

United States Department of the Interior  
BUREAU OF LAND MANAGEMENT  
Washington, D.C. 20240  
<http://www.blm.gov>



October 7, 2010

In Reply Refer To:  
2800 (350) P

EMS TRANSMISSION 10/13/2010  
Instruction Memorandum No. 2011- 003  
Expires: 09/30/2012

To: All Field Officials  
From: Director  
Subject: Solar Energy Development Policy

**Program Area:** Right-of-Way Management, Solar Energy.

**Purpose:** This Instruction Memorandum (IM) provides updated guidance on the processing of right-of-way applications and the administration of right-of-way authorizations for solar energy projects on public lands administered by the Bureau of Land Management (BLM).

**Policy/Action:** This IM updates the Solar Energy Development Policy (IM 2007-097) issued April 4, 2007. The BLM's policy is to facilitate environmentally responsible development of solar energy projects on the public lands, consistent with the provisions of Secretarial Order 3285A1 dated March 11, 2009, as amended February 22, 2010.

Applications for solar energy projects will be processed and authorized as rights-of-way under Title V of the Federal Land Policy and Management Act (FLPMA) and Title 43, Part 2800, of the Code of Federal Regulations (CFR). Utility-scale concentrating solar power or photovoltaic electric generating facilities must comply with the BLM's planning, environmental, and right-of-way application requirements.

This IM provides policy guidance on early coordination with Federal land managers and stakeholders, the term of solar energy right-of-way authorizations, diligent development requirements, bond coverage, Best Management Practices (BMPs), and BLM access to records. Issuance of this IM ensures effective BLM-wide consistency in the processing of right-of-way applications and the management of authorizations for solar energy development on the public lands.

### Early Coordination with Land Managers and Stakeholders

In order to enhance the consideration and protection of the resources and values associated with shared landscapes (including nearby county, state, tribal, or other Federal agency lands), state and field offices will coordinate and/or consult, as appropriate, with land managers and stakeholders that may be affected by the BLM's decision to grant a right-of-way authorization for a solar energy development project. Land managers and stakeholders include parties such as:

- Federal agencies (e.g., Bureau of Reclamation, Department of Defense, Fish and Wildlife Service, Forest Service, and National Park Service).
- Managers of adjacent or proximate BLM field offices and National Landscape Conservation System units.
- Tribal governments.
- State agencies (e.g., State Land Commission, State Parks, and State Fish and Game).
- County and local community stakeholders (e.g., county jurisdictions, managers of municipal watersheds and local parks).

Potentially affected Federal and state land managers will be provided the opportunity to participate in pre-application meetings with prospective project applicants.

### Term of Authorization

In accordance with Title V of FLPMA and the BLM's right-of-way regulations, the term or length of a solar energy right-of-way authorization is limited to a reasonable term (43 U.S.C. 1764(b); 43 CFR 2805.11(b)). The regulations further articulate a number of factors the BLM considers in determining a reasonable term, including the overall costs and useful life of the projects. Most major right-of-way authorizations also include provisions for renewal of the authorization consistent with the provisions of the regulations (43 CFR 2805.15(d) and 2807.22).

Due to the substantial investments required for typical solar energy projects and the projected life of these facilities, it is prudent and in the public interest to provide for a term of solar energy right-of-way authorizations that will provide a reasonable period of time for construction, development, and continued operations. In addition, many Power Purchase Agreements (PPAs) for the purchase of electricity generated from a solar energy facility are for terms of 20 years or longer. The BLM will therefore issue all solar energy right-of-way authorizations for a term not to exceed 30 years. Thirty years provides a reasonable period consistent with the expected needs of a solar energy facility; it also provides for operation periods that are consistent with typical PPAs. The BLM will also include in each solar energy right-of-way authorization a specific provision allowing for renewal, consistent with the regulations at 43 CFR 2807.22.

