

Considerations for Federal Leasing of Onshore Energy: Oil and Gas and Geothermal Power

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Both oil and gas (O&G) and geothermal power are long-standing energy sectors for the United States. The two sectors have many similar characteristics, including use of subsurface resources, ability to provide baseload electricity production, development timelines, drilling technologies and processes, and types of environmental impacts. The technologies also have significant differences. O&G is a more mature sector, with more investment potential and more potential for competitive leasing, but it depends on finite, carbon-intensive resources. Geothermal power has growth potential due to developing technologies like enhanced geothermal systems and the potential to deliver lower-carbon electricity. Geothermal power also has challenges to greater deployment, including high capital costs, difficult operating conditions, lower profit margins on electricity compared to fossil fuels, and other market challenges. These similarities and differences influence how current onshore federal leasing and permitting laws and regulations impact each sector and can inform what changes might be relevant for the future management and development of federal lands and resources.

The Bureau of Land Management (BLM) is the agency responsible for administering onshore energy and mineral resources on federal lands, covering more than 700 million acres of the federal subsurface mineral estate. In general, BLM manages leasing on federal lands for O&G and geothermal energy resources pursuant to the Mineral Leasing Act of 1920 (MLA; 30 U.S.C. §§181 et seq.) and the Geothermal Steam Act of 1970 (30 U.S.C. §§1001 et seq.), respectively. Additionally, leasing activities by BLM and development activities by the lessee are subject to legal and regulatory management requirements of the federal agency responsible for managing the land on which the lease is located, as well as other federal laws such as the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. §4321 et seq.), the Clean Air Act (42 U.S.C. §7401 et seq.), and the Clean Water Act (33 U.S.C. §1251 et seq.) and any relevant state and local laws governing resource use and protection. With respect to NEPA compliance for O&G and geothermal development on onshore federal lands, some categorical exclusions (CEs) have been established in statute or administratively that identify activities that normally do not have a significant impact on the quality of the human environment and thus do not require further environmental reviews under NEPA.

Federal leasing terms and requirements may vary between O&G and geothermal development on federal lands. However, both sectors have periodic competitive and noncompetitive bidding processes that require the lessee to pay bids, rents (paid prior to energy production, based on the amount of land), and royalties (paid once production begins, generally based on the value of the resource being accessed or extracted). Some of the lease terms are set by law at fixed or minimum values, whereas others may be left to BLM to determine based on agency objectives and best-use determinations. Whether and to what degree current leasing and permitting requirements meet various federal priorities is a subject of congressional debate. These priorities include BLM's mission to ensure multiple-use and sustained yield of federal resources or broader federal goals of providing a reliable electricity supply, ensuring energy security, safeguarding the environment, or providing for fiscal security through federal leasing revenue.

Congress has reviewed and may further consider a variety of topics associated with federal leasing and use of O&G and geothermal resources. These topics could include

- guidance or requirements for financial bonding—often used to support site reclamation after project completion;
- lease terms to address nonproductive leases and/or intermediate land uses;
- conditions for when competitive and noncompetitive leasing opportunities could be allowed;
- how much authority BLM has to set lease terms; whether such terms should be fixed values, minimum values, or ranges of values; and their time frames;
- requirements on applications for drilling permits and timelines for reviewing and decisions; and
- appropriateness of the CEs available to O&G or geothermal projects to support resource development and/or to ensure proper evaluation of environmental impacts.

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Oil and Gas and Geothermal Power Sectors

Congress plays a role in energy development on federal lands, including by providing authority and guidance to federal agencies that are responsible for resource management. The Bureau of Land Management (BLM) and other federal agencies support development of both nonrenewable and renewable resources on federal lands, which contribute to federal revenues, the energy supply for the U.S. economy, and other national priorities.

Oil and gas (O&G) and geothermal energy are two such resources. They have a variety of similarities and differences that can affect their contributions to the U.S. economy and their management as a resource. Review of these similarities and differences may help inform Congress on whether to maintain the current laws and regulations that govern management and development of lands and resources or to make changes to best serve federal priorities.

The federal government may seek to regulate both sectors' development similarly, because these two energy resources generally share many physical and operational characteristics. These include similar subsurface location of resources; development processes and timelines; resource identification, access, and production technologies; similarities in the types of potential environmental impact considerations from their development; similar workforce knowledge and skill sets; and similar capability for generation of baseload electricity. The Trump Administration has taken actions to align its approach to technology development for both sectors, with the Department of Energy (DOE) moving geothermal energy to the renamed Hydrocarbons and Geothermal Energy Office in November 2025.¹ Congress may weigh the advantages and disadvantages of aligning other aspects of resource development between O&G and geothermal.

Alternatively, the federal government may continue to regulate these resources differently because of different goals for their exploitation or because of the differences between the resources. These differences include challenges related to accessing resources and their production (including potential development risks, costs, and timelines; operation in different geologies and subsurface conditions; and the need for technology development and adaptations); the degree of emissions and other environmental impacts from development; the fact that O&G is nonrenewable but geothermal is renewable; industry size, investment opportunities, and sector maturity, including long-term profit and development potential; and how each resource can contribute to different national priorities or future development scenarios.

The following sections describe how processes for leasing and permitting on onshore federal lands are applied to O&G and geothermal energy. These sections note how these two resource types are treated similarly or differently and provide context for federal O&G and geothermal energy development regulations. The final section of this report discusses several issues for potential congressional consideration, including bonding and project reclamation, productive and nonproductive leases, agency authority to set lease terms, and application review processes.

In part because of BLM's role in administering the subsurface mineral estate and federal leasing for O&G and geothermal energy, this report focuses on selected BLM processes, including compliance with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. §§4321 et seq.). Multiple other federal, state, and local laws may also require permitting or other procedures for the approval and operation of an O&G or geothermal project on federal lands, depending on the scope and nature of the activities, potential environmental impacts, and other factors. In

¹ U.S. Department of Energy (DOE), "Energy Department Announces Organizational Realignment to Strengthen Efficiency and Unleash American Energy," press release, November 20, 2025, <https://www.energy.gov/articles/energy-department-announces-organizational-realignment-strengthen-efficiency-and-unleash>. Before the reorganization, geothermal research was under the former Office of Energy Efficiency and Renewable Energy.

general, this report does not provide a comprehensive analysis of all relevant laws or approvals that may apply to a given project. In addition, this report does not cover O&G and geothermal resources on federal land managed by other federal agencies;² other onshore energy resources on federal lands (such as solar, wind, or coal); offshore energy resources; or energy resources on tribal lands.³

Development of Oil and Gas and Geothermal Resources in the United States

O&G and geothermal power are two long-operating energy sectors in the United States. The first successful well intended to produce natural gas was dug in 1821 in Fredonia, NY.⁴ The first American natural gas company was formed in Fredonia in 1858. The first commercial well drilled specifically for oil in the United States was the Drake Well near Titusville, PA, in 1859.⁵ John Rockefeller invested in his first oil refinery near Cleveland, OH, in 1863, leading to the creation of Standard Oil in 1870.⁶ In 2025, O&G contributed 73% of total U.S. primary energy consumption and supplies energy and products to a variety of industries.⁷ Even with continued policy and market trends toward lower-carbon energy sources, O&G will likely continue to play an important role in the U.S. energy mix for decades.

The world's first geothermal district heating system was created in Boise, ID, in 1892.⁸ The first small-scale geothermal power plant (250 kilowatts) was installed at The Geysers in Northern California in 1922.⁹ The first large-scale commercial power plant (11 megawatts) was also installed at The Geysers, in 1960.¹⁰ In 2025, geothermal power contributed 0.12% of U.S. primary energy consumption in the form of electricity and direct use (heating and cooling).¹¹ The

² Other federal land management agencies include the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the National Park Service. The Department of Defense and other agencies also manage some federal lands. See CRS In Focus IF10585, *The Federal Land Management Agencies*, by Carol Hardy Vincent et al.

³ For information on offshore oil and gas (O&G) leasing, see CRS Report R44692, *Five-Year Offshore Oil and Gas Leasing Program: Status and Issues in Brief*, by Laura B. Comay, and CRS Report R46195, *Gulf of Mexico Energy Security Act (GOMESA): Background and Current Issues*, by Laura B. Comay. For federal onshore O&G leasing, see CRS Report R46537, *Revenues and Disbursements from Oil and Natural Gas Leases on Onshore Federal Lands*, by Lexie Ryan. For coal, see CRS Infographic IG10076, *U.S. Coal Production & Federal Lands*, by Lexie Ryan. For O&G leasing on tribal lands, see CRS Report R47640, *Energy Leasing and Agreement Authorities on Tribal Lands: In Brief*, by Mariel J. Murray.

⁴ U.S. Energy Information Administration (EIA), "Energy Timelines – Natural Gas," accessed August 20, 2026, <https://www.eia.gov/kids/history-of-energy/timelines/natural-gas.php>.

⁵ American Chemical Society, "Development of the Pennsylvania Oil Industry," <https://www.acs.org/education/whatischemistry/landmarks/pennsylvaniaoilindustry.html>.

⁶ Keith Poole, "Biography: John D. Rockefeller, Senior," *American Experience*, accessed August 20, 2026, <https://www.pbs.org/wgbh/americanexperience/features/rockefellers-john/>.

⁷ Primary energy is the total amount of energy available for practical use after extraction from nature—from all energy sources including oil, natural gas, coal, nuclear power, and renewables. Measured in British thermal units (Btu). EIA, "U.S. Energy Facts Explained," accessed April 20, 2026, <https://www.eia.gov/energyexplained/us-energy-facts/>.

⁸ Kevin Rafferty, "Geothermal District Heating: A Century of Service," *ASHRAE Journal*, September 1992, <http://waterworkshistory.us/DH/ID/Boise/1992Ashrae.pdf>.

⁹ Avenston, "Geothermal Energy: Passed Stage or Step into the Future," November 3, 2019, <https://avenston.com/en/insights/geothermal-energy-stage-or-step>.

