



**Department of Energy**  
Golden Field Office  
1617 Cole Boulevard  
Golden, Colorado 80401-3393

November 6, 2009

**DOE/EA 1440-S-II**

**FINDING OF NO SIGNIFICANT IMPACT**  
**for**  
**SUPPLEMENT- II TO FINAL SITE-WIDE ENVIRONMENTAL ASSESSMENT**  
**OF THE NATIONAL RENEWABLE ENERGY LABORATORY'S**  
**SOUTH TABLE MOUNTAIN COMPLEX**

**AGENCY:** Department of Energy, Golden Field Office

**ACTION:** Finding of No Significant Impact

**SUMMARY:** In accordance with the Department of Energy (DOE) National Environmental Policy Act (NEPA) implementing regulations, DOE evaluated the potential environmental impacts that will result from five actions at the National Renewable Energy Laboratory's (NREL) South Table Mountain (STM) site.

Proposed Construction and Operation of:

- The Energy Systems Integration Facility (ESIF), a new research facility;
- Phase 2 of planned site infrastructure improvements (Phase 2 of Full Site Development);
- A new second full service access road;
- Expansion of the Waste Handling Facility (WHF); and
- Expansion of the Visitors Center.

The decision to implement these projects required that DOE address NEPA requirements and related environmental documentation and permitting requirements. In compliance with the NEPA (42 U.S.C. 4321) and with DOE's NEPA implementing regulations (10 CFR section 1021.330) and procedures, the supplemental environmental assessment (SEA-II) examines the potential environmental impacts of DOE's decision to support this Proposed Action and also examines a No Action Alternative. Under the No Action Alternative, DOE would not fund these projects and they would not be constructed or operated.

All discussions and findings related to the Proposed Action and the No Action Alternatives are presented in the attached Final SEA-II and Appendices. The Final SEA-II is hereby incorporated by reference.

For many of the environmental resource areas assessed in the EA, the five projects that make up the Proposed Action will not result in either adverse or beneficial impacts because the project area and surrounding area lack sensitive receptors or resource areas that will be impacted (e.g., species of concern;

on-site perennial creeks, low-income or minority populations; agriculturally productive soils; or high commercial-value geologic resources). Additionally, while the proposed site expansion will place additional demands on local infrastructure such as water and electrical supplies, telecommunication systems, and sewage treatment, these demands will neither exceed existing capacities nor require upgrades or modifications to the local systems which supply the STM site. Similarly, because the construction activities will be relatively short-term and of limited scale, and operationally the majority of the workers already exist within local communities, there will be no significant socioeconomic impacts from the proposed action. In general, routine operations of the proposed projects will not significantly impact the off-site public and have no potential to affect members of populations protected by Executive Order on Environmental Justice (*E.O. 12898 Federal Actions to Address Environmental Justice in Minority and Low-Income Populations (59 FR 7629)*). However, implementation of these site projects will result in some environmental impacts.

The proposed increase of staff on the South Table Mountain (STM) site will result in increased traffic at intersections near the STM site. Previous analyses in the SEA-I and revised analyses for this SEA-II predict that, if not mitigated, the increased traffic will lead to an unacceptable degradation of traffic flow in the east bound lanes of the Denver West Parkway/Denver West Marriot Boulevard intersection during evening rush hours. In response to these predicted impacts, DOE and NREL developed a Mitigation Action Plan (MAP) for SEA-I, which is hereby incorporated by reference that stipulated the mechanisms by which traffic flows will be reduced to acceptable levels and the monitoring program which will be utilized to assure the success of the mitigating actions. However, for the projected staffing growth assessed in this SEA-II, the mitigation measures defined in the MAP would not adequately mitigate traffic volumes to acceptable levels of service without a second access road. DOE has determined that utilization of the preferred corridor, alternative B/C, for a route that connecting the STM site with South Golden Road could be accomplished without significant impacts. This conclusion is based on the analyses in SEA-II and the consultations with federal, state, and local agencies that have concurred on the acceptability of this corridor. Further agency consultations will occur to select a specific route within this corridor that can be developed without significant impacts to wetlands, floodplains, or historic resources.

