

# RECLAMATION

*Managing Water in the West*

## Guidebook – Use Authorizations for Non-Hydro Renewable Energy on Reclamation Lands



U.S. Department of the Interior  
Bureau of Reclamation  
Research and Development Office

September 2015

## **Mission Statements**

The U.S. Department of the Interior protects America's natural resources and heritage, honors our cultures and tribal communities, and supplies the energy to power our future.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

**REPORT DOCUMENTATION PAGE**

*Form Approved  
OMB No. 0704-0188*

<b>T1. REPORT DATE</b> September 2015			<b>T2. REPORT TYPE</b>		<b>T3. DATES COVERED</b> September 1, 2015	
<b>T4. TITLE AND SUBTITLE</b> Guidebook – Use Authorizations for Non-Hydro Renewable Energy on Reclamation Lands					<b>5a. CONTRACT NUMBER</b>	
					<b>5b. GRANT NUMBER</b>	
					<b>5c. PROGRAM ELEMENT NUMBER</b> 1541 (S&T)	
<b>6. AUTHOR(S)</b> Curtis Brown (Reclamation retired), Erin Foraker (Reclamation active), Brian Jobst (Turning Point Associates, LLC), Charles Johnson (Reclamation retired), Joe Liebhauser (PHED, LLC), Mike Norris (Reclamation active)					<b>5d. PROJECT NUMBER</b>	
					<b>5e. TASK NUMBER</b>	
					<b>5f. WORK UNIT NUMBER</b>	
<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b> Asset Management Office, Power Resources Office, Research and Development Office Denver Federal Center PO Box 25007 Denver, CO 80225-0007					<b>8. PERFORMING ORGANIZATION REPORT NUMBER</b>	
<b>9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b> Bureau of Reclamation Denver Federal Center PO Box 25007 Denver, CO 80225-0007 SET					<b>10. SPONSOR/MONITOR'S ACRONYM(S)</b>	
					<b>11. SPONSOR/MONITOR'S REPORT NUMBER(S)</b> 303-445-2931	
<b>12. DISTRIBUTION / AVAILABILITY STATEMENT</b> Final report can be downloaded from Reclamation's website: <a href="https://www.usbr.gov/power">https://www.usbr.gov/power</a>						
<b>13. SUPPLEMENTARY NOTES</b>						
<b>14. ABSTRACT (Maximum 200 words)</b> This guidebook assists Bureau of Reclamation (Reclamation) personnel in screening, processing, and administering use authorizations for Non-Hydro Renewable Energy (N-HRE) projects on Reclamation lands consistent with the agency's strategic objective to create and implement policies for N-HRE projects ( <i>The Bureau of Reclamation's Sustainable Energy Strategy, Fiscal Year 2013 – 2017</i> ).						
<b>15. SUBJECT TERMS</b>						
<b>16. SECURITY CLASSIFICATION OF:</b>			<b>17. LIMITATION OF ABSTRACT</b>	<b>18. NUMBER OF PAGES</b>	<b>19a. NAME OF RESPONSIBLE PERSON</b>	
<b>a. REPORT</b> U	<b>b. ABSTRACT</b> U	<b>c. THIS PAGE</b> U			<b>19b. TELEPHONE NUMBER</b> 303-445-2125	

# Acronyms and Abbreviations

BLM	Bureau of Land Management
BMP	Best Management Practices
CFR	Code of Federal Regulations
D&S	Directives and Standards
DSRP	Decommissioning and Site Reclamation Plan
EISA	Energy Independence and Security Act of 2007
EO	Executive Orders
MW	megawatt
N-HRE	Non-Hydro Renewable Energy
OMB	Office of Management and Budget
POD	Plan of Development
RCE	Reclamation Cost Estimate
Reclamation	Bureau of Reclamation
RM	Reclamation Manual
RMP	resource management plan
Secretary	Secretary of the Interior
Secretarial Order	Secretarial Order 3285A1
U.S.C.	United States Code

# Contents

	<i>Page</i>
<i>Contents</i>	<i>i</i>
<b><i>About This Guidebook</i></b> .....	<b>3</b>
<b><i>Federal Renewable Energy Statutes and Policy</i></b> .....	<b>3</b>
<b>Reclamation’s N-HRE Approach</b> .....	<b>4</b>
<b>Statutory Authority</b> .....	<b>5</b>
<b><i>Pre-Application Discussions</i></b> .....	<b>5</b>
<b><i>Application Review and Screening</i></b> .....	<b>8</b>
<b>Screening Criteria</b> .....	<b>9</b>
<b>Due Diligence Needs</b> .....	<b>11</b>
<b>Term of Authorization</b> .....	<b>12</b>
<b>Diligent Development</b> .....	<b>13</b>
<b>Performance Bond</b> .....	<b>14</b>
<b>Decommissioning and Site Reclamation Plan</b> .....	<b>16</b>
<b><i>Best Management Practices</i></b> .....	<b>16</b>
<b><i>Reclamation Access to Records</i></b> .....	<b>17</b>
<b><i>Rental Fees</i></b> .....	<b>17</b>
<b><i>Rent Language in Authorization</i></b> .....	<b>18</b>

