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Bonding Requirements for Exploration, Utilization, and Transmission on Public Land

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Abstract
Every phase of geothermal development brings with it a potential obligation for bonding and the need to commit capital or credit. Developers must include reclamation for both successful and unsuccessful projects, and the bonds required to ensure performance, in their business models.

Introduction
Regulatory agencies impose performance requirements on many types of activities. Often, the performance requirements are in the form of bonds to ensure payment of rents and royalties, to ensure that proper reclamation takes place at the conclusion of operations.

Bonding Authority
The authority to impose bond requirements on federal lands comes from several regulatory codes. 43 CFR 3214 allows BLM to require bonds prior to exploration, drilling or utilization activities. 43 CFR 2805 authorizes the federal government to collect bonds on rights-of-way (ROW) under the Federal Land Policy Management Act. Occasionally, decision makers under the National Environmental Policy Act (NEPA) will impose bonding requirements to ensure that conditions of approval (COAs) in Decision Records are met. Various state agencies are authorized to require bonds for operations on private, state and federal lands.

Bond Formats and Amounts
The form of the bond may vary with the type of activity, the bond amount required, the type of organization conducting the operations, and the financial status of the organization conducting the operations. The bond may be in the form of a Surety issued by a financial or insurance institution, or a Corporate or Personal Bond backed by the assets or deposits of the corporation or the individual (43 CFR 3214.21). Financial institutions may also issue irrevocable letters of credit (LOCs) to back the bond (43 CFR 3214.22). The specific form of the bonding requirements are usually determined by the agency for the type of operation being conducted. Agencies will usually refer an applicant to a specific application form and LOC template and may have financial institution restrictions.

The amount of the bond varies with the type of activity proposed, the agency involved and, in some cases, the financial position and operating history of the applicant. Applicants who obtain geothermal leases on federal land, whether through competitive bid, non-competitive purchase or acquisition from another party, must post a bond prior to any drilling activity to ensure compliance with lease terms. The bond amount starts at $10,000 for a single lease, at least $25,000 for all leases in a statewide bond, or a minimum of $150,000 for a nationwide bond. Note that the BLM, who administers geothermal leasing on federal lands, can require an increase in a bond amount any time conditions warrant such an increase. Issues such as non-performance or environmental non-compliance are examples of such conditions.

When an applicant wishes to commence exploration drilling on federal land, the BLM may impose additional bonding requirements. Likely causes for an increased bond include an applicant’s non-payment of royalties, a history on environmental non-compliance, or the BLM’s determination that the existing bond is not sufficient to cover estimated reclamation costs (43 CFR 3214.14). Most states also impose bonding requirements for exploration drilling, so operators should expect to post reclamation bonds on individual wells or obtain a statewide bond to cover all operations in that state (Nevada Administrative Code 534A.250, Oregon Revised Statutes 522.075, California Public Resources Code Section 3205).

When exploration is successful and a developer is ready to commence utilization of geothermal resources on public lands, a new tranche of bonds is required. After the developer obtains the permits necessary to construct the utilization facilities, the
BLM will issue a site license for utilization facilities located on federal lands. A condition of the site license will be posting of a minimum of a $100,000 bond. The primary purpose of the bond is to ensure reclamation of the site takes place once the utilization activities are complete. Regulations authorize BLM to increase the amount of the bond based on the estimated reclamation cost, for unpaid royalties, and for environmental non-compliance. The BLM decision maker will often request the developer to prepare a reclamation cost estimate (RCE) in establishing the bond valuation. While the RCE process is most widely used in mining applications, developers should be prepared to develop comprehensive estimates for well abandonment, equipment demolition and removal, site recontouring and revegetation, and invasive weed mitigation. Developer experience indicates that the discretion given to the BLM decision maker results in wildly varying reclamation bond requests, ranging from the flat $100,000 required in 43 CFR 3273.14, to 50 times that amount.

Successful development of a geothermal facility most often involves the construction of a transmission line or generator tie-line partially or completely sited on federal land. If BLM or United States Forest Service (USFS) issue a Right-of-Way (ROW) grant under the Federal Land Policy and Management Act (FLPMA), they have the regulatory right to impose bonds adequate to reclaim the ROW. A transmission project is often issued as two grants; a short-term (construction) ROW and a long-term (operation) ROW. The short-term ROW may include an expanded construction corridor, angle and pull points, and staging areas that are broader than the final transmission line corridor. The developer should expect to post bonds for both the short-term and the long-term ROW.

Bonding requirements on ROWs are almost entirely up to the discretion of the BLM Field Manager or USFS District Ranger making the decision (43 CFR 2805.12(g), 36 CFR 251 Subpart B). The facts at the decision maker’s disposal when deciding whether or not to bond and the bond amount itself, include the developer’s financial condition, compliance history, the nature and scope of the project, and the entity’s ability to shed liability (LLCs for example). Under FLPMA, the BLM is authorized to require bonds to cover the estimated cost to the United States to satisfy all bond stipulations. These could include direct reclamation costs, indirect and administrative costs, contracting costs and monitoring costs.