## Diligent Development

The right-of-way regulations set forth the qualifications that an individual, business, or government entity must possess in order to hold a right-of-way grant, including the requirement that the potential grantee be technically and financially able to construct, operate, maintain, and terminate the use of the public lands covered by the grant (43 CFR 2803.10(b) and 2804.12(a)(5)). In carrying out its obligation to limit right-of-way authorizations to qualified individuals or entities and to prevent such individuals or entities from holding right-of-way authorizations merely for purposes of speculating, controlling, or hindering development on the public lands, the BLM will focus on ensuring the applicant meets the qualification requirements in the regulations. In addition, the BLM will include provisions requiring diligent development in each solar energy right-of-way authorization.

In ensuring that an applicant meets the regulatory requirement to demonstrate its technical and financial capability to construct, operate, maintain, and terminate the proposed solar energy facility (43 CFR 2803.10(b) and 43 CFR 2804.12(a)(5)), the BLM will consider whether the applicant has a history of successfully designing, constructing, or obtaining the funding for a project generating electrical energy. Actual ownership, development, or management of a successful similarly-sized project generating electrical energy within the last 5 years by the applicant would generally constitute evidence of financial capability. Absent such showing, the BLM will ask the applicant to estimate the capital investment necessary to bring the facility on-line and explain how the applicant intends to finance the project. The BLM may confer with the Department of Energy to determine whether the applicant's estimates and business plan appear viable. If the applicant cannot demonstrate adequate technical or financial ability to construct, operate, maintain, and terminate the specific solar energy facility, the BLM is authorized to deny the application (43 CFR 2804.26(a)(3) and (5)). The BLM may also deny an application if the applicant does not provide in a timely manner additional information requested by the BLM authorized officer to process an application (43 CFR 2804.26(a)(6)) or the processing fees required by 43 CFR 2804.14.

The right-of-way regulations specify that a right-of-way grant conveys to the holder only the rights that the grant expressly contains (43 CFR 2805.14) and that the holder must comply with all terms and conditions included in the grant (43 CFR 2805.12). All solar energy right-of-way grants will include a provision that specifies that ground disturbing activities cannot begin until the BLM authorized officer issues a Notice to Proceed (43 CFR 2807.10). In order to facilitate efficient development of solar energy on the public lands, the BLM will also include a requirement in each right-of-way grant that the holder begin construction of the initial phase of development within 12 months after issuance of the Notice to Proceed, but no later than 24 months after the effective date of the right-of-way authorization. Each grant will also specify that construction must be completed within the timeframes in the approved Plan of Development, but no later than 24 months after start of construction unless the project has been approved for phased development as described below. A Notice to Proceed will be issued for each phase of development.

The BLM will not authorize more than three development phases for any solar energy right-of-way authorization. If an approved Plan of Development provides for phased development, the right-of-way grant will include provisions specifying that construction of each phase (following the first) must begin within 3 years of the start of construction of the previous phase.

The BLM authorized officer may suspend or terminate the authorization when the holder fails to comply with the diligent development terms and conditions of the authorization (43 CFR 2807.17). The regulations provide that before suspending or terminating the authorization, the BLM will send the holder a written notice that gives the holder a reasonable opportunity to correct any noncompliance or to start or resume use of the right-of-way (43 CFR 2807.18). This notice may be satisfied by the BLM sending a Notice of Failure to Ensure Diligent Development.

To address a failure to comply with a grant's diligent development provisions, the holder must show good cause for any delays in construction, provide the anticipated date of completion of construction and evidence of progress toward the start or resumption of construction, and submit a written request for extension of the timelines in the approved Plan of Development. Good cause may be shown, for example, by delays in equipment delivery, legal challenges, and acts of God. This procedure will apply whether a project has multiple development phases or a single phase.

If, following receipt of a Notice of Failure to Ensure Diligent Development, the holder has satisfactorily complied with each of the requirements of the procedure described above, the authorized officer may grant the holder's request for an extension of the timelines in the approved Plan of Development. If, following receipt of such Notice, the holder does not satisfactorily comply with each of the requirements of this procedure, the authorized officer may elect to suspend or terminate the right-of-way grant pursuant to 43 CFR 2807.17 where such action is justified.

