

Response to the Notice of the Department of Interior's Proposed Revisions to the National Environmental Policy Act Implementing Procedures for the Bureau of Land Management

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The Abundance Institute is a mission-driven non-profit dedicated to creating the policy and cultural environment where emerging technologies can develop and thrive in order to perpetually expand widespread human prosperity. This comment is designed to assist the agency as it explores these issues. The views expressed in this comment are those of the author(s) and do not necessarily reflect the views of the Abundance Institute.

Introduction

Thank you for the opportunity to comment in support of the proposed rules and the Department of Interior's continued work on enabling geothermal energy development. The Abundance Institute is a mission-driven nonprofit focused on creating space for emerging technologies to grow, thrive, and reach their full potential. We are dedicated to promoting policies that enable energy abundance and economic growth. Our research demonstrates that increased energy availability directly drives economic growth by reducing costs across all sectors of the economy and enabling new productive activities. Regulatory streamlining for energy development is essential to achieving this vision of abundance.

This comment addresses the Bureau of Land Management's proposed categorical exclusion for geothermal resource confirmation activities, its immediate effects examining on geothermal development and its broader implications for achieving energy abundance. Smart reforms to the implementation of the National Environmental Policy Act, like those in the proposed revisions, represent the first important steps towards a world of energy abundance.

We support the proposed categorical exclusion and urge the Department of Interior to move quickly to adopt the final rule as proposed.

Background and Summary

The proposed categorical exclusion would streamline environmental review for preliminary geothermal resource confirmation activities. These activities help developers determine site viability before



proceeding with full development. Even these limited preliminary steps require environmental assessments under NEPA, creating delays in geothermal deployment.

The proposed categorical exclusion represents an important step toward energy abundance, but several aspects warrant consideration:

- 1. The economic case for accelerating geothermal deployment through streamlined permitting is compelling and wellsupported by evidence.¹
- 2. The current regulatory process imposes unnecessary delays on even preliminary site assessment activities, hindering the achievement of energy abundance.²
- 3. The Department should consider additional reforms to accelerate geothermal development further while maintaining appropriate safeguards. Congressional action is likely needed, but the

² Eli Dourado, "Harnessing the Heat Beneath Our Feet," Property Environment Research Center, July 19, 2021, https://www.perc.org/2021/07/19/harnessing-the-heat-beneathour-feet/; Hannah Downey, "Regulatory Barriers to Geothermal Energy," Property Environment Research Center, January 25, 2022, https://www.perc.org/2022/01/25/ regulatory-barriers-to-geothermal-energy/; Katherine R Young et al., "Geothermal Permitting and NEPA Timelines," Transactions 38 (n.d.), https://gdr.openei.org/ files/1258/Geothermal%20Permitting%20and%20NEPA%20Timeline%20Analysis%20-%20FINAL.pdf.



¹ Ghanashyam Neupane and Birendra Adhikari, "Economic Impact of Permitting Timelines on Geothermal Power in California, Nevada, and Utah," January 1, 2022, doi:10.2172/1845410; Tom Ough, "Watt Lies Beneath," Works in Progress, November 15, 2023, https://worksinprogress.co/issue/watt-lies-beneath/; "Western Governors Applaud the Bipartisan Effort behind the Geothermal Energy Optimization Act (GEO Act)," Western Governors' Association, (October 23, 2024), https://westgov.org/images/files/ Senate ENR S3954 GEO Act WGA correspondence.pdf.

Department should take all of the steps within its authority to ease the development of geothermal energy.

The Economic Imperative for Energy Abundance

Achieving energy abundance is essential for economic growth and innovation. Research demonstrates that higher energy consumption directly increases economic growth by:

- 1. Decreasing the costs of existing goods and services,
- 2. Enabling the production of new goods and services, 3
- 3. Supporting innovation across all sectors of the economy⁴, and
- 4. Creating high-quality jobs, particularly in rural areas. 5

Geothermal energy is uniquely positioned to support this transition to abundance, given its ability to provide reliable, 24/7 clean power with minimal land use impact. This makes it an excellent complement to variable sources of energy, such as wind and solar.

As Utahns, we also note that the relationship between NEPA's requirements and public lands is significant for the western United States. Western states are mostly federal lands, so reforms will have special benefits in enabling western geothermal development. Geothermal's considerable potential has brought it

^{5 &}quot;This Is Where U.S. Clean Energy Jobs Can Make the Biggest Difference," World Economic Forum, May 12, 2021, https://www.weforum.org/stories/2021/05/green-energyamerica-us-jobs-covid-change-pandmeic-poverty/.



³ Austin Vernon and Eli Dourado, "Superabundant Energy: What Will We Do with It?," The Center for Growth and Opportunity at Utah State University, 2022, https://www. thecgo.org/research/energy-superabundance/.

⁴ J. Storrs Hall, Where Is My Flying Car?, First edition (San Francisco, California: Stripe Press, 2021).

attention from policymakers in Utah, Colorado, New Mexico, and other states.6

Current NEPA Rules Hinder Energy Abundance

The existing requirement for environmental assessments, even for preliminary resource confirmation, creates unnecessary barriers to geothermal development:

- 1. Delays increase financing costs and uncertainty,
- 2. Extended timelines discourage investment in innovative technologies,
- 3. Complex permitting particularly impacts smaller developers, and
- 4. Resources spent on the review of minimal-impact activities reduce focus on more significant proposals.