¹⁰ John W. Lund, "100 Years of Geothermal Power Production," *Geothermal Heat Center Bulletin*, September 2004, <https://web.archive.org/web/20100617221828/http://geoheat.oit.edu/bulletin/bull25-3/art2.pdf>.

¹¹ Measured in Btu. EIA, "Table 1.3. Primary Energy Consumption by Source," *Annual Energy Review*, 2025, <https://www.eia.gov/totalenergy/data/browser/?tbl=T01.03#/?f=A&start=2020&end=2025&charted=1-2-3-5-12>.

U.S. Energy Information Administration identifies geothermal power as a renewable resource that could provide baseload electricity generation to support the changing electrical grid.¹² Additionally, new drilling and power generation technologies, including enhanced geothermal systems (EGS), are enabling access to significant new amounts of geothermal power.¹³ DOE projects that geothermal power—particularly due to the potential from EGS development—could provide 90 gigawatts of electricity generation capacity by 2050 (4.6% of total projected U.S. 2050 capacity, providing 11.6% of U.S. electricity).¹⁴

These two energy sectors share some general operational characteristics, including the subsurface location of resources, general development timelines, technologies, and the types of potential environmental impacts from drilling:¹⁵

- Both sectors access underground energy resources tied to specific geographical locations and conditions. Accessing either resource involves many similar types of risks and challenges, including lengthy project development timelines, difficult-to-access resources, and potential well-development failures.
- The two sectors use similar technologies and techniques, including drilling and well-completion technologies, underground resource assessment technologies, and power plant technologies (common to many thermal power generation applications).
- The two sectors' workforces employ similar skill sets and knowledge bases. Development requires related knowledge and understanding of geology and resource potentials.
- The two sectors can affect the environment similarly during drilling, especially if proper precautions are not followed, including the potential for ground water impacts, induced seismicity, and other impacts from the use of drilling rigs and the construction of access roads, power plants, and pipelines.¹⁶

The two energy sectors also have significant differences, including industry size and investment, long-term profit and development potential, the degree of emissions and other environmental impacts, and the applications for each energy type:

¹² EIA, "What Is Energy?" accessed August 20, 2026, <https://www.eia.gov/energyexplained/what-is-energy/sources-of-energy.php>.

¹³ Enhanced geothermal systems (EGS) use directional drilling and hydraulic stimulation technologies to add porosity and fluid circulation to locations of naturally occurring underground heat to create conditions necessary for geothermal energy production. Fervo Energy started operation of a 3.5-megawatt (MW) enhanced geothermal system (EGS) plant in Nevada in November 2023. Other plants and demonstration projects are being developed at several sites in the United States. For more details on EGS, see CRS Report R47256, *Enhanced Geothermal Systems: Introduction and Issues for Congress*, by Morgan Smith; and National Laboratory of the Rockies (formerly National Renewable Energy Laboratory), *2025 U.S. Geothermal Market Report*, June 2026, <https://www.nlr.gov/geothermal/2025-us-geothermal-market-report#market-future>.

¹⁴ With 90 gigawatts (GW) of projected capacity, geothermal power could generate approximately 672 terawatt-hours (TWh) of electricity. EIA's 2050 projections for U.S. electricity supply are 1,965 GW of capacity and 5,782 TWh of electricity generation. Chad Augustine et al., "Enhanced Geothermal Shot Analysis for the Geothermal Technologies Office," National Renewable Energy Laboratory, January 2023, <https://docs.nlr.gov/docs/fy23osti/84822.pdf>; Energy Information Administration, *Annual Energy Outlook 2026*, April 8, 2026, https://www.eia.gov/outlooks/aeo/tables_ref.php.

¹⁵ For more details on comparison of these two industries, see CRS Report R47405, *Oil and Gas Technology and Geothermal Energy Development*, by Morgan Smith.

¹⁶ The magnitudes of these risks and impacts vary between energy types, as noted in the following section on differences.

- Geothermal energy is largely used for building heating or electricity generation—whereas O&G has industrial and building heating, electricity generation, liquid fuel, and chemical feedstock applications. Since geothermal power is renewable, the sustainable operation of geothermal plants and the potential for expanded applications—from the continuing electrification of industrial and residential markets—means geothermal projects have the potential for long-term operations and sustained profits.
- The knowledge of geothermal resources—including their location and subsurface conditions—is generally more limited than the knowledge of fossil fuel resources.
- Geothermal projects—while facing some of the same general challenges as O&G development—have unique operating conditions that generate different risks and different chances of failure. In addition to navigating more uncertainty in location and subsurface conditions compared to O&G, geothermal drilling generally requires larger diameter wells with higher temperatures, involves drilling through harder rock, and accesses deeper resources than O&G drilling. Additionally, geothermal power plants tend to have higher capital costs than other similarly sized thermal power projects, such as natural gas-fired plants, due to operational and plant design factors—geothermal systems generally pump higher fluid volumes, manage more challenging reservoir¹⁷ conditions (e.g., reservoir geochemistry and geofluid mechanics), and incorporate more complex plant designs to maximize efficiency.
- Geothermal power produces low or no carbon emissions, whereas O&G produces significant emissions.¹⁸ Geothermal projects also generate fewer byproducts or other wastes requiring handling and disposal.
- Relative to the geothermal sector, the O&G sector is larger, more mature, and generally better understood by potential investors, developers, and other partners, which can decrease risks and support more and/or easier project development. O&G has more capital available for investment due to high productivity and high profit levels. Potential investors and developers are more familiar with O&G risks, investments, benefits, and markets. O&G also has a larger workforce and more extensive experience with, and knowledge of, its underground resources.
- Some recent policy and social trends—such as business guidance that incorporates considerations of an action’s environmental, social, and governance effects—cast O&G resources as finite, fossil-fuel-based, carbon-intensive energy sources, with the potential for a variety of negative environmental and human impacts. Geothermal resources are renewable, low-carbon energy sources, with more limited degrees of negative environmental and human impacts. Some decisionmakers in corporate, social, and governmental policy and markets, such as those who support greenhouse gas reduction goals, seek to shape U.S. energy

¹⁷ Geothermal reservoirs are natural or man-made underground regions where heat, water, and porosity converge.

¹⁸ For example, geothermal power plants have 97% less emissions of sulfur compounds, which may contribute to acid rain, and 99% less carbon dioxide emissions. EIA, “Geothermal Explained: Geothermal Energy and the Environment,” accessed September 2, 2026, <https://www.eia.gov/energyexplained/geothermal/geothermal-energy-and-the-environment.php>.

development to include more renewable, carbon-free sources, which may include geothermal energy.¹⁹

Bureau of Land Management's Role in Energy and Mineral Development

Located within the Department of the Interior (DOI), BLM manages energy production and mineral development from all federal surface lands (including lands managed by other agencies) and the federal subsurface mineral estate. BLM also assists in energy development projects on certain tribal lands (though it does not lease those lands). In general, BLM derives statutory authority for leasing and developing O&G and geothermal resources from the Mineral Leasing Act of 1920 (MLA; 30 U.S.C. §§181 et seq.) and the Geothermal Steam Act of 1970 (30 U.S.C. §§1001 et seq.), respectively.

An initial step in BLM developing energy and mineral resources on federal land is land use planning.²⁰ BLM, which manages the majority of federal land where energy and mineral resources are developed, derives its general statutory authority for the management of lands under its authority, commonly referred to as “public lands,” from the Federal Land Policy and Management Act (FLPMA; 43 U.S.C. §§1701 et seq.).²¹ FLPMA directs BLM to manage public lands for multiple use and sustained yield, which encompasses “a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values.”²² Although FLPMA places certain requirements and constraints on BLM’s implementation of these “multiple use” and “sustained yield” directives, some discretion is left to the agency for interpreting how best to comply with this statutory mandate.²³

FLPMA requires BLM to develop, maintain, and—when appropriate—revise land use plans (which BLM refers to as “resource management plans,” or RMPs) for lands under their jurisdiction in accordance with the “multiple use and sustained yield” principle.²⁴ An RMP describes the desired outcomes, allowable uses, and anticipated management actions for a given area. Approval of an RMP is subject to the environmental review requirements under NEPA, which is described in more detail in the “NEPA Environmental Review Process” section of this report.²⁵ Part of BLM’s management of federal lands under its multiple use directive is determining the best use of the land, including where and when multiple simultaneous uses are possible without interfering with each other. For example, grazing or recreation are often allowed

¹⁹ For more information on trends in energy, see EIA, *Annual Energy Outlook 2026*, April 8, 2026, <https://www.eia.gov/outlooks/aeo/>.

²⁰ Agency-specific statutory and regulatory authorities guide different agencies in their processes.

²¹ For background on the Federal Land Policy and Management Act (FLPMA), see Bureau of Land Management (BLM), *The Federal Land Policy and Management Act of 1976, as Amended*, September 2016, https://www.blm.gov/sites/blm.gov/files/AboutUs_LawsandRegs_FLPMA.pdf.

²² 43 U.S.C. §1702(c).

²³ 43 U.S.C. §1702(c) and 43 U.S.C. §1702(h). For more information on BLM’s interpretation of these directives, see CRS Legal Sidebar LSB10982, *Federal Land Management: When “Multiple Use” and “Sustained Yield” Diverge*, by Adam Vann.

²⁴ 43 U.S.C. §1712.

²⁵ BLM, “Types of Plans,” accessed August 20, 2026, <https://www.blm.gov/programs/planning-and-nepa/planning-101/types-of-plans>; BLM, “What Informs Our Plans,” accessed March 31, 2026, <https://www.blm.gov/programs/planning-and-nepa/what-informs-our-plans>.

on federal lands in conjunction with other designated uses. However, though an RMP for a given area of land may designate multiple possible uses, an individual project may affect or prevent the other potential uses of the land.

After the RMP is developed, BLM may also develop activity-level and/or project-specific plans and decisions that describe the on-the-ground implementation of certain actions, programs, or projects for a given area. BLM may revise any of its plans based on new information, newly developed technologies, new policy goals, or other changing circumstances. Any proposed development activity, such as for O&G or geothermal, must comport with the RMP and activity plans for the parcel of land.