Each right-of-way grant authorizing solar energy development will include terms and conditions requiring the holder to maintain all onsite electrical generation equipment and facilities in accordance with the design standards in the approved Plan of Development. In addition, the grant will specify that any idle, improperly functioning, or abandoned equipment or facilities that have been inoperative for any continuous period of 3 months must be repaired, placed into service, or removed from the site within 30 days from receipt of a written Notice of Failure to Ensure Diligent Development, unless the holder is provided an extension of time by the BLM authorized officer. Upon receipt of such Notice from the BLM authorized officer, the holder must timely repair, place into service, or remove the equipment or facilities described in the Notice. Alternatively, the holder must show good cause for any delays in repairs, use, or removal, estimate when corrective action will be completed, provide evidence of diligent operation of the equipment and/or facilities, and submit a written request for an extension of the 30-day deadline. If the holder satisfies neither approach, the BLM authorized officer may elect to suspend or terminate the authorization in accordance with 43 CFR 2807.17 – 2807.19 where such action is justified. In addition, the BLM may use the posted Performance and Reclamation bond to cover the costs for removal of any idle or abandoned equipment and/or facilities.

All solar energy right-of-way authorizations must include the diligent development provisions of this IM in the terms and conditions of the authorization, consistent with the requirements of 43 U.S.C. 1765(b) and the right-of-way regulations at 43 CFR 2801.2.

## Performance and Reclamation Bond

Title V of FLPMA and the right-of-way regulations authorize the BLM to require a right-of-way holder to provide a bond to secure the obligations imposed by the right-of-way grant (43 U.S.C. 1764(i) and 43 CFR 2805.12(g)). The BLM will require a Performance and Reclamation bond for all solar energy projects to ensure compliance with the terms and conditions of the right-of-way authorization.

Acceptable bond instruments include cash, cashier's or certified check, certificate or book entry deposits, negotiable U.S. Treasury securities equal in value to the bond amount, surety bonds from the approved list of sureties (U.S. Treasury Circular 570) payable to the BLM, irrevocable letters of credit payable to the BLM issued by financial institutions that have the authority to issue letters of credit and whose operations are regulated and examined by a federal agency, or a policy of insurance that provides BLM with acceptable rights as a beneficiary and is issued by an insurance carrier that has the authority to issue insurance policies in the applicable jurisdiction and whose insurance operations are regulated and examined by a federal or state agency. The BLM will not accept a corporate guarantee as an acceptable form of bond. If a state regulatory authority requires a bond to cover some portion of environmental liabilities, such as hazardous material damages or releases, reclamation, or other requirements for the project, the BLM must be listed as an additionally named insured on the bond instrument. This inclusion would suffice to cover the BLM's exposure should a holder default in any environmental liability listed in the respective state bond. Each bond instrument will be reviewed by the appropriate Regional Solicitor for the Department of the Interior prior to its acceptance by the BLM.

The BLM authorized officer will review all bonds on an annual basis to ensure adequacy of the bond amount. The bond will also be reviewed at the time of any right-of-way assignment, amendment, or renewal. The BLM authorized officer may increase or decrease the bond amount at any time during the term of the right-of-way authorization, consistent with the regulations (43 CFR 2805.12(g)).

The BLM authorized officer will identify the total amount of the Performance and Reclamation bond in the decision that supports the issuance of the right-of-way authorization. The BLM will require the holder to post the portion of the bond associated with the activities to be approved by the Notice to Proceed prior to the issuance of that Notice. For example, if the Notice to Proceed is limited to an initial phase of development, the bond amount required to be posted before issuance of the Notice to Proceed will be limited to that phase. The bond amount required to be posted would increase with the issuance of a Notice to Proceed for future phases of the project.

The Performance and Reclamation bond will consist of three components for purposes of determining its amount. The first component will address environmental liabilities including hazardous materials liabilities, such as risks associated with hazardous waste and hazardous substances. This component may also account for herbicide use, petroleum-based fluids, and dust control or soil stabilization materials. If a holder uses herbicides extensively, this component of the bond amount may be significant. The second component will address the decommissioning, removal, and proper disposal, as appropriate, of improvements and facilities. All solar projects involve the construction of substantial surface facilities and the bond amount for this component could be substantial. The third component will address reclamation, revegetation, restoration, and

soil stabilization. This component will be determined based on the amount of vegetation retained onsite and the potential for flood events and downstream sedimentation from the site that may result in offsite impacts, including Clean Water Act violations or other violations of law. The holder of the right-of-way authorization can potentially reduce the bond amount for this component by limiting the amount of vegetation removal as part of the project design and limiting the amount of grading required for project construction.