## About This Guidebook

This guidebook has been prepared to assist Bureau of Reclamation (Reclamation) personnel in screening, processing, and administering use authorizations for Non-Hydro Renewable Energy (N-HRE) projects on Reclamation lands consistent with the agency's strategic objective to create and implement policies for N-HRE projects (*The Bureau of Reclamation's Sustainable Energy Strategy, Fiscal Year 2013 – 2017*). Reclamation has a long and successful history providing renewable, clean, reliable, and affordable hydropower to its customers. As technology and demands for power and water use evolved over the last 100 plus years, Reclamation has adapted to these changes to take advantage of new technologies to help meet the nation's water and energy needs. As the agency moves well into its second century, Reclamation will play an important role in developing and supporting renewable energy production, and the development, conservation, and the integration of emerging renewable energy technologies into the Nation's power grid. Reclamation will continue to improve and enhance our renewable hydropower capabilities and also support the development of N-HRE resources, such as solar, wind, and geothermal.

Over the past several decades a robust private sector N-HRE industry has developed, resulting in many new large-scale projects on both Federal and private lands. The Bureau of Land Management (BLM), the largest land manager in the Federal government, has been at the forefront of permitting these projects on Federal lands. Through extensive experience the BLM has developed detailed policies and procedures to effectively and fairly handle such projects. Much of the guidance and recommended practices in this guidebook are drawn from BLM's experience. This guidebook both avoids "reinventing" methodology and helps promote consistency among Department of Interior agencies handling N-HRE projects on Federal lands.

## Federal Renewable Energy Statutes and Policy

Several Federal statutes provide a legal framework for Reclamation's efforts to increase energy conservation and optimize generation of clean, renewable energy. Those acts include: the Energy Policy Act of 2005 (Public Law 109-58); the Energy Independence and Security Act of 2007 (EISA) (Public Law 110-140); and the Omnibus Public Land Management Act of 2009 (Public Law 111-11, Title IX Bureau of Reclamation Authorizations, Subtitle F – Secure Water).

In addition to statutes, Federal administration directives influence program activities, including the Presidential Executive Orders (EO) 13693, *Planning for Federal Sustainability in the Next Decade*, signed March 19, 2015. This EO directs Federal agencies to reduce greenhouse emissions by 40 percent over the next decade from 2008 levels and to increase the share of electricity consumed by the Federal Government from renewable sources to 30 percent. The Federal Government is the single largest consumer of energy in the United States.

*The President's Climate Action Plan* released in June 2013 details the case for Federal action and leadership in response to climate change. Key elements of this strategy include accelerating and

## Use Authorizations for Non-Hydro Renewable Energy on Reclamation Lands

expanding the deployment of renewable energy projects and implementing efficiency and conservation programs that can help reduce greenhouse gas emissions and prepare the nation for the impacts of climate change.

The Department of the Interior has issued Secretarial Order 3285, *Renewable Energy Development by the Department of the Interior*, which establishes that encouraging the production, development, and delivery of renewable energy is one of the Department's highest priorities. This priority is further demonstrated in the Department's *Strategic Plan for Fiscal Years 2014 – 2018* which includes developing renewable energy potential as a means of supporting the Department's goal of securing America's energy resources. In relation to this Strategic Plan, Reclamation has established performance targets related to hydropower facility reliability and generation availability during peak demand periods. The Strategic Plan also includes a Priority Goal for Renewable Energy Sources, seeking to increase approved capacity for production of non-hydro renewable (solar, wind, and geothermal) energy resources on lands managed by the Department. Reclamation is uniquely positioned to support these Federal efforts.

### Reclamation's N-HRE Approach

To support future renewable energy projects, Reclamation released its Sustainable Energy Strategy on November 14, 2013. Strategic objective 2.6 calls for the creation and implementation of policies and guidance on the use of land leasing authorities for the development of non-Federal renewable energy projects on Reclamation lands. This guidebook has been developed to assist in meeting that objective.

Reclamation facilitates responsible development of N-HRE energy projects on federally managed lands in accordance with the provisions of Secretarial Order 3285A1 dated March 11, 2009, as amended February 22, 2010. Such development must be compatible with hydroelectric and other project purposes as well as with relevant Federal statutes and existing land use plans including those associated with adjoining lands. To minimize conflicts and increase the likelihood of success in the use authorization process, Reclamation uses early coordination and careful review of proposed renewable energy projects with Federal, State, Tribal and local government agencies before committing significant resources to the processing of N-HRE development use authorization applications. In order to achieve these goals, Reclamation suggests that all prospective applicants schedule and participate in at least one pre-application meeting with Reclamation before filing an application for N-HRE development. In addition, if not previously held, meetings are suggested for any existing applications where an environmental review process has not been initiated for a project. This approach is consistent with the goals of Presidential Executive and Secretarial Orders to facilitate the responsible development of N-HRE projects on federally managed lands.