These regulatory barriers can have dramatic costs in total. For example, a report on a selection of geothermal development projects by researchers at the Idaho National Laboratory concluded that longer review timelines for NEPA and comparable state policies like the California Energy Policy Act resulted in "the loss of \$64 million to \$227 million in potential revenue in present value that the developers could have otherwise generated if the project could be completed sooner with the fastest review scenario." The researchers also found a cost increase of between 4% and 11% because of increased timelines. This means long reviews are

⁷ Ghanashyam Neupane and Birendra Adhikari, "Economic Impact of Permitting Timelines on Geothermal Power in California, Nevada, and Utah," January 1, 2022, doi:10.2172/1845410, pg. 2, 28.



^{6 &}quot;Western Governors Applaud the Bipartisan Effort behind the Geothermal Energy Optimization Act (GEO Act)," Western Governors' Association, (October 23, 2024), https://westgov.org/images/files/Senate ENR S3954 GEO Act WGA correspondence.pdf.

a threat not only to the revenues that developers receive but also to the ability of geothermal technologies to compete in the marketplace against other generators. The risk is then that customers face higher costs than they would otherwise.

The Proposed Reforms are an Important Step Toward **Abundance**

The categorical exclusion would help accelerate geothermal development while maintaining environmental safeguards by:

- 1. Enabling faster determination of site viability,
- 2. Reducing financing costs through streamlined timelines,
- 3. Allowing BLM to focus resources on more impactful proposals, and
- 4. Supporting rapid scaling of geothermal technology.

In particular, considering the potential for load from electrification, artificial intelligence, and manufacturing, adding another source of energy generation to our portfolio has broad ripple effects. The faster discovery and subsequent development that the categorical exemption can enable is a crucial component of meeting load growth.

Additional Reforms that the Department Should Consider

To further support a world of energy abundance, we recommend three further steps for the Department to consider:



- 1. Finalize the proposed categorical exclusion expeditiously,
- Consider additional reforms to streamline geothermal permitting, including:
 - Clear timelines for review processes,
 - Standardized requirements across jurisdictions, and
 - Simplified application procedures.
- 3. Establish a clear monitoring framework to:
 - Track deployment acceleration,
 - Verify environmental protection, and
 - Identify additional streamlining opportunities.

In addition, the Department and Bureau should work with Congress on deeper reforms. While the Department holds significant authority to streamline regulations for geothermal development on public lands, additional action by Congress could provide complementary support to the geothermal industry. For example, the Geothermal Energy Optimization (GEO) Act, introduced in the U.S. Senate as S.3954 and cosponsored by a bipartisan group of senators, including Catherine Cortez Masto, Martin Heinrich, Jim Risch, and Mike Lee, represents a promising legislative step.8 A similar bill, H.R.7370, the Geothermal Energy Opportunity Act, was introduced in the House by Representative John Curtis. Another promising package is the Energy Permitting Reform Act (EPRA), which mirrors

^{8 &}quot;Geothermal Energy Optimization Act," March 11, 2024, https://www.lee.senate.gov/ services/files/199695F7-9047-4102-B3B6-C5540BB755B5.

^{9 &}quot;Curtis advances bipartisan legislation to protect Utah's Great Salt Lake and boost geothermal energy," September 25, 2024, https://curtis.house.gov/news/documentsingle. aspx?DocumentID=3331.

these bills. Section 208 of EPRA includes streamlining permitting for geothermal. 10

These proposals would help place the emerging advanced geothermal industry on equal footing with more established industries, such as oil and gas, which have long benefited from streamlined permitting processes. While this legislative effort is beyond the Department's jurisdiction, it highlights the broader reforms needed to accelerate geothermal development and maximize its potential as a clean energy resource.

Conclusion

Abundant energy is fundamental for a thriving, innovative economy. By streamlining regulatory barriers and accelerating geothermal development, the proposed categorical exclusion supports this vision of energy abundance and sets a precedent for how we approach energy deployment. Reforms like those the Department is considering today are essential to meeting growing energy demands from electrification, reshoring manufacturing, and AI development. A geothermal sector freed of cumbersome reviews ensures that our energy infrastructure can power a prosperous future.

The proposed categorical exclusion represents an important step toward achieving energy abundance through accelerated geothermal development. The recommendations outlined above will help advance clean energy deployment while ensuring appropriate oversight. We

¹⁰ Xan Fishman, John Jacobs, Daniel Elizalde, and Lori J. Pickford, "The Energy Permitting Reform Act of 2024: What's in the Bill?," Bipartisan Policy Center, https://bipartisanpolicy.org/explainer/the-energy-permitting-reform-act-of-2024-whatsin-the-bill/; Swad Sathe, Rachel Levine, and Conrad La Joie, "Permitting Reform Within Reach: A Review of Major Energy Permitting Legislation," Niskanen Center. November 2024, https://www.niskanencenter.org/permitting-reform-within-reach-a-review-of-majorenergy-permitting-legislation/.

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