Briefing on the U. S. Department of Energy Solar Photovoltaic (PV) Project at the Durango, Colorado, Site

August 2011

Office of Legacy Management
Office of Site Operations

U.S. DEPARTMENT OF ENERGY | Legacy Management

Meeting Agenda

- Office of Legacy Management (LM)
- LM sites
- Durango Disposal Site background
- Long-term surveillance plan (LTSP)
- Environmental assessment for the solar PV project at the Durango Disposal Site
- DOE lease
- Path forward*

*All information discussed at this meeting is available in the Expression of Interest that has been made publicly available.

About LM

- Part of the U.S. Department of Energy (DOE)
- Three primary offices: Washington, DC; Grand Junction, Colorado; and Morgantown, West Virginia

LM Mission

- To manage DOE's post-closure responsibilities and ensure the future protection of human health and the environment. LM has the control of, custody of, and responsibility for maintaining legacy sites, structures, and facilities.

LM Goals

- Protect human health and the environment through effective and efficient long-term surveillance and maintenance
- Manage legacy land and assets, balancing remedy management requirements while maximizing beneficial reuse with an emphasis on renewable energy development

LM Sites

- DOE has been managing legacy sites for more than 20 years
- DOE manages 87 sites in the United States and Puerto Rico
- DOE manages 11 sites in Colorado, including the Durango Disposal Site
- DOE owns the mill tailings and land at the Durango Disposal Site

Durango Disposal Site Background

- The Uranium Mill Tailings Radiation Control Act authorized DOE to clean up uranium mill tailings at 22 inactive mill sites
- Tailings were moved from Smelter Mountain to a new disposal site up Bodo Canyon
- Remedial action was completed in 1991
- The property is bounded by the Colorado Division of Wildlife to the north, west, and east, and the Bureau of Reclamation Animas-LaPlata Project to the south

Durango Disposal Site Background (continued)

- The Nuclear Regulatory Commission (NRC) licensed the site in 1996. DOE is responsible for the site's long-term surveillance and maintenance.
- The 40-acre disposal cell sits on the 120-acre property
- The cell contains 2.5 million cubic yards of uranium mill tailings and mill debris
- The top of the cover slopes slightly at 1 to 2 percent; the top 6 inches are comprised of gravel and soil to support some vegetation
- The cover contains multiple layers to minimize infiltration into the cell and limit the release of radon from the cell

Durango Disposal Site Background (continued)

- The NRC license requires the site to have an LTSP
- The LTSP states the long-term surveillance and maintenance requirements
- NRC and the Colorado Department of Public Health and Environment approved the original LTSP on September 16, 1996
- The LTSP requires that the site undergo annual inspections and reporting; the reporting is available online at www.lm.doe.gov

Long-Term Surveillance Plan

- LTSP was revised to allow for a beneficial reuse project; i.e., placing a solar PV system on the cover and on several flatter areas surrounding the cell
- LTSP, Section 4.0 contains numerous technical requirements for a solar PV system placed on the cell to protect the integrity of the cover
  - Restrictions on disturbing top of cover and rock on side slopes and ditches
  - Can not concentrate storm runoff
  - Site shall be restored at end of lease
- NRC approved the revised LTSP on May 19, 2011
- LTSP available online at http://www.lm.doe.gov/Durango/Disposal/Documents.aspx

Disposal Cell

U.S. DEPARTMENT OF ENERGY | Legacy Management

Environmental Assessment

DOE conducted an Environmental Assessment (EA) as a requirement of the National Environmental Policy Act (NEPA)

Alternatives considered in the EA

- Take no action
- A lease for placement of a solar PV system on flat ground on top of the cell
- A lease for placement of a solar PV system on top of the cell and flatter areas west and south of the cell on land previously disturbed

Environmental Assessment (continued)

Example of Solar Facility
Rifle, Colorado, Former Mill Site

Environmental Assessment (continued)

- Flat land on the cell cover is available for a solar PV system that generates up to 4 megawatts
- The area around the cell could be the site of a system of up to 0.5 megawatts
- Panels would be placed on top of the cell without penetrating the soil
- Electrical transmission lines cross the southwest corner of the property and a substation is 1,000 feet to the south
- DOE would make land available for leasing to a utility company or private industry
- Developing the solar PV system requires working with La Plata Electric Association and Tri-State Generation and Transmission Association, Inc.

Environmental Assessment (continued)

- The EA considered the environmental impacts on the physical, cultural, and biological resources that the alternatives could affect
- Visual analysis was performed
- Prospective cooperating agencies were contacted
- Cultural resource inventory (Class I) was conducted
- Cultural resources consultation letters were sent to four tribes

EA Timeline

- Scoping meeting was held May 3, 2010
- Issued draft EA to the public for review: August 20, 2010
- Finding of No Significant Impact was signed on June 9, 2011
- LM determined that placing solar PV system on the cell would not significantly affect the environment; no long-term impacts were identified

DOE Lease

- Lease will be for 20 years with a 5-year option
- Lease will require the lessee to comply with all technical requirements stated in the LTSP, Section 4.0
- Reclamation bond and other appropriate bonding
- Insurance requirements
- Lessee will have to obtain any other permits and follow all applicable regulations

Path Forward for Solar PV Project

- DOE issued an Expression of Interest to determine if there was interest in leasing the site (closes 8-26-11)
- If the response is positive, DOE will solicit offers for a long-term lease for a private entity to build a solar PV system
- Lessee will be responsible for any remaining permits
- Lessee will have to work with La Plata Electric Association for interconnections