in transportation, water quality, hydrogeology, environmental and emergency preparedness impacts participated in this collaborative review and comments on the Draft EIS. The three areas of impact identified in this review that most directly impact California continue to be: (1) potential transportation impacts, (2) potential groundwater impacts in the Death Valley National Park region, and (3) impacts on wildlife, habitat and public parks.

In our review in 2000, we found the Draft EIS to be deficient in its superficial and incomplete discussion of potential transportation and groundwater impacts in California. Specifically, we concluded that the Draft EIS was inadequate and incomplete because it failed to: (1) fully consider transportation impacts from the proposed project, (2) fully evaluate realistic project alternatives, (3) identify and analyze potential route-specific and modal specific impacts to populations and the

environment along shipment corridors, (4) adequately evaluate potential groundwater impacts in California, (5) address issues important to California that were identified early on in the public environmental scoping process in 1995, and (6) provide adequate notice to impacted communities along transportation corridors of the significant transportation impacts from the proposed project.

In addition, there has been insufficient discussion and/or reply to California's comments regarding the potential impacts to California's surface water channels and groundwater from the proposed Yucca Mountain repository. To date there has been no environmental assessment of the potential impacts from a spill into surface waters as the result of a spent fuel transport accident or incident. DOE should respond to California's request for a groundwater monitoring program on the west side of the Yucca Mountain site to allow for testing and potential mitigation in the event of contamination.

Despite California's repeated requests to DOE and DOE's commitment to conduct route and mode-specific analyses as part of the EIS process, the Draft EIS and Final EIS provide only generic analyses of these impacts. As mentioned, DOE has not identified the routes and transport modes for these shipments and has not provided a route-specific and mode-specific analysis of the potential transportation impacts. Under NEPA, an EIS is invalid if it is "too vague, too conclusory, and too general." (*Silvia v. Lynn* 482 F.2d 1282 (1<sup>st</sup> Cir. 1973)). Without route-specific and mode-specific analyses, the public and decision makers cannot make a reasonable, informed decision about the potential risks to the environment from the proposed project.

The Final EIS' discussion and analyses regarding potential groundwater and transportation impacts in California continue to be seriously deficient and California's concerns have yet to be adequately addressed in the EIS. Without this needed information affected communities, states and tribes have an insufficient basis upon which to make decisions regarding the proposed action described in the EIS. Overall, DOE has yet to provide a full evaluation of these potential impacts and continues to make changes to the repository design without providing adequate information on the implications of these changes.

In conclusion, the two NOIs and public comment period fail to comply with NEPA requirements by not providing an adequate opportunity and time period for public review and comment and by not providing a complete and accurate project description, including a full disclosure of the proposed new TAD canister approach and its impacts on waste handling, storage, transportation, and disposal practices as well as not providing a description and map of the likely routes and shipment modes needed to access the Mina rail spur. Therefore, DOE should reissue the NOIs at a minimum to provide:

- Adequate time (at least 90 days) and opportunity for public comment (DOE should add EIS scoping meeting locations within California including meetings in Sacramento, the Central Valley, the Los Angeles region, Barstow and Lone Pine),

- Sufficient information on the implications of the new TAD approach for waste handling, storage, transportation and disposal practices so that informed decisions can be made on the implications of what is being proposed, and
- Sufficient information and maps on: (a) the likely cross-country and intermodal access routes to the proposed new Mina rail spur and Caliente spur, (b) the analyses that will be completed to assess the implications of these new access routes for California communities and natural resources along potential repository shipment corridors (impacts on number of shipments and risk), and (c) how the SEIS' risk assessment will evaluate the potential transportation impacts from the proposed Mina and Caliente rail corridors including examining route-specific risks such as rail traffic congestion, transport through densely populated areas, and hazardous rail segments.

The Mina rail alignment analyses and SEIS should address these issues, incorporate the recommended analyses, as well as respond to the concerns that, although raised by the State of California since 1989, have not been adequately addressed. We respectfully request that DOE provide an adequate description of the proposed project, extend the public comment deadline and schedule meetings in California to allow for public input, and address these important concerns.

# North South Routing from Reactors to Yucca Mt. on Mina Route

*Dedicated Rail routes from UP gateways of Memphis and Kansas City*