### When BLM Can Collect Against Bonds

In general, the BLM can collect against a bond for a developer’s failure to comply with any requirement of 43 CFR, subpart 3200. The most likely causes for collection are failure to plug and abandon (P&A) a well in the prescribed time or manner, failure to follow the reclamation requirements for a lease or ROW area, and failure to pay outstanding royalties. Developers should pay special attention to interim reclamation requirements for ROWs, access roads, construction sites and well pads, since failing to adequately complete these reclamation tasks, even on operating facilities, exposes operators to bond collection (43 CFR 3215.10). In the unfortunate event that BLM collects against a bond, it must either be replaced or restored to full value (43 CFR 3215.11). If an operator fails to replace or restore a bond, the BLM has authority to order wells shut-in, utilization facilities shutdown and termination of affected leases (43 CFR 3215.12). The operator should also expect the bond amount on any other leases or facilities to come under greater scrutiny by BLM, as the operator now has a history of non-compliance.

### Case Studies

Each of the following brief case studies illustrates an important bonding factor when considering acquisition or development of a geothermal lease on public land. In each case, the bond became a significant issue in acquiring, developing or disposing of the lease.

#### Case 1

An experienced geothermal operator acquired several geothermal leases on public land through the competitive bidding process. Upon completion of the necessary NEPA process and after obtaining all necessary permits, the developer drilled exploratory wells but did not encounter a commercial resource. The developer was the holder of a Nationwide Bond and, therefore, was not required by the field office to post a separate bond for this project. The wells were plugged and abandoned, but the pads were never reclaimed.

After a period of time, the leases were assigned to a second developer (Developer B) as part of a larger transaction between the two developers. Other than analyzing the geologic and drilling data which confirmed a low potential, Developer B simply paid the annual rental and the leases languished. Developer B subsequently acquired additional public land in the same state through competitive leasing, and began the permitting process for exploration drilling on these new lands. The land management agency responsible for both the original and the new leases informed Developer B that the failure to reclaim the well pads and roads on the original leases had implications for permitting and bonding on the new project. Developer B prudently began immediate reclamation activities on the old leases and the land management agency, recognizing this progress, allowed development of the new leases to continue.

The lesson here is that agencies will ultimately hold developers and operators responsible for reclamation and other 43 CFR 3200 requirements, and are willing and able to affect future actions if past obligations have not been met.

#### Case 2

Several developers were competing with one another to consolidate a large enough land position to warrant a utilization project on mixed public and private parcels. A unit operator had been identified from among the developers, and a unit agreement had been executed. Several wells had been drilled by the competing developers but none were successful, none had been plugged and abandoned, nor had any of the pads been reclaimed.

One of the developers sought to exchange its parcels in this area for parcels another developer (Developer C) controlled in another state. In acquiring the leases, Developer C would also be required to accept the unit operator responsibility. Along with accepting this responsibility, Developer C would also ultimately be responsible to reclaim any wells on the unit that the other developers abandoned. The reclamation costs would amount to several million dollars. Developer C wisely chose not to accept the leases as part of the transaction.
In this case, Developer C did enough research to identify both the benefits and the liabilities associated with acquiring the leases and decided that these liabilities, combined with the competition from other developers, did not warrant the acquisition.

Recommendations

Every phase of geothermal development which has the potential to expose the public or the environment to injury or damage brings with it a potential obligation for bonding and the need to commit capital or credit. Each agency involved and, in many cases, each individual agency district may have its unique take on the timing and the amount of the bonds required. Many developers’ philosophy is: “If the regulatory agency doesn’t bring it up, let’s not mention it and maybe it will go away.” A failure to accurately anticipate the bonding requirements for a project can create delays and cash flow or credit constraints just as the developer can see the finish line for a project.

The Following Recommendations will Help Developers to:

1. Become familiar with each agency’s bonding requirements. Ask the decision-maker where to locate the most current guidance on bonding.
2. Engage the decision maker early in the permitting process, asking specifically what the bonding requirements will be for the proposed action.
3. Become familiar with the agencies’ bond options (surety bond, personal bond) and if personal bond-backed by a financial instrument such as an irrevocable letter of credit, be sure to understand the qualifications required of the financial institution issuing the letter of credit. (43 CFR 3214.21, 43 CFR 3214.22)
4. If a federal agency requires bonding in excess of the statewide or nationwide amount, be prepared to discuss the methods used to calculate the reclamation bond amount. Often, this will require a Reclamation Cost Estimate (RCE) prepared by a licensed engineer, prepared at the developer’s expense.
5. Since state and federal agencies often regulate both mining and geothermal development out of the same office, developers could reasonably expect the agencies to blur the lines between reclamation and bonding requirements between the two activities. Be prepared to ask for the regulatory basis for the agency’s requirements and ensure that the correct requirements are being applied (43 CFR 3200 for geothermal, 43 CFR 3800 for mining, 43 CFR 2800 for rights of way, 36 CFR 251 Subpart B – USFS Special Use Permit).
6. Ask about and gain a clear understanding on the difference between short-term (construction) bonding and reclamation, and long-term bonding and reclamation. This is most common on Right-of-Way grants for off-lease access roads and for transmission lines.
7. Pay attention to interim reclamation requirements for exploration, development and utilization projects to ensure that compliance problems do not result in subsequent bond collection.

Summary

While most developers are familiar with the BLM’s statewide and nationwide bond programs, many are surprised at the BLM’s ability to impose much higher bond requirements for exploration, utilization and transmission projects. Engaging the BLM Field Manager or USFS District Ranger early in the development process to identify potential bonding requirements may seem to some developers as an invitation to bonding requirements beyond the statewide/nationwide thresholds. In today’s regulatory and development environment, however, a prudent developer should weigh the chances that leaving these discussions to the end of permitting or development will result in delays and the loss of negotiating leverage in what may ultimately be a foregone conclusion, the appropriate bond amount.