Federal Lease Terms

O&G and geothermal development on federal lands are managed through BLM leasing processes that share many similarities in requirements but also have many differences. Differences between O&G and geothermal leasing include fiscal terms, frequency of lease sales, and operator responsibilities specific to the resource type. Past and current Congresses have debated and continue to debate whether and to what degree current leasing and permitting requirements meet various federal priorities. Such federal priorities include BLM's mission to ensure multiple-use and sustained yield of federal resources or more general federal goals of providing a reliable electricity supply, ensuring energy security, safeguarding the environment, or providing for fiscal security through federal leasing revenue.

Leases for federal onshore O&G development are generally administered pursuant to the MLA.²⁶ Leases for geothermal projects on federal lands are administered pursuant to the Geothermal Steam Act of 1970. **Table 1** provides a summary of lease terms for O&G and geothermal resources. Both resources have some similar lease terms, including the duration of the primary lease and opportunities for renewals. Both require a nomination fee, but with different terms. Both have competitive and noncompetitive lease options.²⁷ Both leasing processes similarly require the payments of bids (also known as *bonuses*), rents, and royalties.

Differences also exist in lease terms. O&G leases require a minimum bid, but geothermal leases do not. The Geothermal Steam Act of 1970 defines ranges (minimum and maximum rates) for the royalties for geothermal production based on years from production start,²⁸ but the MLA establishes only a minimum rate for royalties for O&G.²⁹ For rents, minimum rates are established by statute for both resource types. Additionally, the minimum rent and royalty rates are higher for O&G than for geothermal. As a result of these terms, payments from lessees may be a greater percentage of sales or higher value per project for O&G compared to geothermal.

In addition to the terms summarized in **Table 1**, both O&G and geothermal leasing processes are subject to land use decisions, activity plans, and NEPA compliance. Project operators for both

²⁶ O&G leasing programs on some specific federal lands are administered pursuant to other laws. For example, the National Petroleum Reserves Production Act (P.L. 94-258) authorized O&G development and established leasing terms in the National Petroleum Reserve in Alaska; see CRS In Focus IF13119, *National Petroleum Reserve in Alaska (NPR-A): A Summary*, by Mark K. DeSantis and Lexie Ryan. Also, acquired lands are subject to the Mineral Leasing Act for Acquired Lands (P.L. 80-382); see CRS Report R42346, *Federal Land Ownership: Overview and Data*, by Carol Hardy Vincent.

²⁷ The budget reconciliation measure often referred to as the Inflation Reduction Act of 2022 (P.L. 117-169) eliminated noncompetitive O&G leases. Three years later, the FY2025 reconciliation law (P.L. 119-21) reestablished noncompetitive O&G leases.

²⁸ 30 U.S.C. §1004.

²⁹ 30 U.S.C. §226(b).

resource types must also comply with requirements of site-specific and project-specific permits and other applicable requirements of federal, state, and local laws and regulations.

Table 1. Summary of Lease Terms for Federal Oil and Gas (O&G) and Geothermal Resources

	O&G	Geothermal
Primary lease length	10 years (30 U.S.C. §226(e))	10 years (30 U.S.C. §1005(a))
Lease renewal	Lease continues as long as there is production of oil or gas in paying quantities. If drilling operations commenced before the end of the primary term, the lease can be extended for two years and any period thereafter during which oil and gas is produced (30 U.S.C. §226(e)).	Lease may be extended for two five-year periods provided work toward development, or required payments, are made. If geothermal production and use commenced before the end of the primary term, the lease can be extended for 35 years with a preferential renewal option after that (30 U.S.C. §1005).
Pre-drilling bond requirements	Lessee or operator must post a bond amounting to a minimum of \$150,000 for a single lease or \$500,000 for all leases in a state (43 C.F.R. §3104). ^a	For exploration operations, lessee or operator must post a bond amounting to a minimum of \$5,000 for a single operation, \$25,000 for all operations in a state, or \$50,000 for all operations nationwide (43 C.F.R. §3251.14). For drilling operations, lessee or operator must post a bond amounting to a minimum of \$10,000 for a single lease, \$50,000 for all operations in a state, or \$150,000 for all operations nationwide (43 C.F.R. §3261.18).
Site License Bond Requirements	n/a	For electrical generation, the site operator must post a bond amounting to a minimum of \$100,000 (43 C.F.R. §3279.19).
Nomination fee	n/a ^b	Nomination fee is \$150 plus \$0.14 per acre (43 C.F.R. §3000.120).
Application fee	Application fee is \$3,175 for competitive leases only (43 C.F.R. §3000.120). ^c	Application fee is \$205 for competitive leases or \$535 for noncompetitive leases (43 C.F.R. §3000.120). ^c
Minimum bid	Minimum bid is \$10 per acre for the 10-year period beginning on August 16, 2022. The national minimum acceptable bid may be increased after that period (30 U.S.C. §226(b)).	n/a
Rent	Competitive leases: For the 10-year period beginning on August 16, 2022, rent is not less than \$3 per acre for the first two years, \$5 per acre per year for the following six-year period, and \$15 per acre per year thereafter (30 U.S.C. §226(d)).	Competitive leases: Rent is not less than \$2 per acre per year for the first year, \$3 per acre per year for the following nine years, and \$5 per acre per year thereafter (30 U.S.C. §1004(a)). Noncompetitive leases: Rent is \$1 per acre per year for the first 10 years, and \$5 per acre per year thereafter (30 U.S.C. §1004(a)).

	O&G	Geothermal
Royalty	Royalty is not less than 12½% of the value of production. The Secretary of the Interior is permitted to “waive, suspend or reduce the rental, or minimum royalty” as a production incentive (30 U.S.C. §226(b); 30 U.S.C. §209; 43 C.F.R. §3103.41(a)).	Royalty is not less than 1% and not more than 2.5% of the gross proceeds of electricity produced in first 10 years of production; or not less than 2% and not more than 5% thereafter (30 U.S.C. §1004). The Secretary of the Interior is permitted to “waive, suspend or reduce the rental or royalty” for conservation purposes, to encourage the greatest recovery of resources, if necessary to promote development, or if the lease cannot be operated under those terms (30 U.S.C. §1012).

Sources: U.S. Code and federal regulations as indicated in table.

Notes: n/a = not applicable. Bid (also known as a *bonus*) is the payment that an applicant offers to purchase the lease of public lands. Rent is the payment made by a lessee before production occurs. Royalty is a required payment made by a lessee to the federal government based on the value of the public resource involved.

- a. In June 2026, after a review directed by Executive Order 14154 of January 20, 2025, “Unleashing American Energy,” and Department of the Interior Secretarial Order 3418 of February 3, 2025, “Unleashing American Energy,” the Bureau of Land Management (BLM) published a proposed rule rescinding the 2024 rule that updated O&G bonding levels. The rescission would decrease bonds to a minimum of \$10,000 for a single lease and \$25,000 for all leases in a state. The proposed rule was open for a 60-day comment period ending August 24, 2026. See BLM, “Oil and Gas Leasing,” 91 *Federal Register* 38084, June 24, 2026, <https://www.federalregister.gov/public-inspection/2026-12734/oil-and-gas-leasing>.
- b. The FY2025 reconciliation law (P.L. 119-21) removed the \$5 per acre expression of interest (EOI) nominating fee established by the law commonly known as the Inflation Reduction Act of 2022 (P.L. 117-169).
- c. Many fees adjusted annually are announced in the *Federal Register* and posted on the BLM website. BLM posted fees for FY2026 on January 12, 2026. See BLM, “Fixed Filing Fees,” <https://www.blm.gov/fixed-filing-fee-schedule-blm-energy-and-minerals>; 43 C.F.R. § 3000.120; and BLM, “Minerals Management: Annual Adjustment of Cost Recovery Fees,” 91 *Federal Register* 1194, January 12, 2026, <https://www.federalregister.gov/documents/2026/01/12/2026-00386/minerals-management-annual-adjustment-of-cost-recovery-fees>. Statutory authority for the Application of Permit to Drill fee expires at the end of FY2026; H.R. 7831 would extend the statutory authority until the end of FY2037.

The U.S. Government Accountability Office (GAO) in several reports identified potential deficiencies with some of the elements of BLM’s federal leasing program, including noncompetitive leasing, royalty rates, data collection, fair return on federal resources, and bonding and reclamation processes. GAO also recommended actions for BLM to improve the related agency policies.³⁰ DOI’s Office of Inspector General has also identified issues with compliance and penalties, particularly on O&G leases.³¹ In 2021, in response to Executive Order

³⁰ See, for example, the following GAO reports: *Oil and Gas Royalties: Congress and Interior Should Strengthen Safeguards to Better Ensure Accurate Payments* (GAO-26-107669), November 25, 2025; *Oil and Gas: Onshore Competitive and Noncompetitive Lease Revenues* (GAO-21-138), November 19, 2020; *Federal Oil and Gas Revenue: Actions Needed to Improve BLM’s Royalty Relief Policy* (GAO-21-169T), October 6, 2020; *Oil and Gas: Interior Should Strengthen Management of Key Data Systems Used to Oversee Development on Federal Lands* (GAO-21-209), May 27, 2021; *Federal Energy Development: Challenges to Ensuring a Fair Return for Federal Energy Resources* (GAO-19-718T), September 24, 2019; and *Oil and Gas: Bureau of Land Management Should Address Risks from Insufficient Bonds to Reclaim Wells* (GAO-19-615), September 18, 2019.

³¹ See U.S. Department of the Interior (DOI), Office of Inspector General, *ONRR Needs to Consistently Enforce Compliance and Timely Revenue Collection* (Report No. 2024-CR-008), January 2026, https://www.doioig.gov/sites/default/files/2021-migration/Final-Audit-Report_ONRR-Needs-To-Consistently-Enforce-Compliance-and-Timely-Revenue-Collection.pdf.

