UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Washington, D.C. 20240
http://www.blm.gov

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To: All Field Officials

From: Director

Subject: Solar Energy Development Policy

Program Area: Rights-of-Way Management, Solar Energy
Facilities Management, Solar Energy

Purpose: This Instruction Memorandum (IM) establishes policy for the processing of right-of-way applications for solar energy development projects on public lands administered by the Bureau of Land Management (BLM) and evaluating the feasibility of installing solar energy systems on BLM administrative facilities and projects.

Policy/Action: This IM replaces the Solar Energy Development Policy (IM No. 2005-006), issued October 20, 2004. The BLM's general policy is to facilitate environmentally responsible commercial development of solar energy projects on public lands and to use solar energy systems on BLM facilities where feasible. Applications for commercial solar energy facilities will be processed as right-of-way authorizations under Title V of the Federal Land Policy and Management Act (FLPMA) and Title 43, Part 2804 of the Code of Federal Regulations (CFR). Commercial concentrating solar power (CSP) or photovoltaic (PV) electric generating facilities must comply with the BLM's planning, environmental and right-of-way application requirements, as do other similar commercial uses.

The BLM will evaluate the feasibility of installing PV systems on administrative facilities and on range improvement, resource monitoring, public safety, and recreation projects. Project planning and design should incorporate an appropriate analysis to determine the feasibility, cost and benefits of using PV systems. In June 2006, an Energy Savings Performance Contract was awarded to Johnson Controls, Inc. for the installation of energy efficiency technologies into BLM facilities. Phase II of the contract, expected to be awarded in May 2007, will include the installation of solar and other renewable energy technologies. Trent Duncan, BLM Utah State

Office, at 801-539-4090 or Pat Fleming, BLM National Science and Technology Center, at 303-987-6856 can provide additional information on installing PV systems on BLM administrative facilities or for other project uses.

Inventory and Planning

The Department of Energy's National Renewable Energy Laboratory (NREL) has prepared solar insolation potential maps at the request of the BLM for Arizona, California, Nevada, and New Mexico. The maps identify areas with one percent or less slope with high levels of solar insolation that have potential for commercial solar energy development. Solar maps from NREL are available at http://www.nrel.gov/csp/maps.html.

New or updated BLM land use plans are required to consider NREL maps showing areas having commercial solar energy development potential. The land use plans or revisions should address potential impacts of solar energy development and related environment and local community issues. The land use plans should sufficiently analyze and consider the potential for solar energy development and the local environmental or community issues related to making lands available (or not available) for commercial solar energy development. When necessary, the land use plan amendment and the environmental analysis for the solar energy development proposal can be prepared and processed concurrently. This policy does not require updates for recently completed plans to include an analysis of solar energy development.

Right-of-Way Applications

Applications for commercial solar energy facilities, both PV and CSP, will be processed as right-of-way authorizations under Title V of the FLPMA and Title 43, Part 2804 of the CFR. Applications submitted to the BLM for commercial solar energy development projects will use Form SF-299, Application for Transportation and Utility Systems and Facilities on Federal Land, consistent with the requirements of 43 CFR 2804. No separate authorization is necessary if the installation of a PV system is part of another authorized facility or use. As an example, oil and gas operators may install PV facilities for operating metering equipment and lighting systems on their lease area as part of an approved oil and gas lease operation. In addition, oil and gas pipeline right-of-way authorizations would allow for the use of PV facilities at pump station locations. Those are valid uses that the BLM can encourage and allow.

Right-of-way applications for solar energy development projects will be identified as a high priority Field Office workload and will be processed in a timely manner. This priority is consistent with the President's National Energy Policy of 2001 and the Energy Policy Act of 2005. Adequate resources should be provided to review and process the application. The applicant must submit a complete and acceptable application and provide a cost recovery payment before the BLM will initiate processing of a right-of-way application. It is anticipated that most right-of-way applications for solar energy development will be Category 6, full cost recovery applications. The BLM will apply sound business practices in expediting the application process. For further information regarding the BLM ROW application process, please

refer to the following BLM web site:
http://www.blm.gov/wo/st/en/prog/energy/cost_recovery_regulations.html.

The BLM authorized officer should schedule pre-application meetings with applicants (43 CFR 2804.10). This facilitates preparation and processing of applications that identifies potential issues and land use conflicts impacting the authorized officer's decision to grant or not grant the right-of-way authorization. The pre-application process will identify any environmental or cultural resource studies that may be needed, assess public interest and concerns, identify other authorized uses within or near the area, allow consideration of potential alternative site locations, and outline arrangements for paying the costs associated with processing a right-of-way grant.

Early public notification and involvement of local communities and other interests is also important in increasing public acceptance and avoiding potential conflicts, especially in areas where other uses exist on the public lands. The application process is pre-decisional and may or may not result in the BLM granting a right-of-way authorization.

A BLM State or Field Office right-of-way project manager will be assigned to process the application; ensure appropriate cost recovery; and monitor construction and use of the land for the authorized purpose. As an option, the BLM State Director may request assistance of a National Right-of-Way Project Manager from the BLM Washington Office (WO-350).