Presently, authorizing the use of Reclamation lands by third parties for any use compatible with Reclamation project uses is guided primarily by the regulations of 43 Code of Federal Regulations (CFR) 429, and current Reclamation Manual (RM) Directives and Standards (D&S) including, but not limited to *RM D&S, LND 08-01, Land Use Authorizations*. While these provide sound direction for issuing use authorizations in general, N-HRE projects are not

specifically mentioned. At times this has proven problematic for Reclamation regions where N-HRE project developers have sought land use authorizations. This guidebook is intended to help in that regard.

This guidebook relies on many BLM materials that guide their processes for granting rights-of-way for N-HRE projects. Reclamation has a long history of using established land use processes, practices, fee schedules and other methods/materials from the BLM. No Reclamation policies prohibit this practice, provided the N-HRE use authorization is compatible with hydroelectric and other project purposes as well as with relevant Federal statutes and existing land use plans including those associated with adjoining lands.

This guidebook also draws on the experiences of Reclamation personnel involved in land use authorizations for proposed and actual N-HRE projects on Reclamation lands. Their insights can assist others in using practices that worked and avoiding those that were problematic.

This guidebook includes a mix of terminology; some of it is prescriptive (e.g., “will, must”) and some of it is advisory (e.g., “suggested, recommended”). Prescriptive language has been used to denote actions that are required based on statutes, the CFR, or the RM. Advisory language has been used to describe actions that are recommended, but not required. Those recommendations are based on the experiences of BLM and Reclamation lands professionals.

## Statutory Authority

Section 10 of the Reclamation Act of June 17, 1902 (43 United States Code [U.S.C.] 373), provides the Secretary of the Interior (Secretary) with the authority to “perform any and all acts and to make such rules and regulations as may be necessary and proper” for carrying out the provisions of the Act. Section 10 of the Reclamation Project Act of 1939 (43 U.S.C. 387) provides the Secretary the authority, in his or her discretion, to grant rights-of-way or land use authorizations that include leases, licenses, permits, and easements, but must be compatible with project purposes and uses (for additional discussion of compatibility with project purposes, see Pre-Application Discussions). These two acts provide Reclamation with the general statutory authority to issue rules on authorizing or prohibiting uses of Reclamation land, facilities, and water bodies.

## Pre-Application Discussions

Applications for proposed N-HRE development projects are processed as use authorizations under Title 43, Part 429 of the CFR. The processing of N-HRE development applications must comply with Reclamation’s planning, environmental, and use authorization requirements.

*N-HRE is an accepted use of Reclamation lands as long as it is compatible with hydroelectric and other project purposes.* This is consistent with 43 CFR 429.14 which indicates that compatibility with authorized project purposes, project operations, safety and security will be considered when reviewing land use authorizations. Accordingly, proposed land uses cannot

## Use Authorizations for Non-Hydro Renewable Energy on Reclamation Lands

interfere with project purposes, but such uses may or may not be water or power related. Examples of potentially compatible land uses include, but are not limited to row crops, roads, pipelines, fences, free-range cattle, solar panels, windwills, water pumps and timber harvesting. Current Reclamation regulations intentionally do not list all possible land uses because it is not feasible to do so. Instead, the regulations set forth in 43 CFR 429.3 refer to general types of allowable lands uses and allow Reclamation wide latitude considering and approving use authorizations compatible with project uses or other considerations.

Consistent with the regulations at 43 CFR 429, at least one pre-application meeting is suggested to identify potential environmental and siting constraints, determine whether lands are available for proposed uses, discuss potential alternative site locations, discuss timeframes for processing proposed applications, inform applicants of financial obligations in processing an application, and to facilitate coordination with Federal, State, Tribal and local government agencies. The appropriate Reclamation Regional Director or designee may determine that additional pre-application meetings are necessary before Reclamation will accept a use authorization application. It is recommended that Reclamation not accept new N-HRE development use authorization applications without holding the pre-application meeting.

Before a use authorization application is submitted to Reclamation, the pre-application meeting(s) can help:

- Identify necessary studies of environmental, wildlife, cultural, or other resources, permits, or other information that may be needed
- Identify other existing authorized uses within or near the project area
- Allow for possible consideration of potential alternative site locations and project configurations
- Identify lands with high conflict potential and identify potential conflicts with Reclamation project purposes or sensitive resource values.
- Provide an opportunity for N-HRE projects to be directed toward other areas such as previously disturbed sites, areas adjacent to previously disturbed or developed sites, and locations that minimize construction of roads and/or transmission lines and avoid potential interference with hydroelectric or other project purposes
- Allow Reclamation to learn about the interests and objectives of the applicant, including any constraints or flexibilities with respect to the proposal (e.g., timing or location constraints based on loan guarantees, power purchase agreements, or transmission connections) and any consideration that has been given to siting on non-Federal lands

Reclamation lands are sometimes adjacent to or near lands managed by other agencies (e.g., BLM, Forest Service, Department of Defense). N-HRE projects may already be established on these lands or under consideration or those lands have been prioritized for N-HRE development (e.g., BLM's Solar Energy Zones). It is suggested that in the pre-application

meeting Reclamation personnel discuss these issues and options with the potential applicant, when applicable.