(EO) 14008 of January 27, 2021, “Tackling the Climate Crisis at Home and Abroad,” DOI produced a report identifying many of these same issues as the GAO reports and a number of recommendations to address them.³² See the section “Issues for Congress” for more information on addressing these considerations.

Changes to Federal Oil and Gas Lease Terms in the 119th Congress

Legislation passed in the 119th Congress reverted several changes made by the 117th Congress to onshore O&G terms. The law commonly known as the Inflation Reduction Act of 2022 (IRA; P.L. 117-169) amended MLA provisions for onshore O&G leasing. Changes included increasing the minimum bid required for a lease, increasing rental rates, increasing the minimum royalty rate, assessing new royalties on flared or vented methane, eliminating noncompetitive leasing, and implementing a fee to nominate lands for consideration to lease. The FY2025 reconciliation law (P.L. 119-21) reverted some of these changes, reducing royalty rates back to pre-IRA levels, repealing royalties on flared or vented methane, reinstating noncompetitive leasing, and repealing the fee to nominate lands for consideration to lease. **Table 2** summarizes the changes to O&G leasing terms in the IRA and P.L. 119-21.

Table 2. Summary of Changes to Oil and Gas Leasing Terms in the Inflation Reduction Act (IRA; P.L. 117-169) and the FY2025 Reconciliation Law (P.L. 119-21)

Leasing Term and Details	IRA Change	P.L. 119-21 Change
<i>Nominating fee:</i> The Bureau of Land Management solicits nominations for lands for oil and gas leasing.	Expressions of interest (EOIs) must include \$5 per acre fee, adjusted for inflation not less frequently than every four years (Section 50262(d)).	Removed the nominating fee submitted with EOI (Section 50101(a)(1)).
<i>Noncompetitive leasing:</i> Federal leases not awarded through the competitive leasing process were made available for noncompetitive leasing for a period of two years. Noncompetitive leases were awarded to the first qualified applicant. No bonus payment was required.	Eliminated noncompetitive leasing (Section 50262(e)).	Reinstated noncompetitive leasing, making parcels available for two years after the competitive lease sale for the first qualified applicant. No bonus payment is required (Section 50101(a)(2)).
<i>Minimum bonus bid:</i> Also known as the <i>bonus</i> or the <i>bid</i> , the <i>bonus bid</i> is the payment that an applicant offers to purchase the lease of public lands.	Set minimum bid to \$10 per acre for the 10-year period beginning on August 16, 2022. The Secretary of the Interior may increase the national minimum acceptable bid after that period by regulation (Section 50262(b)).	No change.
<i>Rent:</i> <i>Rent</i> is the payment made by a lessee before production occurs.	For the 10-year period beginning on August 16, 2022, set rent to not less than \$3 per acre for the first two years, \$5 per acre per year for the following six-year period, and \$15 per acre per year thereafter (Section 50262(c)).	No change.

³² DOI, *Report on the Federal Oil and Gas Leasing Program*, November 2021, <https://www.doi.gov/sites/doi.gov/files/report-on-the-federal-oil-and-gas-leasing-program-doi-eo-14008.pdf>.

Leasing Term and Details	IRA Change	P.L. 119-21 Change
<i>Royalty:</i> Royalty is a required payment made by a lessee to the federal government based on the value of the public resource involved. The Secretary of the Interior is permitted to “waive, suspend or reduce the rental, or minimum royalty” as a production incentive, at the Secretary’s discretion.	Set royalty to exactly 16⅔% of the value of production during the 10-year period beginning on August 16, 2022, and not less than 16⅔% thereafter (Section 50262(a)(1)). Royalties are assessed on natural gas that is vented or flared (Section 50263).	Set royalty to not less than 12½% of the value of production (Section 50101(a)(1)). Royalties are not assessed on natural gas that is vented or flared (Section 50101(a)(1)).

Sources: Noncompetitive leasing, 30 U.S.C. §226(b)(1)(A) and 30 U.S.C. §226(c); minimum bonus bid, 30 U.S.C. §226(b); rent, 30 U.S.C. §226(d); royalty, 30 U.S.C. §226(b); natural gas that is vented or flared, 30 U.S.C. §1727.

Note: Before the FY2025 reconciliation law repealed the provisions, the nominating fee was at 30 U.S.C. §226(q), and natural gas that is vented or flared was at 30 U.S.C. §1727.

Past Amendments to Federal Geothermal Lease Terms

Congress made changes to geothermal lease terms by amending the Geothermal Steam Act of 1970 as part of the Energy Policy Act of 2005 (P.L. 109-58). Changes enacted in 2005 include adding two potential 5-year extensions to the initial 10-year lease term, increasing the maximum acreage of a single lease, and increasing the total acreage a single entity may lease in any one state.

Federal Permitting and Leasing Process

The federal permitting and leasing processes are largely similar for both O&G and geothermal projects.

BLM identifies land available for leasing through an RMP, identifies high- and low-preference parcels, holds competitive and noncompetitive lease sales, and conducts environmental reviews under NEPA at different stages during the processes, as required.³³ Individuals, companies, or contractors are able to nominate lands for BLM to consider, including for either O&G or geothermal lease sales. BLM manages the leasing process for O&G and geothermal resources for federal land managed by other federal agencies, though leases on these lands may have legal and regulatory management requirements specific to the federal agency responsible for managing the land on which the lease is located.

Operator responsibilities for leases include submitting specific permits at similar points in the drilling timeline for both O&G and geothermal projects. For example, operators submit an application for permit to drill (APD) to BLM before drilling for O&G projects (43 C.F.R. §3162.3-1); operators submit a geothermal drilling permit (GDP) application to BLM before drilling for geothermal projects (43 C.F.R. §3261). Both APDs and GDP applications contain plans for drill pad location, surface reclamation, and other surface uses.

Despite these similarities, there are significant differences. For example, operator responsibilities for exploration and drilling differ due to differences inherent to the resources. **Table 3** compares BLM permitting and leasing processes for O&G and geothermal resources and provides examples

³³ Other agencies that manage federal lands have different planning processes to determine where leasing may or may not be available.

of similarities and differences. The table is intended to be illustrative and not comprehensive in identifying similarities and differences that may arise in implementation.

Table 3. Selected Bureau of Land Management (BLM) Permitting and Leasing Processes for Geothermal and Oil and Gas Resources

	Oil and Gas	Both	Geothermal
Applicability of federal and state laws and regulations	—	BLM and operator comport with state and federal laws and regulations through entire process.	—
How land is chosen for evaluation and leasing	BLM can select parcels to include in a lease sale, but typically a qualified applicant submits expressions of interest (EOIs) to nominate lands for leasing (43 C.F.R. §3120). Nominated lands must align with lands designated as open for development by the resource management plan (RMP).	BLM prepares leasing analysis.	A qualified entity may nominate lands for competitive sale by submitting an applicable BLM nomination form. BLM may include land in a lease sale on its own initiative (43 C.F.R. §3203). BLM must have information on potential lands that indicate geothermal resources that could be produced are present.
Competitive sales and frequency	Competitive sales are held in states with eligible lands on at least a quarterly basis (30 U.S.C. §226).	Competitive sales are required.	Competitive sales must be offered at least once every two years for states that have nominations (30 U.S.C. §1003). ^a
Noncompetitive sales	30 U.S.C. §226(b)(1)(A) and 30 U.S.C. §226(c).	If a lease is offered competitively but no bid qualifies, the land becomes available for noncompetitive leasing for a two-year period.	30 U.S.C. §1003.

	Oil and Gas	Both	Geothermal
Operator responsibilities before various activities	Operator must submit an application for permit to drill (APD) to BLM (30 U.S.C. §191(d); 43 C.F.R. §3162.3-1). The fee for FY2026 is \$12,580.^a The APD form (BLM Form 3160-3) must include, among other things, a drilling plan, a surface use plan, and evidence of bond/surety coverage. The surface use plan should contain information on drill pad location, pad construction, the method for containment and waste disposal, and plans for surface reclamation. Operator may also need to secure permits based on project-specific needs to transport the product, such as right-of-way or pipelines, or to flare gas. Before other operations that will result in additional surface disturbance, the operator submits a new surface use plan of operations (APD Form 3160-5) (43 C.F.R. §3162.3-3). The APD is valid for two years (30 U.S.C. §226 (p)(4)).	Operator must meet requirements of site-specific and project-specific permits, including state regulations.	Operator must submit a Notice of Intent (NOI) to Conduct Geothermal Exploration Operations to BLM (43 C.F.R. §3251), including planned well characteristics and drilling and completion procedures. Operator must secure a geothermal drilling permit (GDP) from BLM (43 C.F.R. §3261), including a complete operations plan and a complete drilling program, with information on plans for well pads, roads, facilities, water sources, environmental protection procedures, and surface reclamation, among other data. Operator must submit a plan of utilization (POU) and a facility construction permit to be approved by BLM (43 C.F.R. §3271). The POU must include anticipated environmental impacts and mitigations. The construction permit must address any pipelines or facilities.

Source: U.S. Code and federal regulations as indicated in the table.

Notes: Though there are differences between APDs and GDPs, for the purposes of this analysis CRS is treating them as analogous. Laws and requirements listed in the table are not exhaustive; additional requirements may apply depending on the type of project, its location, and other factors.

- On December 16, 2025, BLM released an instruction memorandum, *Promoting Annual Competitive Geothermal Lease Sales* (IM 2026-004), which established the BLM policy to hold competitive lease sales annually.
- BLM, “Minerals Management: Annual Adjustment of Cost Recovery Fees,” 91 *Federal Register* 1194, January 12, 2026, <https://www.federalregister.gov/documents/2026/01/12/2026-00386/minerals-management-annual-adjustment-of-cost-recovery-fees>.