Solar energy right-of-way applications and authorizations are subject to appropriate cost recovery and rental payments required by 43 CFR 2804.14, 43 CFR 2805.16, and 43 CFR 2806.10, and the bonding requirements of 43 CFR 2805.12(g).

Right-of-Way Authorizations

A right-of-way grant (Form 2800-14) will be used to authorize all facilities held by the holder of the grant on the public lands related to a commercial solar energy development project. This authorization will include the solar collectors, tower, turbine generator, fossil fired generator for hybrid systems, thermal storage, access roads, electrical and transmission facilities, and other testing and support facilities. The lands involved in the right-of-way grant will be defined by aliquot legal land descriptions and be configured to minimize the amount of land involved.

The right-of-way authorization will contain appropriate stipulations relating to all aspects of project development including, but not limited to, road construction and maintenance, vegetation removal, natural, cultural and biological resources mitigation and monitoring, and site reclamation. In addition, an approved Plan of Development (POD) for construction and operation of the solar facility must be completed prior to beginning construction. When possible, the right-of-way authorization and POD can be processed simultaneously.

The right-of-way holder should be encouraged, through terms and conditions of the right-of-way authorization, to work with the BLM to increase public acceptance and awareness of the benefits of solar energy development by providing information and public viewing areas at safe locations

near the development. The BLM and right-of-way holder can provide a positive message on the responsible use of renewable resources and the multiple resource use on public lands.

A bond will be required for solar energy development right-of-way grants to ensure compliance with the terms and conditions of the authorization and the requirements of the regulations, including reclamation. The reclamation provisions within the POD should include not only removal of solar collectors and other structures, but also the reclamation of access roads and disturbed areas. The amount of the bond will consider potential reclamation and administrative costs to the BLM.

The term length of the authorization is not limited by regulation; however, it should recognize the overall costs and useful life of solar energy facilities (43 CFR 2805.10(a)(3)). The term of the solar energy authorization for a commercial facility should not exceed the design life of the project, typically 30 years. The authorization may be renewed consistent with the provisions of the regulations (43 CFR 2807.22(a)). Other compatible uses may be authorized, but are unlikely due to the intensive use of the site for PV or CSP facility equipment.

The right-of-way grant may be assigned consistent with the provisions of the regulations (43 CFR 2807.21(b)). However, all assignments shall be approved by the BLM authorized officer and the qualifications of all assignees must comply with 43 CFR 2803.10 and the Due Diligence section of this IM and the requirements of the regulations (43 CFR 2807.21(c)(1) and 43 CFR 2807.21(d)). The assignment shall not interfere with the BLM's enforcement of the terms and conditions of the authorization or management of the associated public lands.

All final decisions issued by the authorized officer in connection to the authorization of solar energy projects can be appealed under 43 CFR part 4 and 43 CFR 2801.10. It should also be noted that right-of-way grants are issued as full force and effect decisions (43 CFR 2801.10(b)) and will remain effective during any appeal period.

Rental

All solar energy right-of-way authorizations are subject to rent in accordance with this IM, unless they are specifically exempt from rent by statute or regulation. Some holders or facilities may be exempt from rent pursuant to the Rural Electrification Act of 1936, as amended (43 CFR 2806.14(d)).

The holder of a right-of-way authorization shall pay an annual rent established by the BLM using real estate appraisals and reviews procured from the Department of the Interior, Appraisal Services Directorate. The rents paid will be in conformance with 43 CFR 2806.10(a). The appraisal should consider the value of the rights to be conveyed and the lease of comparable lands in an early or similar stage of potential development, e.g., commercial land or industrial land, as of the date of the appraisal. The procured appraisal and review report will be prepared on a site-specific basis and reflect market conditions for setting rental payments. Since the rental

payment reflects the full use of the public land for solar facilities, similar to a lease for industrial purposes, there are no additional royalty payments for electric generation.

The appraisal assignment to estimate annual rental should also include a request to identify an appropriate rental index for updating the rental payment. The justification for the index should reflect normal market conditions for updating rental payments on similarly used land.

The rental payment will be phased in over a 3-year period to permit additional data collection that may be required after the approval of the grant, preparation and approval of a POD, and construction of the facility. The rent for the first year will be 25 percent of the BLM approved rent, 50 percent the second year, and 100 percent the third year.

Competitive Interest

Right-of-way applications for solar energy development will generally be accepted and processed on a first-come, first-serve basis. The right-of-way regulations (43 CFR 2804.23(c)) provide authority for offering public lands under competitive bidding procedures for solar energy right-of-way authorizations. The BLM will initiate a competitive process if a land use planning decision has specifically identified an area for competitive leasing. The BLM may also consider other public interest and technical factors in determining whether to offer lands for competitive leasing. Competitive bidding will follow the procedures required by 43 CFR 2804.23(c).