A thorough and mutually informative pre-application meeting between Reclamation and the prospective applicant is valuable in avoiding acceptance of applications that are fundamentally flawed or incompatible with Reclamation projects. Caution should be exercised by Reclamation personnel to ensure that in-depth discussions, analysis of details, review of designs, and other application processing activities are appropriately considered after receipt of a formal use authorization application and cost recovery fees. As a rule of thumb, subject to project-specific situations, the pre-application meeting and associated discussions and coordination should generally be limited to a total of 2 to 6 total labor hours for all Reclamation involvement (to ensure compliance with constraints established by the Antideficiency Act of 1982 (Public Law 97-258) and OMB Circular A-25). Reclamation work beyond that level should be a part of application processing and review after receipt of a formal application and cost recovery funds.

In unusual cases, if more complex and involved ‘up-front’ discussions or work is warranted before a full and complete application can be developed, there are two typical ways to accomplish this:

- Reclamation may accept applications that are lacking in full and complete detail to allow establishment of a contract file and receipt of processing costs to allow completion of additional detailed information during processing.
- If the potential applicant and Reclamation determine formal application submittal should be preceded by additional pre-application coordination, Reclamation and the potential applicant may agree to enter into a formal funding agreement to allow the potential applicant to fund additional pre-application work beyond the typical and reasonable 2 to 6 hour level.

Pre-application meetings also allows Reclamation to learn about the interests and objectives of the applicant, including any constraints or flexibilities with respect to the proposal (e.g., timing or location constraints based on loan guarantees, power purchase agreements, or transmission connections) and any consideration that has been given to siting on non-Federal lands. Other Federal agencies (e.g., BLM, National Park Service, U.S. Fish and Wildlife Service, Department of Defense, Forest Service, or U.S. Army Corps of Engineers), Tribes, and State and local agencies (e.g., State fish and game agencies), as appropriate, may be invited to participate in the pre-application meeting when it is obvious that they may have significant issues and concerns so those can be given consideration early in the process. More typically, an interagency coordination meeting of this sort would be scheduled and coordinated in the initial processing of the formal application.

The pre-application meeting can also serve as an opportunity to encourage the potential applicant to initiate early discussions with other agencies, as above, as well as with existing authorized users and other parties that may be affected by the proposed project. These outreach efforts by the applicant can inform existing affected parties of the proposed N-HRE development project, discuss how the proposed project may affect their operations, address possible mitigation or

## **Use Authorizations for Non-Hydro Renewable Energy on Reclamation Lands**

compensation strategies, and encourage the existing authorized users to participate in the future public involvement and environmental review processes for the project when the formal application is submitted to Reclamation.

Reclamation should document the pre-application meeting for inclusion into the contract file if a formal application is submitted for a use authorization, and also for use in any environmental review document prepared for the project as a part of the scoping process as this information may be useful during scoping meetings and other public information efforts that are part of the environmental review process. Before allowing public access to financial or technical information provided by the potential applicant or applicant, Reclamation should establish a clear understanding of what, if any, information is requested to be held as proprietary. Thorough documentation of the pre-application meeting will provide a public record that will reflect the preliminary review that went into developing the project proposal.

It is also important to review the existing Reclamation resource management plan decisions (if any) that are used to guide management of the land. Pre-application discussion may result in the applicant modifying the project proposal to bring it into conformance with existing laws, regulations, policies, and resource management plans, avoiding conflicts with Reclamation projects or other existing uses.

## **Application Review and Screening**

Reclamation may elect not to accept a N-HRE development use authorization application without holding the pre-application meetings. Based on the discussions during the pre-application meetings and the recommendations of affected Federal, State, Tribal, and local government land managers, the appropriate Reclamation Regional Director or designee may recommend that an application not be filed for the proposed project or that a proposed project be modified prior to submission of an application. If a proposal includes areas where development would cause impacts to project purposes and sensitive resources and values that are the basis for special designations or protections, Reclamation may exercise its discretion to reject the application. Additionally, no application will be processed until an applicant has submitted a complete use authorization application with sufficient detail to initiate the environmental analysis and review process, and the applicant has provided cost recovery fees as required by the regulations (43 CFR 429.17 and Office of Management and Budget [OMB] Circular A-25).