Multiple other federal, state, and local laws may also require permitting or other procedures for the approval and operation of an O&G or geothermal project on federal lands, depending on the scope and nature of the activities, potential environmental impacts, and other factors. Requirements to comply with these laws and others remain and are separate from executive orders issued by the second Trump Administration that aim to increase or promote O&G development on federal lands (see **text box** below). Depending on the site-specific circumstances, examples of other federal laws that may apply to a project include, but are not limited to, the Clean Water Act (33 U.S.C. §§1251 et seq.), Endangered Species Act (ESA; 16 U.S.C. §§1531 et

seq.), National Historic Preservation Act (NHPA; 54 U.S.C. §§300101 et seq.), Wild and Scenic Rivers Act (16 U.S.C. §§1271 et seq.), and Native American Graves Protection and Repatriation Act (25 U.S.C. §§3001 et seq.). NEPA authorizes a procedural framework for evaluating the potential effects of proposed actions and potential alternatives to inform agency decisions under other laws, but the NEPA process itself does not provide permitting or other regulatory approvals to carry out a project. For further discussion, see the section “NEPA Environmental Review Process,” below.

Executive Orders Supporting Oil and Gas and Geothermal Leasing on Federal Lands

The second Trump Administration has issued several executive orders (EOs) that aim to increase or promote the development of certain domestic energy resources on federal lands. These include the following:

- **EO 14154 of January 20, 2025, “Unleashing American Energy.”** Among other measures, EO 14154 directs agencies to review actions that may “burden ... domestic energy resources—with particular attention to oil, natural gas” on federal lands. EO 14154 revoked several executive orders from previous administrations, including EO 14008 of January 27, 2021, “Tackling the Climate Crisis at Home and Abroad.” EO 14008 addressed the potential for climate change and federal actions to address it, including transitioning the electricity sector to carbon-free electricity, which would include geothermal power.
- **EO 14156 of January 20, 2025, “Declaring a National Energy Emergency.”** Among other measures, EO 14156 directs agencies to facilitate the development of specified domestic energy resources, such as oil and gas (O&G) and “geothermal heat,” including, but not limited to, those on federal lands.³⁴
- **EO 14153 of January 20, 2025, “Unleashing Alaska’s Extraordinary Resource Potential.”** Among other measures, EO 14153 calls for the development of O&G resources in Alaska (on both state and federal lands), including in the Arctic National Wildlife Refuge and the National Petroleum Reserve in Alaska.³⁵

Developing Projects: Productive and Nonproductive Leases

While O&G and geothermal projects are being developed (i.e., any time before production starts) their leases are classified as nonproductive. O&G and geothermal power have operational factors that may extend development time (relative to other energy types), such as challenges related to drilling wells, confirming resources, and—for geothermal projects—the complexities in designing and constructing power plants. The base federal lease periods of 10 years—longer than some other federal energy lease periods, such as for solar or wind testing—reflect these development challenges.³⁶

While longer initial lease terms may allow the successful development of many O&G and geothermal projects, both successful and unsuccessful projects can result in leased parcels being nonproducing for extended amounts of time. For a variety of reasons, including the operational challenges mentioned above as well as market fluctuations or other business decisions, some

³⁴ A presidential message on January 13, 2026, continued the national energy emergency declared in EO 14156: U.S. President (Trump), “Report of the Continuation of the National Emergency That Was Originally Declared in Executive Order 14156 of January 20, 2025, with Respect to Energy,” *Congressional Record*, daily edition, vol. 172, no. 9 (January 13, 2026), <https://www.congress.gov/congressional-record/volume-172/issue-9/senate-section/article/S159-3>.

³⁵ For more details on federal oil and gas leasing in Alaska, see CRS In Focus IF13119, *National Petroleum Reserve in Alaska (NPR-A): A Summary*, by Mark K. DeSantis and Lexie Ryan, and CRS In Focus IF12006, *Arctic National Wildlife Refuge: Status of Oil and Gas Program*, by Laura B. Comay.

³⁶ For example, BLM right-of-way grants or leases for wind and solar testing—which are used to determine whether an area’s energy potential is adequate for development—have a maximum initial term of three years with an option for a three-year renewal if accompanied by a development application (43 C.F.R. §2805.11).

O&G and geothermal lease parcels are nonproductive for several years or may never become productive. Of all onshore O&G leases held in FY2025, 5,707 out of 29,354 (19%) were not producing—covering 8,373,674 out of 20,719,675 leased acres (40%).³⁷ Out of all geothermal leases held in FY2025, 522 out of 610 (86%) were not producing—covering 1,220,111 out of 1,322,389 leased acres (92%).³⁸ Additionally, BLM has noted a variety of reasons for nonproductivity—including “speculative leasing,” projects that are nonproductive likely pending market changes, or projects that are ultimately unsuccessful—that often inhibit those lands from being managed for other purposes, such as conservation or recreation.³⁹

O&G projects—including exploratory and producing wells—must secure an approved APD from BLM before commencing drilling operations. A lease may continue to be nonproducing even after the APD is approved, for reasons mentioned above. As of June 1, 2026, BLM had approved 9,931 APDs.⁴⁰

NEPA Environmental Review Process

Unless certain conditions are met, NEPA generally requires federal agencies to evaluate and document the environmental impacts of a proposed federal agency action (i.e., through an environmental review).⁴¹ How a federal agency demonstrates compliance with NEPA depends on the level of the proposed action’s impacts. The different types of review vary in scope, purpose, and procedural requirements and are intended to ensure that the level of analysis is appropriate for the action’s potential environmental impact.

A proposed action that has a reasonably foreseeable significant effect on the “quality of the human environment” typically requires the preparation of an environmental impact statement (EIS).⁴² An EIS is the most comprehensive level of review and includes a detailed analysis of potential environmental impacts, reasonable alternatives to the proposed action, and public input.⁴³ EISs are to be completed in two years, with opportunities for extensions.⁴⁴

³⁷ Not all of these projects will be nonproducing by the end of their initial lease period; this is a snapshot of 2025 conditions. BLM, *Public Land Statistics 2025*, July 2026, <https://www.blm.gov/sites/default/files/docs/2026-08/BLM-Public-Land-Statistics-2025.pdf>.

³⁸ BLM, *Public Land Statistics 2025*, July 2026, <https://www.blm.gov/sites/default/files/docs/2026-08/BLM-Public-Land-Statistics-2025.pdf>.

³⁹ DOI, *Report on the Federal Oil and Gas Leasing Program*, November 2021, <https://www.doi.gov/sites/doi.gov/files/report-on-the-federal-oil-and-gas-leasing-program-doi-eo-14008.pdf>.

⁴⁰ BLM, *FY 2026 Application for Permit to Drill (APDs) Status Report: 05/1/2026 to 05/31/2026*, accessed June 10, 2026, at <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/operations-and-production/permitting/applications-permits-drill>.

⁴¹ The National Environmental Policy Act of 1969 (NEPA) establishes a national policy with respect to environmental quality and the basic process for integrating environmental considerations into federal decisionmaking (i.e., “environmental reviews”). NEPA’s environmental review procedures do not typically apply to actions that are exempted by statute, conflict with another provision of federal law, or involve nondiscretionary agency functions.

⁴² 42 U.S.C. §4336(b)(1).

⁴³ 42 U.S.C. §4332(2)(C) requires federal agencies to evaluate reasonably foreseeable environmental effects, reasonably foreseeable adverse environmental effects that cannot be avoided, a reasonable range of alternatives, the relationship between local short-term uses of the human environment and the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitments of federal resources. 42 U.S.C. §4336a(c) requires that an agency publish a notice of intent (NOI) to prepare an environmental impact statement (EIS) that includes a request for public comment on alternatives, impacts, and relevant information, studies, or analyses with respect to the proposed agency action.

⁴⁴ 42 U.S.C. §4336a(g)(1)(A) requires that agencies complete an EIS no later than two years after the sooner of “(i) the (continued...) ”

If the proposed action does not have a reasonably foreseeable significant effect on the quality of the human environment, or if the significance of the effect is unknown, an agency typically prepares an environmental assessment (EA).⁴⁵ An EA is a concise public document prepared by an agency to set forth the basis of the agency's analysis. EAs are to be completed within one year.⁴⁶ If, after preparing the EA, the agency determines that the impact will not be significant, the agency issues a Finding of No Significant Impact (FONSI) to conclude the NEPA process.⁴⁷ If the EA finds that significant impacts are likely, the agency must then prepare an EIS.

An agency is not required to prepare an EIS or EA if the major federal action is excluded pursuant to one of the agency's categorical exclusions (CEs)⁴⁸ or if the agency can apply another agency's CE consistent with statute.⁴⁹ CEs are categories of actions that a federal agency has previously determined normally do not significantly affect the quality of the human environment.⁵⁰ When an agency applies a CE to a proposed action, the agency does not prepare an EA or an EIS.⁵¹

BLM's Implementation of NEPA

BLM follows DOI regulations and departmental guidance to carry out NEPA's environmental review process.⁵² BLM land use planning regulations specify that the preparation of an RMP under FLPMA "is considered a major Federal action significantly affecting the quality of the human environment" requiring an EIS under NEPA.⁵³

BLM permitting or leasing decisions for land uses approved under an RMP would also be subject to the preparation of an EIS if the proposed action is expected to have a reasonably foreseeable significant effect on the quality of the human environment. Alternatively, such decisions would be subject to the preparation of an EA if the proposed action is not expected to have a reasonably significant effect on the quality of the human environment or if the significance of such effect is unknown.

Some O&G and geothermal activities of a more limited scope are categorically excluded from the preparation of an EA or EIS under NEPA. Two O&G CEs are authorized in statute.⁵⁴ BLM has

date on which such agency determines that section 4332(2)(C) of this title requires the issuance of an environmental impact statement with respect to such action; (ii) the date on which such agency notifies the applicant that the application to establish a right-of-way for such action is complete; and (iii) the date on which such agency issues a notice of intent to prepare the environmental impact statement for such action."

⁴⁵ 42 U.S.C. §4336(b)(2).

⁴⁶ 42 U.S.C. §4336(b)(2) and 42 U.S.C. §4336a(g)(1)(B), which requires that agencies complete an environmental assessment (EA) no later than one year after the sooner of "(i) the date on which such agency determines that section 4336(b)(2) of this title requires the preparation of an environmental assessment with respect to such action; (ii) the date on which such agency notifies the applicant that the application to establish a right-of-way for such action is complete; and (iii) the date on which such agency issues a notice of intent to prepare the environmental assessment for such action."