Due Diligence

The BLM will discourage applicants from holding right-of-way authorizations for purposes of speculating, controlling, or hindering development of solar energy on public lands. Speculative interest can be mitigated by ensuring the applicant meets qualification requirements of the regulations (43 CFR 2803.10(a-c)), and requiring certain due diligence provisions in the right-of-way authorization for solar energy development.

The regulations clearly provide authority to require that the application include information on the applicant's technical and financial capability to construct, operate, maintain and terminate the solar energy facilities (43 CFR 2803.10(b)). This technical capability can be demonstrated by obtaining the funding, designing, constructing or successfully operating an energy generating project. Actual ownership, development, or successful management of similar-sized electric energy-related facilities within the last 5 years by the applicant would generally constitute evidence of financial capability. The regulations provide the authority to deny the application if the applicant cannot demonstrate adequate technical ability to construct, operate, and maintain the solar energy facilities (43 CFR 2804.26(a)(5)). The BLM may also deny an application if the applicant does not provide, in a timely manner, additional information requested by BLM to process an application or the cost recovery funds required by 43 CFR 2804.14.

In addition, the solar energy development right-of-way grant shall include a due diligence requirement for installation of facilities consistent with an approved POD. If construction of

solar energy facilities has not commenced within 3 years after the effective date of the grant, the right-of-way holder shall provide the BLM good cause as to the nature of any delay, evidence of progress toward beginning construction, and the anticipated date of start-up operations. Failure of the holder to comply with the due diligence provisions of the solar energy development right-of-way grant provides the authorized officer the authority to terminate the authorization (43 CFR 2807.17).

Environmental Review

The scope of the environmental analysis required by the National Environmental Policy Act (NEPA) for a solar energy development project should address all aspects of the solar project, including direct, indirect, and cumulative effects of the proposed action.

The scope of the NEPA analysis and the compliance requirements with the Endangered Species Act, the Migratory Bird Treaty Act, the National Historic Preservation Act, and other laws for a solar energy development right-of-way application should address the installation and maintenance of solar collectors, water for steam generation and cooling purposes, oil or gas used by backup generators, thermal or electrical storage, turbines or engines, access roads and electrical inverters and transmission facilities. The scope and level of site clearance should include the areas of proposed surface disturbance and areas potentially affected by the project.

The level of NEPA analysis will be determined by project scoping and the anticipated potential impacts on the environment. The level of analysis will reflect the amount of land needed for the solar energy collection and associated support facilities, the amount of surface to be disturbed, water requirements, and potential impacts on wildlife and other resources. It may be possible to combine the required environmental review process for a solar energy development project with other required State or local environmental requirements. This would streamline the process and be consistent with Departmental policy on intergovernmental cooperation.

LR 2000 Data Entry

Commodity code 975 will be used to identify solar energy applications and authorizations in LR 2000, the BLM case recordation system. In addition, the data entry will also identify under the comment section whether the authorization is for a PV or CSP facility. This will allow the BLM to track and report solar energy activities on public land within LR 2000.

Timeframe: This policy is effective immediately.

Background: As part of an overall strategy to develop a diverse portfolio of domestic energy supplies for our future, the National Energy Policy of 2001 and the Energy Policy Act of 2005 (Public Law 109-58, August 8, 2005) encourage the development of renewable energy resources, which includes solar energy. Section 211 of the Energy Policy Act of 2005 encourages the approval of at least 10,000 megawatts (MW) of non-hydropower renewable energy projects on the public lands within the next 10 years.

Solar energy has significant potential in the western United States for converting the sun's light into electricity using technology that is rapidly improving. Solar energy currently accounts for less than one percent of total U.S. electricity supply. As the cost of producing solar energy declines, there will be a greater interest in locating large solar power systems on public lands. Please refer to the attachment for additional information regarding PV and CSP solar systems.

Budget Impact: The application of this policy will have a minimal budget impact. Any land use planning associated with this policy will be part of existing planning efforts. Land use plans will take into account the solar mapping data described under the Inventory and Planning section of this IM. It is assumed that any solar energy commercial development will probably meet the criteria for full cost recovery. In addition, the BLM post authorization monitoring activities are subject to the cost recovery provisions of the regulations. These procedures will minimize any unnecessary budget and workload impacts.

Manual/Handbook Sections Affected: Manual 2801, Right-of-Way Management and Handbook H-2801-1. Land Use Planning Handbook H-1601-1.

Coordination: The Washington Office Planning, Assessment and Community Support Division (WO-210), the Property, Acquisition and Headquarters Services Division (WO-850), and the BLM State Offices were contacted to provide input on this policy prior to finalization.

Contact: Please direct any questions concerning the content of this IM to the Washington Office Division of Lands, Realty and Cadastral Survey, attention: Rick Stamm, at 202- 452-5185; or rick_stamm@blm.gov.

Signed by:
James M. Hughes
Acting, Director

Authenticated by:
Robert M. Williams
Division of IRM Governance,WO-560

1 Attachment
1-Solar Energy Systems (2 pp)