Reclamation will review all N-HRE development use authorization applications for compatibility with Reclamation's resource management plan (RMP). In cases where N-HRE development proposals are not compatible with the RMP, it may be appropriate to amend the RMP concurrently with processing the application using the same environmental review process. Projects that would require major RMP revisions with potentially significant environmental impacts should be avoided.

N-HRE development proposals in specially designated areas that are closed to use authorization applications may be rejected. Reclamation may also exercise its discretion to reject an application if a proposed project is determined, in consultation with other appropriate agencies,

that could cause unacceptable impacts to important resources and values, including impacts to specially designated areas.

When Reclamation accepts an N-HRE development use authorization application, it retains the discretion to prioritize the processing of such applications. The use authorization regulations (43 CFR 429) define the processing timeframes for use authorization applications, but also provide authority to Reclamation’s Regional Directors or designees to notify the use authorization applicant in writing of the reasons for delays in processing an application. Reclamation has the discretion to screen applications for environmental or other conflict issues and to prioritize the processing of applications based on those considerations.

The screening and prioritization process provides an opportunity to direct development away from lands with high conflict or sensitive resource values and towards low conflict areas such as previously disturbed sites, areas adjacent to previously disturbed or developed sites, and locations that minimize construction of new roads and/or transmission lines. Applications in high conflict areas will be more difficult to process and require a greater level of consultation, analysis, and mitigation to resolve issues or may not be feasible to authorize. Such applications may be given a lower priority for action. Applications with fewer resource conflicts are anticipated to be easier and thus less costly and time-consuming for Reclamation to process. Projects that avoid impacts to specially designated areas will be given a higher priority for processing. However, it should be noted that an application that may have initially been identified as a project in a low conflict area, might later through additional surveys and data collection be determined to be in an area with greater resource conflict issues. These project applications could later be determined to be a lower priority for processing.

Reclamation can use the following screening criteria to assist in prioritizing the processing of N-HRE development use authorization applications.

## Screening Criteria

**Low Potential for Conflict** – timely or expedited authorizations possible:

- Lands without hydroelectric or other project purpose or resource conflicts
- Previously disturbed sites or areas adjacent to previously disturbed or developed sites without significant resource conflicts
- Locations that minimize construction of new roads and/or transmission lines
- Lands adjacent to designated transmission corridors without significant resource conflicts or potential adverse affects to special areas designated on subject or nearby lands
- Lands identified as suitable by Reclamation for the proposed use

## Use Authorizations for Non-Hydro Renewable Energy on Reclamation Lands

**Medium Potential for Conflict** – projects that have resource conflicts that can potentially be resolved:

- Designated areas that provide for some limited development
- Use authorization avoidance areas
- Areas where project development may adversely affect properties listed in the National Register of Historic Places or areas with sensitive cultural and/or historic resource values and other designated areas such as National Natural Landmarks/Trails and National Historic Landmarks/Trails
- Sensitive habitat areas, riparian areas, or areas of importance for Federal or state sensitive species
- Department of Defense operating areas, including areas with significant radar, airspace, or land use conflicts
- Areas where project development may have significant effects on lands acquired for conservation purposes
- Developed recreation sites and/or facilities
- Projects with proposed groundwater uses within groundwater basins that have been already appropriated by state water resource agencies

**High Potential for Conflict** – more complex projects that will require a greater level of consultation, analysis, and mitigation to resolve issues or may not be feasible to authorize:

- Lands with significant hydroelectric or other project purpose or resource conflicts
- Previously undisturbed sites or areas adjacent to previously undisturbed or developed sites
- Locations that require construction of multiple new roads and/or a new transmission line
- Designated habitat for federally threatened and/or endangered species if project development is likely to result in the destruction or adverse modification of that critical habitat
- Use authorization exclusion areas

These screening criteria can be used by Reclamation to assist in prioritizing the processing of and in determining appropriate actions for N-HRE development use authorization applications. The processing of applications with the least resource conflicts should facilitate the development

of environmentally responsible N-HRE projects on Reclamation lands, consistent with the provisions of the Secretarial Order. Applications with low resource conflicts would generally be considered projects that can more easily be processed by Reclamation. Applications with high resource conflicts would generally be considered to be more difficult to process.

## Due Diligence Needs

Reclamation wants to avoid the potential for land speculators to file applications for N-HRE use authorizations on Reclamation lands that may hinder other applicants with serious interests in the potential development of N-HRE resources on such lands. These concerns can be mitigated by applying the applicant qualification standards, requesting the timely submittal of a Plan of Development (POD), and informing project applicants at the time an application is filed that use authorization applications are *not assignable interests*.

It is suggested that all N-HRE applications include information on the financial and technical capability of the applicant to construct, operate, maintain and decommission the project. Reclamation has the authority to deny any application where the applicant cannot demonstrate the technical or financial capability to construct the project, operate it, and ultimately decommission the project. It is suggested that the appropriate Reclamation Regional Director or designee place a priority on the review of pending applications and reject any applications where the applicant cannot demonstrate the technical or financial capability.