⁴⁷ 42 U.S.C. §4336(b)(2).

⁴⁸ A categorical exclusion (CE) may also sometimes be referred to as "CX" or "CatEx."

⁴⁹ 42 U.S.C. §4336(a)(2). Further, 42 U.S.C. §4336c allows for an agency to adopt a CE listed in another agency's NEPA procedures.

⁵⁰ 42 U.S.C. §4336e(1).

⁵¹ 42 U.S.C. §4336(a)(2).

⁵² 43 C.F.R. Part 46 and DOI, *Handbook of National Environmental Policy Act Implementing Procedures*, February 2026, <https://www.doi.gov/media/document/doi-handbook-nepa-procedures>.

⁵³ 43 C.F.R. §§1601.0-6.

⁵⁴ Section 390 of the Energy Policy Act of 2005 (P.L. 109-58) authorized CEs for certain O&G activities, including the (continued...)

also administratively established some CEs through agency guidance.⁵⁵ Federal agencies may also “adopt a categorical exclusion listed in another agency’s NEPA procedures for a category of proposed agency actions for which the categorical exclusion was established.”⁵⁶

BLM’s Implementation of NEPA for O&G and Geothermal Activities amid the Declared National Energy Emergency

DOI NEPA regulations provide alternative procedures for NEPA compliance when “an emergency exists that makes it necessary to take actions to address imminent threats to life, property, or important natural, cultural, or historic resources before preparing an environmental document or documenting the use of a CE.”⁵⁷ For actions that must be taken beyond those that are urgently needed but “in response and relation to such emergency action,” DOI NEPA regulations specify that a “Responsible Official” may incorporate the use of “alternative arrangements” for NEPA compliance.⁵⁸ Alternative arrangements allow an agency to meet its NEPA obligations but do not waive the requirements to comply with NEPA.⁵⁹ For actions that are “likely to result in significant effects,” DOI officials “must consult with the Council on Environmental Quality prior to authorizing the use of alternative arrangements.”⁶⁰

drilling of new wells within a developed field. The Infrastructure Investment and Jobs Act (P.L. 117-58) authorized several criteria for the Secretary of the Interior to apply a CE for certain gathering lines (i.e., pipelines installed to transport oil, natural gas, and related constituents, or produced water from one or more wells).

⁵⁵ DOI, *Handbook of National Environmental Policy Act Implementing Procedures*, February 2026, pp. 65-67, <https://www.doi.gov/media/document/doi-handbook-nepa-procedures>. DOI’s *Handbook of National Environmental Policy Act Implementing Procedures* specifies eight BLM CEs related to O&G and geothermal activities. Three of these CEs apply only to approval of geothermal activities—such as approval of an operations plan, notice of intent, or other geothermal agreements—and specify certain conditions (e.g., resource utilization limitations, project size, reclamation requirements, travel routes, and other resource protection) that may limit their application. Three CEs apply to certain administrative or fiscal decisions, such as lease adjustments and royalty rate reductions. One CE applies to BLM’s decision to suspend operations and production. And one CE applies to O&G and geothermal exploration activities as long as there is no temporary or permanent road construction.

⁵⁶ 42 U.S.C. §4336c and DOI, *Handbook of National Environmental Policy Act Implementing Procedures*, February 2026, pp. 99-102, <https://www.doi.gov/media/document/doi-handbook-nepa-procedures>. DOI’s *Handbook* identifies eight CEs that bureaus have formally adopted related to O&G and geothermal activities.

⁵⁷ 43 C.F.R. §46.150. For actions that are “necessary to control the immediate impacts of the emergency that are urgently needed to address imminent threats to life, property, or important natural, cultural, or historic resources,” the “Responsible Official shall consider taking steps to mitigate reasonably foreseeable adverse environmental impacts to the extent practicable and consistent with agency authority” without first completing an environmental review.

⁵⁸ 43 C.F.R. §46.150(c)-(d). DOI’s *Handbook of National Environmental Policy Act Implementing Procedures* defines *responsible official* as “the bureau employee who is delegated the authority to make and implement a decision on a proposed action and is responsible for ensuring compliance with NEPA.”

⁵⁹ Council on Environmental Quality, *Guidance on Emergencies and the National Environmental Policy Act*, January 21, 2026, p. 2, <https://nepa.gov/sites/default/files/documents/Emergencies%20and%20NEPA%20Guidance%202026.pdf>.

⁶⁰ 43 C.F.R. §46.150(d). NEPA established the Council on Environmental Quality (CEQ) within the Executive Office of the President. NEPA directs CEQ to—among other duties—assist and advise the President on certain environmental matters, including NEPA implementation. Section 102(2)(B) of NEPA instructs federal agencies to “identify and develop methods and procedures, in consultation with CEQ,” to implement NEPA.

Pursuant to EO 14156 of January 20, 2025, “Declaring a National Energy Emergency,”⁶¹ DOI adopted alternative arrangements to comply with NEPA for certain energy projects.⁶² These alternative arrangements for NEPA compliance allow for shortened environmental reviews for specified projects.⁶³ **Table 4** outlines the key features of the alternative arrangements to NEPA compliance.

Table 4. Features of National Environmental Policy Act (NEPA) Analyses Under Alternative Arrangements Adopted by the Department of the Interior (DOI)

Pursuant to Executive Order 14156 of January 20, 2025, “Declaring a National Energy Emergency”

Level of Anticipated Impacts	Required Documentation	Timeline	Public Notification or Participation Requirements
Reasonably foreseeable significant effect on the quality of the human environment.	Environmental impact statement (EIS) addressing the purpose and need, ^d alternatives, ^e and a brief description of environmental effects in accordance with 43 C.F.R. 46.415(a)-(b). NEPA review concludes with publication of the EIS and any record of decision.	Approximately 28 days. ^a	Publication of a notice of intent (NOI) to prepare an EIS. A public meeting to be held during preparation of the EIS. Ten-day public comment period. ^b EIS published on a public website and filed with the Environmental Protection Agency (EPA). ^c
Does not have a reasonably foreseeable significant effect on the quality of the human environment or if the significance of effect is unknown.	Environmental assessment (EA) addressing the purpose and need, ^d alternatives, ^e mitigation measures, and a brief description of environmental effects. NEPA review concludes with a finding of no significant impact (FONSI) or, if the EA finds that significant impacts are likely, the responsible official ^h must then prepare an EIS.	Approximately 14 days. ^f	EA and FONSI published on a public website. ^g

Source: Table prepared by CRS based on Department of the Interior, *Alternative Arrangements for Compliance with the National Environmental Policy Act amid the National Energy Emergency*, April 23, 2025, https://www.doi.gov/sites/default/files/documents/2025-04/alternative-arrangements-nepa-during-national-energy-emergency-2025-04-23-signed_1.pdf.

Notes: Executive Order 14156 of January 20, 2025, “Declaring a National Energy Emergency,” 90 *Federal Register* 8433, January 29, 2025, declared a national emergency, stating that “the United States’ insufficient energy production, transportation, refining, and generation constitutes an unusual and extraordinary threat to our

⁶¹ The executive order declared a national emergency stating that “the United States’ insufficient energy production, transportation, refining, and generation constitutes an unusual and extraordinary threat to our Nation’s economy, national security, and foreign policy.” Executive Order 14156 of January 20, 2025, “Declaring a National Energy Emergency,” 90 *Federal Register* 8433, January 29, 2025.

⁶² DOI, *Alternative Arrangements for Compliance with the National Environmental Policy Act amid the National Energy Emergency*, April 23, 2025, https://www.doi.gov/sites/default/files/documents/2025-04/alternative-arrangements-nepa-during-national-energy-emergency-2025-04-23-signed_1.pdf.

⁶³ Specified projects include “projects that seek to identify, lease, site, produce, transport, refine, or generate energy resources as defined in section 8(a) of EO 14156; and for which the project applicant(s) have submitted plans of operations, applications for permits to drill, or other applications.” Letter from Katherine R. Scarlett, Chief of Staff, CEQ, to Karen Budd-Falen, Acting Deputy Secretary, DOI, April 23, 2025, https://www.whitehouse.gov/wp-content/uploads/2025/04/CEQ-to-DOI-re-Alternative-Arrangement_04.23.25.pdf.

Nation's economy, national security, and foreign policy.” Pursuant to this emergency declaration, DOI adopted alternative arrangements allowing it to meet its National Environmental Policy Act (NEPA; 42 U.S.C. §§4321 et seq.) obligations.

- a. The EIS should be prepared within approximately 28 days of publishing the NOI.
- b. DOI anticipates that most comment periods will be approximately 10 days. The responsible official will determine the duration of the written comment period based on the nature of the action and the urgency of the emergency response.
- c. 42 U.S.C. §7609 requires the Administrator of EPA to review all draft EISs prepared by other federal agencies and requires that EPA make these reviews public.
- d. 42 U.S.C. §4336a(d) states that each environmental document shall include a statement of purpose and need that briefly summarizes the underlying purpose and need for the proposed agency action.
- e. 42 U.S.C. §4332(2)(C)(iii) requires federal agencies to evaluate a reasonable range of alternatives to the proposed agency action, including an analysis of any negative environmental impacts of not implementing the proposed agency action in the case of a no action alternative. Alternatives must be technically and economically feasible and meet the purpose and need of the proposal.
- f. The EA should be prepared within approximately 14 days of receiving a complete application. If the EA supports a FONSI, documentation of such finding should be prepared concurrently within the same period of approximately 14 days.
- g. The responsible official is not required to seek public comment prior to finalizing the environmental assessment, finding of no significant impact, and any decision.
- h. The DOI's *Handbook of National Environmental Policy Act Implementing Procedures* defines responsible official as “the bureau employee who is delegated the authority to make and implement a decision on a proposed action and is responsible for ensuring compliance with NEPA.”