Ultimately, the Performance and Reclamation bond will be a single instrument to cover all potential liabilities. The entire bond amount could be used to address a single risk event such as hazardous materials release or groundwater contamination regardless of the fact that in calculating the total bond amount other risks were also considered. If the bond is used to address a particular risk, the holder would then be required to increase the bond amount to compensate for this use. This approach to establishing a bond is preferable to one allowing holders to maintain separate bonds for each contingency. If separate bonds are held, an underestimation of one type of liability may leave the BLM responsible for making up the difference, as the funds associated with one bond may not be applicable for the purposes of another. Requiring a single, larger bond will ensure that the holders are bonded with a surety that has the capacity to underwrite the entire amount associated with the grant.

The regulations authorize the BLM to require that applicants submit a Decommissioning and Site Reclamation Plan (DSRP) that defines the reclamation, revegetation, restoration, and soil stabilization requirements for the project area as a component of their Plan of Development (43 CFR 2804.25(b)). The DSRP shall require expeditious reclamation of construction areas and the revegetation of disturbed areas to reduce invasive weed infestation and erosion and must be approved by the BLM authorized officer prior to the grant of the right-of-way. The approved DSRP will be used as the basis for determining the standard for reclamation, revegetation, restoration, and soil stabilization of the project area and, ultimately, in determining the full bond amount.

The BLM has issued policy guidance for determining bonding requirements for 43 CFR 3809 mining operations on the public lands (IM 2009-153, dated June 19, 2009) that provides detailed information about the process for determining the appropriate financial guarantees for intensive land uses on the public lands. This guidance can also be used to assist in calculating the bond amount for utility-scale solar energy development projects on public lands. The guidance requires that mining operators submit a Reclamation Cost Estimate (RCE) to the BLM authorized officer for review to assist in determining the bond amount. Although the right-of-way regulations do not specifically require that a holder of a right-of-way submit a RCE to the BLM, the BLM can require a right-of-way applicant to submit a Plan of Development in accordance with 43 CFR 2804.25(b). Because a RCE is key to determining the bond amount, a figure that is set forth in any decision authorizing a solar energy project on the public lands, BLM policy will be to require all solar energy right-of-way applicants to submit a RCE as part of the DSRP and the overall Plan of Development for a solar energy project. Attachment 1 to IM 2009-153 provides Guidelines for Reviewing Reclamation Cost Estimates and can be used as a guideline to assist in reviewing RCEs submitted for solar energy projects.

To assist in the consistent review of RCEs for solar energy projects and the establishment of bonding amounts for individual projects, the BLM will form a Solar Energy Bond Review Team to provide support to the BLM state and field offices. The Solar Energy Bond Review Team will consist of one representative each from California, Nevada, and Arizona and a BLM Washington Office Right-of-Way Project Manager. This Solar Energy Bond Review Team will assist the BLM state and field offices in the review of RCEs for solar energy projects and provide recommendations to the BLM authorized officer on the Performance and Reclamation bond for a solar energy project.

### Best Management Practices

The BLM is currently preparing a Solar Energy Development Programmatic Environmental Impact Statement (PEIS) that will identify the impacts of solar energy development and potential BMPs that could mitigate or reduce adverse impacts from solar energy development on the public lands. A preliminary set of potential BMPs has been developed as part of the preparation of the PEIS and posted at <http://teamspace/sites/rmpnepadocs> for consideration by BLM field offices as they analyze individual projects. These potential BMPs are set forth in a document entitled BLM Draft Mitigation Measures (October 2009), which can be found at the above website under the Solar PEIS folder, BLM BMPs folder, and BLM Draft Mitigation Measures folder. This set of potential BMPs is not complete and will continue to be modified as comments are received and as relevant information is collected from the processing of site-specific solar energy projects. This collection of potential BMPs is intended to serve as an interim resource to BLM field offices until the PEIS is completed and a Record of Decision has been issued.