A variety of factors can be considered in determining whether an applicant has the financial and technical capability to construct, operate, maintain, and decommission a project. Applicant qualifications can be demonstrated by international or domestic experience with N-HRE projects on either Federal or non-Federal lands. The applicant should provide information on the availability of sufficient capitalization to carry out development, including the preliminary study phase of the project and the environmental review and clearance process. Applicants in bankruptcy or with other financial difficulties would generally present financial risk and should be encouraged to provide additional information regarding financial capability. Failure to provide such additional information can be the basis for the appropriate Reclamation Regional Director or designee to reject the application pursuant to the regulations (43 CFR 429.13(a)). Further evidence of financial and technical capability can include conditional commitments of DOE loan guarantees; confirmed power purchase agreements; engineering, procurement and construction contracts; and supply contracts with credible third-party vendors for the manufacture and/or supply of key components for the N-HRE project facilities.

During the assessment of technical and financial capability, the appropriate Reclamation Regional Director or designee should also inform applicants that such requirements are continuous throughout the application process. Reclamation may periodically seek confirmation of this. Reclamation's assigned Regional Director or designee should additionally inform applicants that such technical and financial capability will likely become a condition of any use authorization, and failure to sustain technical and financial capability for the development of an approved project could be grounds for termination of the authorization.

## **Use Authorizations for Non-Hydro Renewable Energy on Reclamation Lands**

Reclamation requires that a POD be submitted for all N-HRE development use authorization applications. Reclamation will not accept a POD that is simply conceptual. The POD must be of sufficient detail to provide the information needed to begin the environmental analysis and review process for a proposed N-HRE project on Reclamation lands.

It is important that diligence be demonstrated by the applicant in the timely submittal of an acceptable POD to ensure that Reclamation processes those applications that are most likely to result in appropriate N-HRE development on Reclamation lands. Reclamation's assigned Regional Director or designee should place a priority on the review of pending applications and reject any applications where the applicant has not demonstrated diligence in the completion and submittal of an acceptable POD to Reclamation for review.

The appropriate Reclamation Regional Director or designee typically initiates the due diligence process by requesting, in writing, submittal of a complete POD to Reclamation for review. The applicant may be requested to provide the POD within 90 days. If the applicant does not respond within 90 days, or if the applicant has responded and the information is not sufficient, the appropriate Reclamation Regional Director or designee may send a second written request with a 60-day response. A final 30-day show cause letter may be provided to the applicant prior to issuing any decision to reject the application for failure to respond. Many PODs for N-HRE projects that have been submitted to the BLM are publicly available through standard Internet searches and provide sound examples for both Reclamation personnel and use authorization applicants.

### **Term of Authorization**

In accordance with Reclamation's use authorization regulations, the term or length of a N-HRE use authorization is limited to a reasonable term. The regulations and the Reclamation Manual further articulate a number of factors that Reclamation considers in determining a reasonable term, including the overall costs and useful life of the projects. Most major use authorizations also include provisions for consideration of the renewal of use authorizations.

Due to the substantial investments required for typical renewable energy projects and the projected life of these facilities, it is prudent and in the public interest to provide for a term of renewable energy use authorizations that provide a reasonable period of time for construction, development, and continued operations. The life of a renewable energy facility is typically 25 to 30 years. The terms of the land use authorization are at Reclamation's discretion; however, it is reasonable to consider a term commensurate with the life of the project. Ultimately, the term for each N-HRE use authorization is at the discretion of the appropriate Reclamation Regional Director or designee. Reclamation will also typically include in each N-HRE use authorization a specific provision allowing for consideration of renewal, consistent with Reclamation requirements.

Consistent with 43 CFR 429.7 any use authorization for a term of 25 years or longer must have consent of any involved water user organization. Concurrence in and approval of uses for less than a 25-year period may be requested of the water users organization at the discretion of the

appropriate Reclamation Regional Director. As a minimum, the water user's organization shall be notified of the use authorization application prior to its being granted.

## Diligent Development

The use authorization conveys to the holder only the rights that the contract expressly contains and the holder must comply with all terms and conditions included in the N-HRE use authorization. All N-HRE use authorizations will likely include a provision that specifies that ground-disturbing activities cannot begin until Reclamation's assigned Regional Director or designee issues a Notice to Proceed. To facilitate efficient development of renewable energy on the Reclamation lands, Reclamation prefers that each N-HRE use authorization 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 N-HRE use authorization. Each contract will typically specify that construction must be completed within the timeframes in the approved POD, 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.

Reclamation will likely not authorize more than three development phases for any renewable energy use authorization. If an approved POD provides for phased development, the use authorization will likely 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 appropriate Reclamation Regional Director or designee may suspend or terminate the authorization if the holder fails to comply with the diligent development terms and conditions of the authorization. Before suspending or terminating the authorization, Reclamation 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 use authorization. This notice may be satisfied by Reclamation sending a Notice of Failure to Ensure Diligent Development.

