

**U.S. House of Representatives**  
**Committee on Natural Resources**  
**Washington, DC 20515**

August 29, 2024

Mr. Gene Dodaro  
The Comptroller General of the United States  
U.S. Government Accountability Office  
441 G Street, N.W.

Dear Mr. Dodaro:

Replenished by natural heat sources deep in the Earth, geothermal energy is a renewable resource that generates 24/7 electricity with minimal carbon emissions. Geothermal energy presents a promising avenue for sustainable and reliable power generation that can help reduce reliance on polluting fossil fuels and create opportunities for oil and gas workers with transferrable skills. Geothermal resources were the first form of renewable energy the Bureau of Land Management (BLM) approved for production on federal lands, with the first project approved in 1978. Today, 51 power plants produce geothermal energy on federal lands, with a combined total capacity of more than 2.6 gigawatts. One environmental research organization estimates that approximately 90 percent of potential geothermal energy development in the U.S. is located on federal lands.

Unlike conventional geothermal systems, where fluids circulate through naturally occurring fractures deep within the earth, next-generation geothermal systems circulate fluids through fractures created by hydraulic fracturing and horizontal drilling or through a series of interconnected underground wells. Next-generation geothermal has several starting advantages over conventional geothermal, including transferrable technology and workforces from the oil and gas sector. According to the Department of Energy (DOE), next-generation geothermal technologies have the potential to produce more than 12 percent of our nation's electricity by 2050—more electricity than currently generated by hydropower and solar combined.

DOE's National Renewable Energy Laboratory has reported that next-generation geothermal plants face some challenges operating on BLM lands. Stakeholders in the energy sector have expressed concerns that there are insufficient acres of federal land available for geothermal development because few BLM field offices hold regularly scheduled sales of geothermal leases. According to a geothermal association, some BLM field offices have experience with geothermal permitting while others do not. As a result, offices with less experience may take considerable time to review and approve geothermal permits. The association further stated that limited staff availability and high staff turnover at some BLM field offices have increased geothermal permit

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review and processing timeframes. The extent to which BLM staff share knowledge and coordinate across offices to facilitate efficient leasing and permitting is uncertain.

Considering the challenges associated with leasing and permitting for geothermal development on federal lands and the growing interest in next-generation geothermal technology, the committee asks GAO to answer the following:

1. Since 1978, how many geothermal projects have been leased and permitted, including the number of acres available for geothermal leases, the number of acres leased to date, and the average time frame from initial leasing to full-scale production?
2. What challenges affect BLM's leasing of federal lands for geothermal and next-generation geothermal projects—including workforce challenges—and what opportunities, if any, exist to address the challenges?
3. What challenges affect BLM's permitting of geothermal and next-generation geothermal projects on federal lands—including workforce challenges—and what opportunities, if any, exist to address the challenges? For example, what is the potential to establish a center of excellence to provide BLM field offices with best practices for geothermal processing and permitting?

Thank you for your attention to this request. If you have any questions or need further information, please contact Kelsey Hartman with the House Natural Resources Committee minority staff at [kelsey.hartman@mail.house.gov](mailto:kelsey.hartman@mail.house.gov).

Sincerely,



Raúl M. Grijalva  
Member of Congress  
Ranking Member, Committee  
on Natural Resources



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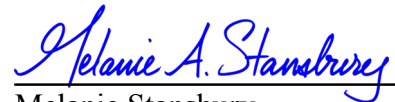
LORA SNYDER  
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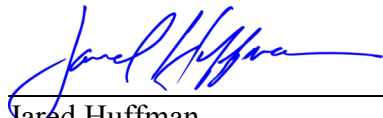
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Susie Lee  
Member of Congress



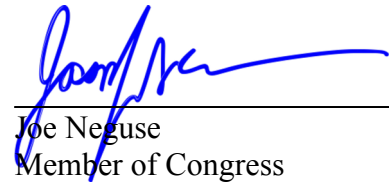
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Melanie Stansbury  
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Joe Neguse  
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