Department of Energy
Golden Field Office
1617 Cole Boulevard
Golden, Colorado 80401-3305

July 2, 2007

DOE/EA 1573

FINDING OF NO SIGNIFICANT IMPACT
for the
THREE SITE DEVELOPMENT PROJECTS
AT THE NATIONAL RENEWABLE ENERGY LABORATORY
SOUTH TABLE MOUNTAIN SITE
ENVIRONMENTAL ASSESSMENT

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 would likely result from the construction and operation of three site development projects at the National Renewable Energy Laboratory's (NREL) South Table Mountain (STM) site:

- Renewable Fuel Heating Plant (RFHP) - would reduce NREL's current STM site natural gas consumption by an estimated 75 to 80 percent by using woodwaste to replace natural gas usage in the primary site heating boiler. The project would also showcase the viability of woodwaste biomass fuels as an alternative to fossil fuel heating.

- SolarTAC - would accelerate the introduction and recognition of pre-commercial and early-commercial solar energy technologies in the U.S. marketplace. It would support and promote the commercial acceptance of solar energy technologies. The SolarTAC Project would provide a launch pad for commercialization of solar-generating technologies in Colorado and elsewhere, such that solar technologies would become an increasingly important and ultimately indispensable contributor to the energy use profile in the United States and across the world.

- Mesa Top Photovoltaic Project (MTPP) - would generate about 1.0 megawatt (MW) of electric power for use at the STM site to offset NREL's growing energy demand. This is consistent with DOE's long-term site development plans and energy goals to increase on-site renewable energy generation at the laboratory.

Prior to making a decision to construct and operate these proposed projects (collectively, the "Proposed Action"), DOE is required to address NEPA requirements, 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, DOE completed an environmental assessment (EA). The EA examined the potential environmental impacts of DOE's decision to support this Proposed Action and also a No Action Alternative. Under the No Action Alternative, DOE would not construct or operate these proposed projects.

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

For many of the environmental resource areas assessed in the EA, the three site improvement projects that make up the Proposed Action would not result in either adverse or beneficial impacts because the project area and surrounding area lack sensitive receptors or resource areas that would be impacted (e.g., species of concern; on-site perennial creeks, streams, ponds, or floodplains; cultural resources; wetlands; low-income or minority populations; off-site noise receptors; agriculturally productive soils; or high commercial- or aesthetic-value geologic resources). However, implementation of the three site improvement projects would result in some environmental impacts.

The proposed RFHP would result in an increase in emissions of criteria air pollutants and toxic air pollutants of about 8.3 tons/year. Based on a dispersion modeling analysis of the proposed RFHP, emissions of criteria air pollutants would not exceed National Ambient Air Quality Standards, nor would they pose a health risk. Although the proposed RFHP would increase the site's net emissions of CO_2, a greenhouse gas, by about 1600 tons annually, it would also substantially reduce the STM site's use of and reliance on natural gas, and would reduce emissions of geologically sequestered carbon. Collectively, the three proposed projects would result in the loss of approximately 3 hectares (8 acres) of grassland and shrubland habitat. The RFHP and the SolarTAC Project would be constructed in or adjacent to natural drainages, which are among the site's most productive wildlife habitats and corridors. The drainages also support the site's richest vegetation. The MTPP would be an extension of DOE's existing mesa-top facilities.

Construction of the three proposed facilities would result in short-term (up to 1 year) increases in on-site traffic, noise, fugitive dust, auto and equipment emissions, and construction debris. Operationally, the proposed RFHP and the MTPP would have little impact on either on-site or off-site traffic. However, the proposed SolarTAC Project could attract up to 500 visitors a month. This influx could further strain already limited on-site parking and traffic flow. Until supplemental parking for the SolarTAC was constructed, there could be a need for NREL visitors to park off-site and walk to the site or for the site to implement shuttle bus service to accommodate visitors.

The equipment and facilities that would be added to the STM site under the Proposed Action would not be unique to the site. The appearance of these facilities would in fact be similar to other buildings and PV panels that have been a part of the STM site for many years. As such, the addition of the RFHP, SolarTAC, and MTPP would add to, but would not substantially alter, the visual impact and character of the site. If the proposed facilities were noticed at all, the casual observer would likely note only that the added development resembled the structures already on the site.

The proposed actions would not result in untreated operational discharges of pollutants to surface water or groundwater. Drains would be connected to the site's existing stormwater and sewage lines, and all discharges to the publicly owned treatment works would meet the requirements of the Metro Wastewater Reclamation District and the Pleasant View Water and Sanitation District.

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

The Proposed Action would be consistent with the overall objectives and mission of NREL and would 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

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 EA (DOE/EA 1573), DOE determines that the Proposed Action does not constitute a major Federal action 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 5th day of July, 2007.

Rita Wells

Rita Wells, Acting Manager
U.S. Department of Energy, Golden Field Office