Issues for Congress

The following sections discuss some options Congress could consider when addressing federal leasing and permitting issues related to O&G and geothermal energy development. While some issues are specific to one resource or the other (due to the technical, environmental, or market considerations for that resource), certain issues discussed could potentially impact both.

Congress has considered a variety of changes to BLM leasing and permitting for O&G and geothermal projects, some of which have been implemented in law, and others of which are still being considered.

Bonding and Project Reclamation

The MLA directs the Secretary of the Interior to establish “adequate” bonding levels “by rule or regulation”; these levels are not defined in statute.⁶⁴ In 2024, BLM issued a rule, “Fluid Mineral Leases and Leasing Process,” that updated bonding levels, which had not been changed since the mid-20th century.⁶⁵ Under the 2024 rule, the minimum bonding amount for an O&G lease increased from \$10,000 to \$150,000 per lease bond, which covers all drilling operations on a single lease, and from \$25,000 to \$500,000 for a statewide bond, which covers all of an operator's wells in a single state.⁶⁶ BLM is to adjust bond amounts for inflation every 10 years.⁶⁷ Any nationwide bonds (which cover all federal leases nationwide) or unit operator bonds (which

⁶⁴ 30 U.S.C. §226(g).

⁶⁵ BLM, “Fluid Mineral Leases and Leasing Process,” 89 *Federal Register* 30916, April 23, 2024, <https://www.federalregister.gov/documents/2024/04/23/2024-08138/fluid-mineral-leases-and-leasing-process>.

⁶⁶ 43 C.F.R. §3104.1.

⁶⁷ 43 C.F.R. §3104.1(a).

cover operations on all federal leases under a unit agreement) filed by the O&G unit operator in lieu of individual lease bonds were to be replaced with individual lease or statewide bonds.⁶⁸

In June 2026, pursuant to EO 14154 and Department of the Interior Secretarial Order 3418,⁶⁹ BLM published a proposed rule that would rescind the 2024 rule.⁷⁰ Under the proposed rule, BLM would reduce lease bonds to \$10,000 and statewide bonds to \$25,000, and is considering reinstating unit operator and nationwide bonds. The proposed rule was open for a 60-day comment period ending August 24, 2026.

BLM estimates the average costs taxpayers bear to reclaim an O&G well is \$71,000, which is higher than pre-Fluid Mineral Leases and Leasing Process bonding amounts for a single lease and for all leases in a state.⁷¹ Some Members of Congress contend that because the full cost of reclamation for a well may be higher than the bonding amount, taxpayers may have to pay for wells that are abandoned.⁷²

Representatives of the O&G industry have argued that most developers clean up their projects and that setting bonding requirements higher will depress oil production on federal lands.⁷³ Some opponents of higher bonding amounts argue that the increase in statewide bonding amounts may especially harm small companies that hold federal O&G leases.⁷⁴

Congress has considered amending the law to clarify statutory requirements for bonding on federal public lands and to establish bonding levels and structure in statute. For example, the House-reported version of the IRA would have established bonding levels in statute (\$150,000 for lease bonds and \$500,000 for statewide bonds, the same levels set by the Fluid Mineral Leases and Leasing Process rule).⁷⁵ The final version of the IRA enacted into law did not include this language.

BLM Authority to Set Royalty Rates

Congress has regularly considered whether, and, if so, at what level, royalty rates should be set in statute. As discussed, the royalty rate for O&G projects has been adjusted multiple times in recent years. For example, in April 2022, BLM implemented a new royalty rate of 18.75%—for the first time setting it above the minimum rate established under the MLA (12½%).⁷⁶ In August 2022,

⁶⁸ 30 U.S.C. §226(g); 43 C.F.R. §3104.90. A unit agreement is a cooperative development plan adopted by multiple lessees and approved by BLM; see 30 U.S.C. §226(m) and 43 C.F.R. §3101.3.

⁶⁹ Secretarial Order 3418, “Unleashing American Energy,” February 3, 2025, <https://www.doi.gov/document-library/secretary-order/so-3418-unleashing-american-energy>; and EO 14154, “Unleashing American Energy,” 90 *Federal Register* 8353, January 29, 2025.

⁷⁰ BLM, “Oil and Gas Leasing,” 91 *Federal Register* 38084, June 24, 2026, <https://www.federalregister.gov/public-inspection/2026-12734/oil-and-gas-leasing>.

⁷¹ BLM, “Oil and Gas Bonding,” accessed April 20, 2026, <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/bonding>.

⁷² Letter from Sen. Michael F. Bennet et al. to Doug Burgum, Secretary, DOI, and Bill Groffy, BLM acting director, November 24, 2025, https://www.bennet.senate.gov/wp-content/uploads/2025/11/Quill_-_Letter_Bonding.pdf.

⁷³ Heather Richards, “Biden Unveils Aggressive Rules for Public Land Oil Drilling,” *E&E News*, July 20, 2023, <https://www.eenews.net/articles/biden-unveils-aggressive-rules-for-public-land-oil-drilling/>.

⁷⁴ Letter from Melissa Simpson, president of Western Energy Alliance, to Bill Groffy, BLM acting director, November 20, 2025, <https://www.westernenergyalliance.org/assets/pdf/Alliance+Letter+to+BLM+National+Office-BLM+Leasing+Rule/>.

⁷⁵ Section 70804, H.R. 5376 in the 117th Congress, as reported in the House on September 27, 2021.

⁷⁶ BLM, “June 2022 Oil & Gas Lease Sale: Set a Royalty Rate of 18.75 Percent,” April 18, 2022, <https://eplanning.blm.gov/eplanning-ui/project/2017575/510>.

Congress, through the IRA, set the royalty rate at exactly 16⅔% for all new projects for the following 10 years. P.L. 119-21 reverted the royalty rate increase, setting the minimum royalty back to 12½%. Current statute retains BLM’s authority to set the royalty rate higher than 12½%, but also permits the Secretary of the Interior to “waive, suspend or reduce the rental, or minimum royalty” in certain situations, including as a production incentive.⁷⁷ Congress most recently updated the geothermal royalty rate in the Energy Policy Act of 2005 (P.L. 109-58). It set the rate to “not less than 1 percent and not more than 2.5 percent” of the gross proceeds from electricity sales for the first 10 years of production and “not less than 2 and not more than 5 percent” thereafter.⁷⁸ The Secretary of the Interior “may waive, suspend, or reduce the rental or royalty” for conservation, resource recovery, or certain market reasons.⁷⁹

Congress could consider the advantages and disadvantages of the current O&G and geothermal royalty rates. Current federal oil and gas royalty rates are generally lower than levels seen in leasing on state and private lands.⁸⁰ While these lower rates may promote development on federal lands, lower rates may also impact BLM’s other land management mandates (e.g., the under- or overutilization of energy resources). Changes to royalty rates that result in a significant step change in rates (such as the change in April 2022) have the potential to disrupt energy project development.

Alternatively, rather than set statutory minimums for royalties, Congress could defer to BLM to set royalty rates for O&G and geothermal leasing. Congress has taken similar approaches in the context of wind and solar development on federal lands. For example, the Energy Act of 2020 (Division Z of P.L. 116-260) modified FLPMA to give BLM the ability to reduce the rates (for acreage rents and capacity fees) for wind and solar rights-of-way “to promote the greatest use” of those energy resources and for other reasons (43 U.S.C. §3003).⁸¹ Since then, BLM has made multiple revisions to the wind and solar rates, including setting uniform capacity fees regardless of the technology deployed and adjusting those fees to be based on the actual electricity generated and its market value (rather than on the prior basis of the potential maximum capacity of the project). In P.L. 119-21, Congress set a fixed royalty rate of 3.9% of the gross proceeds of electricity sales; however, the Secretary of the Interior still retained the authority to reduce the actual rates as appropriate.⁸² Congress could decide to grant BLM similar flexibility on O&G and geothermal royalty rates to support expanding O&G development or supporting more widely available geothermal power deployment (such as deployment enabled by EGS). BLM might, for example, choose to establish state- or zone-based rates to account for regional differences in project costs and energy values. Congress could also decide that the current terms and authorities for leasing are suitable to support the various federal goals and thus opt to make no changes.

⁷⁷ 30 U.S.C. §209.

⁷⁸ 30 U.S.C. §1004.

⁷⁹ 30 U.S.C. §1012.

⁸⁰ See “Table 1: Oil and Gas Royalty Rates Across Federal Public, Private, and State Lands” in DOI, *Report on the Federal Oil and Gas Leasing Program*, November 2021, p. 8, <https://www.doi.gov/sites/doi.gov/files/report-on-the-federal-oil-and-gas-leasing-program-doi-eo-14008.pdf>.

⁸¹ BLM typically issues *leases* for the development of O&G and geothermal resources. In contrast, BLM issues *rights-of-way grants* for certain wind and solar projects. Similarly, BLM charges *royalties* to O&G and geothermal producers based on the value of production from the lease. For wind and solar leases, BLM charges a *capacity fee* based on the gross proceeds of sale of electricity. For the purposes of this comparison, CRS has treated leases and rights-of-way grants as analogous and royalties and capacity fees as analogous.

⁸² 43 U.S.C. §3003.

Productive and Nonproductive Leases

Congress could consider modifications of leasing terms or requirements related to nonproductive leases. Shorter initial lease periods could reduce nonproductive times, whereas longer lease periods could support more development of these energy resources. Congress could consider modifying requirements for BLM's regular review of nonproductive leases, requirements for lessees to show progress, and/or requirements relating to the termination or re-competition of nonproductive leases. Higher rent rates (which are paid by lessees prior to achieving production) could disincentivize longer nonproductive lease periods but could also discourage some development. Partial rent rebates for projects that ultimately become productive could incentivize leases of lands with the best resource development potential. Congress could also consider guidance to BLM regarding the development of activity plans that specifically accommodate and encourage intermediate land uses during nonproductive lease periods, as appropriate.