To address a failure to comply with a use authorization contract's diligent development provisions, the holder should show good cause (e.g., delays in equipment delivery, legal challenges, and acts of God) 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 POD. This procedure applies whether a project has multiple development phases or a single phase.

After receiving a Notice of Failure to Ensure Diligent Development, if the holder has satisfactorily complied with each of the needs of the procedure described above, Reclamation's assigned Regional Director or designee may approve the holder's request for an extension of the timelines in the approved POD. If the holder does not satisfactorily comply with each of the needs of this procedure, Reclamation's assigned Regional Director or designee may elect to suspend or terminate the use authorization where such action is justified.

Each N-HRE use authorization will likely include terms and conditions requiring the holder to maintain all onsite electrical generation equipment and facilities in accordance with the design

## **Use Authorizations for Non-Hydro Renewable Energy on Reclamation Lands**

standards in the approved POD. In addition, the use authorization contract must specify that any idle, improperly functioning, or abandoned equipment or facilities that have been inoperative for any continuous period of 3 months should 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 appropriate Reclamation Regional Director or designee. Upon receipt of such Notice from the appropriate Reclamation Regional Director or designee, the holder should timely repair, place into service, or remove the equipment or facilities described in the Notice. Alternatively, the holder should 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 appropriate Reclamation Regional Director or designee may elect to suspend or terminate the use authorization. In addition, at its discretion, Reclamation may use the posted Performance Bond to cover the costs for removal of any idle or abandoned equipment and/or facilities.

All N-HRE use authorizations should include diligent development provisions in the terms and conditions of the authorization, consistent with sound land management practices and Reclamation's stewardship of public resources.

### **Performance Bond**

Reclamation will require a Performance Bond for all renewable energy projects to ensure compliance with the terms and conditions of the use authorization and the requirements in this section. Reclamation's regulations authorize Reclamation to require a N-HRE use authorization holder to provide a bond to secure the obligations imposed by the use authorization (43 CF 429.29).

Acceptable bond instruments include cash, cashier's or certified checks, 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 Reclamation, irrevocable letters of credit payable to Reclamation 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 Reclamation 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. Reclamation will likely 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, remediation, or other requirements for the project, Reclamation must be listed as an additionally named insured on the bond instrument. This inclusion would suffice to cover Reclamation's exposure should a holder default in any environmental liability listed in the respective state bond. The appropriate Reclamation Regional Solicitor will review each bond instrument prior to Reclamation's acceptance.

The appropriate Reclamation Regional Director or designee will review all bonds on an annual basis to ensure adequacy of the bond amount in accordance with good stewardship practices. The

bond will also be reviewed at the time of any N-HRE use authorization assignment, amendment, or renewal. The appropriate Reclamation Regional Director or designee may increase or decrease the bond amount at any time during the term of the use authorization.

The appropriate Reclamation Regional Director or designee will identify the total amount of the Performance Bond in the decision that supports the issuance of the N-HRE use authorization. Reclamation 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 were limited to an initial phase of development, the bond amount necessary to be posted before issuance of the Notice to Proceed would be limited to that phase. The bond amount to be posted would increase with the issuance of a Notice to Proceed for future phases of the project.

The Performance Bond will typically consist of three components for purposes of determining its amount:

- **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.
- **Decommissioning, removal, and proper disposal**, as appropriate, of improvements and facilities. If a renewable energy project involves the construction of substantial surface facilities, the bond amount for this component could be substantial.
- **Reclamation, re-vegetation, restoration, and soil stabilization**. This component may be determined based on the amount of vegetation that is 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 N-HRE use authorization could 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 Bond should 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 were used to address a particular risk, the holder would then need 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 Reclamation 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 can help ensure that the holders are bonded with a surety that has the capacity to underwrite the entire amount associated with the use authorization contract.

## Decommissioning and Site Reclamation Plan

Reclamation may require that applicants submit a Decommissioning and Site Reclamation Plan (DSRP) that defines the reclamation, re-vegetation, restoration, and soil stabilization requirements for the project area as a component of their POD. The DSRP should specify the expeditious reclamation of construction areas and the re-vegetation of disturbed areas to reduce invasive weed infestation and erosion and must be approved by Reclamation's assigned Regional Director or designee prior to the approval of the use authorization. The approved DSRP will be used as the basis for determining the standard for reclamation, re-vegetation, restoration, and soil stabilization of the project area and, ultimately, in determining the full bond amount. Multiple DSRPs for N-HRE projects that have been submitted to the BLM are publicly available through standard Internet searches and provide sound examples for both Reclamation personnel and use authorization applicants.

