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To: District and Field Managers, Nevada
From: State Director, Nevada
Subject: Geothermal Exploration Permit Guidance Direction

Program Area: Geothermal Exploration Operations Permitting

Purpose: This Instructional Memorandum (IM) provides direction to Nevada Bureau of Land Management (BLM) District and Field Offices on Environmental Assessment (EA) level appropriate scoping and which reasonably foreseeable future actions should be considered for geothermal operations plans proposing only exploration wells and resource delineation activities.

Policy/Action: Geothermal exploration projects proposing only drilling of exploration wells and resource delineation activities such as injection testing, interference testing, geophysical surveys well surveys (e.g. temperature and pressure surveys, fracture orientation surveys, spinner tests, mechanical and formation integrity testing, etc.) and flow testing do not automatically trigger development of the geothermal resource. The purpose of geothermal exploration operations is to assess and define the resource to determine the potential for future development. Prior to conclusion of the exploration phase, the nature, extent, viability location, and timing of future project development activities remain largely uncertain. Therefore, to reduce the time and costs associated with permitting this type of exploration project, District and Field Offices are directed to incorporate and implement procedures described in this IM.

1. Baseline Data Requirements Geothermal Exploration Projects
The National Environmental Policy Act (NEPA) Handbook (H-1790-1) provides the following guidance for scoping an EA: “Analyze an issue if its analysis will help in making a reasoned choice among alternatives, or if it is, or may be, related to a potentially significant effect.”
The following items typically would not be included within the scope of a routine exploration EA because they would not provide useful information regarding project alternatives or impacts. Baseline date requirements for projects proposing only exploration wells and resource delineation activities should be limited to those necessary to address the impacts associated with such activities. Examples of unnecessary baseline data may include:

- Groundwater monitoring data;
- Groundwater modeling data;
- Detailed analysis of anticipated impacts from future utilization activities;
- Reservoir management procedures;
- Flow test modeling; and
- Any other information and data which are largely irrelevant to the exploration phase, but which would be more appropriately investigated at the utilization phase.

2. **Reasonably Foreseeable Future Actions**

The NEPA Handbook categorizes reasonably foreseeable future action “as those for which there are existing decisions, funding, formal proposals, or which are highly probable, based on known opportunities or trends. Reasonably foreseeable development scenarios may be valuable sources of information to assist in the BLM’s cumulative effects analysis.” However, per the NEPA Handbook, the applicant is “not required to speculate about future actions.” Therefore, the NEPA analysis for each phase of geothermal development should be narrowly tailored to focus on the actual issues proposed for decision at that level of environmental review. Power plant development should not be considered a reasonable foreseeable future activity when analyzing the effects of a geothermal exploration project proposing solely exploration wells and resource delineation activities.

**Time Frame:** This policy is effective immediately.

**Background:** The Interior Board of Land Appeals (IBLA) has specifically addressed the proper scope of NEPA analysis with regard to geothermal exploration operations and held that an EA did not err in focusing its analysis on the proposed exploration project (Oregon Chapter Sierra Club, 176 IBLA 350, 350 [2009]). In doing so, the IBLA clarified that an EA related to the drilling of exploration wells for the purposes of assessing and defining the underlying geothermal resources need not include resource development or production. “[S]ince the exploration project will neither cause nor automatically trigger production activities, exploration and development are not connected actions” under NEPA.

**Budget Impact:** None

**Manual/Handbook Sections Affected:** None

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Signed by:                                      Authenticated by:
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