The BLM Draft Mitigation Measures (October 2009) document also identifies a preliminary list of project-specific plans that will be required for each solar energy project and provides a brief description of the components of each plan. Many of the mitigation measures required for a project would be addressed within these project-specific plans. Examples of some of these plans include the Decommissioning and Site Reclamation Plan; Grading, Drainage, Erosion and Sedimentation Control Plan; Vegetation Management Plan; Habitat Restoration and Management Plan; Hazardous Materials Management Plan; Cultural Resources Management and Mitigation Plan; and Visual Restoration Monitoring and Compliance Plan. These plans are an essential part of a Plan of Development, which the BLM will require of an applicant (43 CFR 2804.25(b)). The terms and conditions of each right-of-way grant shall require that these plans be included in a Plan of Development and that the holder will fully comply with the terms of the plans. It is anticipated that additional plans will be identified as comments are received and as information is collected from the processing of individual solar energy projects.

### BLM Access to Records

The BLM may require the holder of a solar energy development right-of-way authorization to provide any pertinent environmental, technical, and financial records, reports, and other information, including Power Purchase and Interconnection Agreements, related to project construction, operation, maintenance, and decommissioning, including the production and sale of electricity generated from the approved facilities on public land (43 CFR 2805.12(p); 43 U.S.C. 1765(b); 43 U.S.C. 1764(g); 43 U.S.C. 1761(b)). The BLM may use this information for the

purpose of monitoring the authorization and for periodic evaluation and adjustment of rental fees or other financial obligations under the authorization.

Upon the request of the BLM authorized officer, the appropriate records, reports, or information shall be made available for inspection and duplication by such officer. Any information marked confidential or proprietary will be kept confidential to the extent allowed by law. Failure to cooperate with such request, provide data, or grant access to information or records, may, at the discretion of the BLM authorized officer, result in suspension or termination of the right-of-way authorization. All solar energy right-of-way authorizations must include such disclosure provisions in the terms and conditions of the authorization in accordance with the regulations (43 CFR 2807.17).

**Timeframe:** This policy is effective immediately. Pending applications will be processed consistent with the provisions of this IM.

**Budget Impact:** The application of this policy will have minimal budget impact. The processing of solar energy right-of-way applications are subject to the processing fee provisions of the regulations (43 CFR 2804.14).

**Background:** As part of an overall strategy to develop a diverse portfolio of domestic energy supplies for our future, the Energy Policy Act of 2005 (Public Law 109-58, August 8, 2005) encourages the development of renewable energy resources on the public lands, including solar energy. Section 211 of the Energy Policy Act encourages approval of non-hydropower renewable energy projects of at least 10,000 megawatts on the public lands by 2015. Secretarial Order 3285A1, signed on March 11, 2009, and amended on February 22, 2010, established the development of renewable energy as a priority of the Department of the Interior.

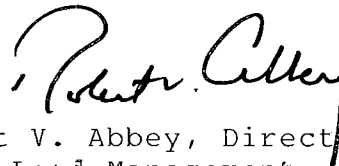
There is significant potential for the development of solar energy on the public lands in the southwestern states. The BLM has identified some 23 million acres of the public lands with utility-scale solar energy potential, and over 200 right-of-way applications have been submitted to the BLM for processing. As the cost of producing solar energy declines in future years, and as additional transmission capacity is developed, there will be an even greater interest in locating utility-scale solar energy projects on the public lands. This policy IM helps ensure environmentally-responsible development of solar projects on public lands and provides for effective processing of the right-of-way applications.



**Manual/Handbook Sections Affected:** This IM transmits interim policy that will be incorporated into BLM Manual 2801, Right-of-Way Management, and Handbook H-2801-1 during the next revision.

**Coordination:** The BLM state offices reviewed and provided input to this policy prior to its finalization.

**Contact:** If you have questions, please contact Michael Nedd, Assistant Director for Minerals and Realty Management, at 202-208-4201, or your staff may contact Ray Brady, Renewable Energy Policy Team, at 202-912-7312, or ray\_brady@blm.gov.



/s/ Robert V. Abbey, Director  
Bureau of Land Management