Collectively, the ESIF, WHF and Visitor Center expansions, second access road, and infrastructure upgrades will result in the loss of approximately 6 hectares (15 acres) of grassland and shrubland habitat, some of which will occur in or adjacent to natural drainages, which are among the site's most productive wildlife habitats and corridors. Because this incremental habitat loss is within the total build out plans assessed in the 2003 SWEA and determined to be insignificant, and the fact that DOE's long term plans for the STM site would ultimately develop only 15 percent of the site, setting aside over one half of the entire site for conservation easement, DOE has determined that the habitat loss under the proposed actions evaluated in this SEA-II will not be significant.

Construction will result in short-term (1- 2 years) increases in on-site traffic, noise, fugitive dust, auto and equipment emissions, and construction debris. The equipment and facilities that will be added to the STM site under the Proposed Action are not unique to the site. The appearance of these facilities will in fact be similar to other buildings. As such, the addition of the ESIF and infrastructure upgrades will add to, but not substantially alter the visual impact and character of the site and will not significantly interfere with nearby neighborhood views of South Table Mountain to the north or foothill views to the west. Final design and operations of nighttime lighting for facilities, parking structures, and roadways will integrate operational safety and security requirements with a commitment to minimize the offsite effects of lighting to less than significant impact levels. The proposed actions will not result in untreated operational discharges of pollutants to surface water or groundwater. Drains will be connected to the site's existing or new stormwater and sewage lines, and all discharges to the publicly owned treatment works will meet the requirements of the Metro Wastewater Reclamation District and the Pleasant View Water and Sanitation

District. Operational air emissions from facilities and increased traffic will not exceed permit levels and will not result in any significant increases in health effects.

The new construction will increase the impervious surface area, which could increase quantities of stormwater conveyed off-site. Management practices, including stormwater pollution prevention measures to minimize runoff, which will include permanent detention ponds, will be implemented during construction to minimize degradation of surface water quality due to sediment and various chemicals associated with additional vehicles and construction equipment.

Under the Proposed Action, workers within the ESIF could be directly affected by exposures to hazardous releases, fires, or explosions under the accidents postulated in SEA-II, and serious injuries could occur. However, because the operations are conducted remotely, and workers have standard procedures in place to control hazards, protective equipment, and emergency response procedures, the likelihood of a serious injury to an ESIF worker is small. As design and construction of ESIF proceeds, more detailed hazards analyses will be performed consistent with NREL's Hazard Identification and Control Procedure so that changes in the facility hazards and design are adequately captured and analyzed. This will confirm that facility workers, site workers, and the general public will be adequately protected from any events that may occur after the ESIF becomes operational.

Construction activities near the east and west boundaries of the STM site will occur near residences and noise could be a nuisance for some residents during the duration of construction. Construction-related noise impacts will vary with the phase of construction and will occur intermittently. Because this noise will be short-term, mitigated by distance, occur during normal week day working hours, and will comply with all applicable noise ordinances, it will not result in a significant adverse impact. Operationally, there will be no noise sources that could generate significant noise impact to off-site members of the public.

The Proposed Action will not offer any credible targets of opportunity for terrorists or saboteurs to inflict significant adverse impacts to human life, health, or safety, nor will the Proposed Action render the STM site as a whole any more susceptible to such acts. However, the consequences of an operational accident as defined in the SEA-II could occur if initiated by an act of terrorism or sabotage.

The Proposed Action will support and promote the overall objectives and mission of NREL and will occur within areas evaluated and committed to for further development in the 2003 site-wide EA.

**COPIES OF THE FINAL EA ARE AVAILABLE FROM:**

Steve Blazek  
DOE/GO NEPA Compliance Officer  
U.S. Department of Energy  
1617 Cole Boulevard  
Golden, CO 80401  
(303)275-4723  
[Steve\\_blazek@go.doe.gov](mailto:Steve_blazek@go.doe.gov)

**FOR FURTHER INFORMATION ON THE DOE NEPA PROCESS CONTACT:**

Office OF NEPA Policy and Compliance  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Washington, D.C. 20585

(202) 586-4600 or (800) 472-2756

**DETERMINATION:**

Based on the information presented in the Final SEA-II (DOE/EA 1440-S-II), DOE determines that the construction and operation of ESIF; expansions of the WHF and the Visitors Center; the selection of corridor B/C for the second full service access road; and the proposed infrastructure upgrades; do not constitute major Federal actions significantly affecting the quality of the human environment, within the meaning of the National Environmental Policy Act. Therefore, the preparation of an Environmental Impact Statement is not required, and DOE is issuing this Finding of No Significant Impact.

Issued in Golden, Colorado 10<sup>th</sup> day of November, 2009.



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Rita L. Wells  
Manager