The BLM has issued policy guidance for determining bonding requirements for 43 CFR 3809 mining operations on public lands (Informational Memorandum 2009-153, dated June 19, 2009) that provides detailed information about the process for determining the appropriate financial guarantees for intensive land uses on Federal lands. This guidance can also be used to assist in calculating the bond amount for utility-scale renewable energy development projects on lands under the responsibility of Reclamation. The guidance requires that mining operators submit a Reclamation Cost Estimate (RCE) for review to assist in determining the bond amount. Although the use authorization regulations do not specifically require that a holder of a use authorization submit a RCE to Reclamation, the agency can require a use authorization applicant to submit a POD.

Because a RCE is key to determining the bond amount, a figure that is set forth in any decision authorizing a renewable energy project on Reclamation lands, Reclamation suggests all N-HRE use authorization applicants to submit a RCE as part of the DSRP and the overall POD for a renewable energy project. Attachment 1 to BLM's Informational Memorandum 2009-153 provides Guidelines for Reviewing Reclamation Cost Estimates and can be used as a guideline to assist in reviewing RCEs submitted for N-HRE projects.

To assist in the consistent review of RCEs for renewable energy projects and the establishment of bonding amounts for individual projects, the BLM formed a Solar Energy Bond Review Team. Reclamation can use the guidelines established by this team to review of RCEs for renewable energy projects and provide recommendations on the Performance Bond for renewable energy projects.

## Best Management Practices

The BLM has identified Best Management Practices (BMP) that can mitigate or reduce adverse impacts of renewable energy development on federally managed lands. Reclamation can use these BMPs as guidance. available at:

[http://www.blm.gov/pgdata/etc/medialib/blm/wo/MINERALS\\_REALTY\\_AND\\_RESOURCE](http://www.blm.gov/pgdata/etc/medialib/blm/wo/MINERALS_REALTY_AND_RESOURCE)

[\\_PROTECTION\\_/energy/renewable\\_references.Par.1568.File.dat/RenewableEnergyVisualImpacts\\_BMPs.pdf](#)

The BMPs presented in that document are designed to provide safe and efficient operations while minimizing the undesirable impacts on visual resources. Proactively incorporating BMPs into project planning and development typically results in a more efficient review process, greater stakeholder acceptance of proposed projects, and in many cases, reduced remediation costs. Their effective use helps Reclamation fulfill its mandate to manage, develop and protect resources in an environmentally and economically sound manner in the interest of the American public.

## Reclamation Access to Records

Reclamation may require the holder of a N-HRE use 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 Reclamation lands. Reclamation 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.

The appropriate records, reports, or information shall be made available for inspection upon the request of Reclamation's assigned Regional Director or designee. 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 Reclamation's assigned Regional Director or designee, result in suspension or termination of the use authorization. All N-HRE use authorizations should include such disclosure provisions in the terms and conditions.

## Rental Fees

The holder of a N-HRE use authorization must pay an annual rent in conformance with the regulations (43 CFR 429). Reclamation will calculate rents on all renewable energy use authorizations in accordance with Reclamation's Directives and Standards. These allow Reclamation to set use fees by using the schedules developed by other agencies. The BLM has already developed instructions for determining use fees for renewable energy projects. For consistency, to reduce the need for costly individual appraisals, and to expedite the process, Reclamation regularly uses the BLM's process; Reclamation Directive and Standard LND 05-01 expressly allows the adoption of the BLM process, available at: [http://www.blm.gov/wo/st/en/info/regulations/Instruction\\_Memos\\_and\\_Bulletins/national\\_instruction/2010/IM\\_2010-141.html](http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2010/IM_2010-141.html)

Whatever method is used to calculate land use fees, that method must be approved by the appropriate Regional Director or designee and include written documentation that states the

## Use Authorizations for Non-Hydro Renewable Energy on Reclamation Lands

rationale for the selected methodology. It is recommended that for N-HRE projects the rental fee schedule include a base rent for the acreage of Reclamation lands included in the use authorization and an additional megawatt (MW) capacity fee based on the total authorized MW capacity of the facility.

## Rent Language in Authorization

Reclamation has the authority to include standard terms in N-HRE use authorizations to provide for adjustments to both the base rent and the MW capacity fee when necessary to reflect changes in the fair market value of use authorizations. The following language should be included in all renewable energy use authorizations to additionally provide for rent adjustments consistent with regulatory changes or provisions of new or revised statutory authorities:

*“For and in consideration of the rights provided, the holder agrees to pay the Bureau of Reclamation fair market value rental, which includes both base rent and a megawatt capacity fee, as determined by the assigned Regional Director or designee unless specifically exempted from such payment by regulation. Provided, however, that the rental may be adjusted by the assigned Regional Director or designee, whenever necessary, to reflect changes in the fair market rental value as determined by the application of sound business management principles, and as far as practicable and feasible, in accordance with comparable commercial practices. The rental provisions of this authorization may also be modified consistent with the provisions of any regulatory changes or pursuant to the provisions of any new or revised statutory authorities.”*

Revenues from land use authorizations, are considered “incidental revenues” and are credited in accordance with Reclamation policy and RM, *Crediting of Incidental Revenues*, PEC 03-01.