Noncompetitive Leases

Congress could consider changing whether noncompetitive lease offerings should be available for either O&G or geothermal leases. Some Members of Congress criticized noncompetitive oil and gas leases as having “led to the hoarding of low-priced land by oil and gas companies, much of which they never bring into production.”⁸³ Congress, through the IRA, eliminated noncompetitive offerings for O&G and then reinstated them in P.L. 119-21. Congress could reconsider the purpose of noncompetitive leasing in relation to the various energy resources. For example, noncompetitive leasing could support development of individual resources based on specific policy or economic goals. For geothermal leasing, noncompetitive leases may be appropriate for the geothermal industry due to its smaller size—meaning there is generally less competition or potential funding for project development compared to O&G development—or because of other development or operational challenges. Additionally, as the geothermal industry develops, Congress could determine these challenges are no longer decisive and thus noncompetitive leases should be eliminated. Conversely, Congress could determine that the effects of some markets and policy trends—for example, natural gas and oil prices—may continue to support the suitability of noncompetitive leases for O&G.

Drilling Activities and Review Processes

Applications for Permits to Drill (APDs) and Geothermal Drilling Permits (GPDs)

Congress could consider changes to applications for permits to drill (APDs or GDPs) and the timelines associated with reviewing, processing, and deciding on applications; notifying applicants; and issuing permits. APDs/GDPs can contribute to the administrative overhead and to the length of the development timeline for O&G or geothermal projects.⁸⁴ Regulation requires

⁸³ See “Sec. 80102. Noncompetitive Leasing” in the “Dissenting Views” section of U.S. Congress, House Committee on the Budget, *One Big Beautiful Bill Act*, report to accompany H.R. 1, 119th Congress, 1st sess., H.Rept. 119-106, book 1, May 20, 2025, p. 1071.

⁸⁴ After a geothermal or O&G lease has been obtained, a geothermal drilling permit (GDP) or an application for a permit to drill (APD) must be approved for each well to be drilled. For more information on GDPs/APDs, see BLM, “Geothermal Guidance,” <https://www.blm.gov/programs/energy-and-minerals/geothermal-energy/geothermal-guidance>, and BLM, “Applications for Permits to Drill,” <https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/operations-and-production/permitting/applications-permits-drill>. For more on BLM's APD review process, (continued...)

BLM to decide whether to approve, approve subject to conditions, defer, or deny an APD within 30 days of receiving it, but projects frequently face delays past the 30-day mark.⁸⁵

The Energy Policy Act of 2005 provided timeline requirements and introduced a pilot program in an attempt to streamline the O&G permitting process—the law provided a fund to support increased staffing for the pilot and required agency staff with expertise relevant to processing applications to be co-located in central offices to improve coordination and communication. Following the act’s passage, BLM noted some individual process improvements. BLM reported that NEPA processing time (one step in the overall process) for APDs and rights-of-way applications fell from 81 days to 61 days, or roughly 25%, due to co-location of agency staff and other factors.⁸⁶ The field offices for the pilot program processed more APDs in each of 2006 and 2007 than in previous years (though the total number of applications processed decreased from 2006 to 2007). Additionally, all the pilot sites reported more completed inspections—environmental, drilling, and operational inspections performed in parallel with the APD processing—in 2006 and again in 2007 than in previous years, and in 2007 the pilot sites completed 100% of planned inspections.

Despite BLM reporting these individual statistics, GAO noted that, as of August 2013, BLM had not completed a full program review and report to Congress, as required under the Energy Policy Act of 2005, making it challenging to determine the overall success of the pilot effort. GAO’s own analysis indicated that APD processing times increased between 2005 and 2007 in the seven pilot offices.⁸⁷ Funding for the pilot program was made permanent under the FY2015 National Defense Authorization Act (P.L. 113-291).

Despite the changes made in the Energy Policy Act of 2005 and other administrative efforts within BLM to streamline APD processing times, APD processing times have not decreased overall. Average processing times between FY2005 and FY2025 are shown in **Figure 1**. Between FY2005 and FY2011 the trend in average APD processing time was increasing. In BLM’s budget justification for FY2012, it stated that it expected shorter processing times in the future. Despite that expectation, while the average APD processing time did decrease from the local high in FY2011, and while processing times were relatively lower on average between FY2018 and FY2021, the average processing time has not decreased overall. Between FY2005 and FY2011, the average processing time was 224 days. Between FY2012 and FY2025, the average was 227 days. Between FY2005 and FY2025, the average was 226 days.⁸⁸

including delays, see *Oil and Gas Permitting: Actions Needed to Improve BLM’s Review Process and Data System* (GAO-20-329), March 16, 2020.

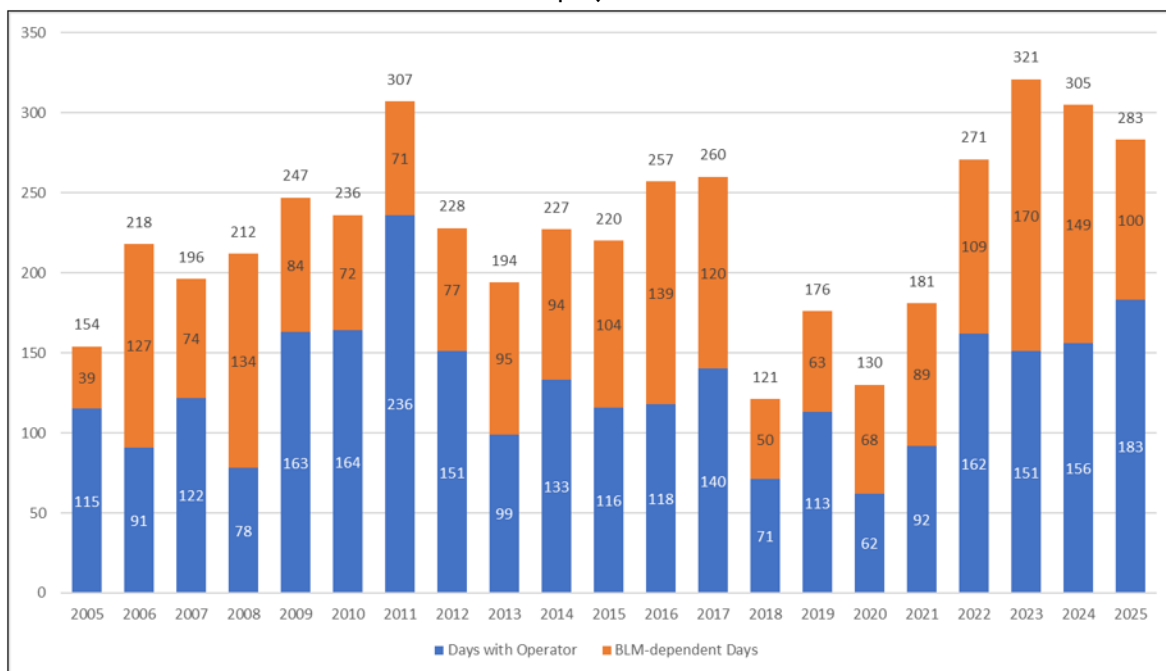
⁸⁵ 43 C.F.R. § 3171.12.

⁸⁶ Booz Allen Hamilton, *Section 365 of the Energy Policy Act of 2005: Year Two Report for the Pilot Project to Improve Federal Permit Coordination*, prepared for BLM, February 2008.

⁸⁷ GAO, *BLM Needs Better Data to Track Permit Processing Times and Prioritize Inspections*, August 2013, <https://www.gao.gov/assets/gao-13-572.pdf>.

⁸⁸ The average total time required to approve an APD includes both days waiting on operators and BLM-dependent days. BLM Oil and Gas Statistics, 2017, Table 12, https://www.blm.gov/sites/blm.gov/files/Table12_Time_to_Complete_an_APD1.pdf; and BLM Oil and Gas Statistics, 2025, Table 12, <https://www.blm.gov/programs-energy-and-minerals-oil-and-gas-oil-and-gas-statistics>.

Figure I. Average APD Processing Times
Federal and Indian projects, FY2005-FY2025



Source: Bureau of Land Management (BLM) Oil and Gas Statistics, 2017, Table 12, https://www.blm.gov/sites/blm.gov/files/Table12_Time_to_Complete_an_APD1.pdf; BLM Oil and Gas Statistics, 2025, Table 12, <https://www.blm.gov/programs-energy-and-minerals-oil-and-gas-oil-and-gas-statistics>.

Notes: APD = application for permit to drill. The average total time required to approve an APD includes both days waiting on operators and BLM-dependent days, which are days under review by BLM after the operator has completed the APD. Years are fiscal years.

Data on the time required to process GDPs is more limited. Analysis by staff from the National Laboratory of the Rockies (formerly the National Renewable Energy Laboratory) reported that GDPs have been approved typically following a determination of NEPA adequacy (DNA) or an environmental assessment (EA), though there are exceptions where assessments have been covered by a CE.⁸⁹ Typical time frames for these approvals have been 1 month for a DNA, 2 months for a CE, and 10 months for an EA.⁹⁰

Bills in the 119th Congress would establish statutory deadlines for the approval or rejection of APDs/GDPs or modified processes, technology, or funding to speed up leasing and project approval. For example, H.R. 1687 would establish a 30-day deadline (after a completed application) for BLM to consider a GDP application. As another example, H.R. 5631 would make several changes related to geothermal leasing and permitting; the bill would establish a 60-day deadline for BLM to consider GDP applications and other similar geothermal applications. The bill would also provide BLM with greater authority to charge geothermal developers fees for various permitting and monitoring tasks and would provide dedicated funding support for those administrative tasks. The bill would create an ombudsman and a permitting task force within

⁸⁹ Katherine R. Young et al., “Geothermal Permitting and NEPA Timelines,” *GRC Transactions*, vol. 38 (2014), <https://gdr.openei.org/files/1258/Geothermal%20Permitting%20and%20NEPA%20Timeline%20Analysis%20-%20FINAL.pdf>.

⁹⁰ Aaron Levine and Katherine R. Young, “Efforts to Streamline Permitting of Geothermal Projects in the United States,” *Rocky Mountain Mineral Law Foundation Journal*, vol. 55, no. 1 (2018), p. 1, <https://www.osti.gov/servlets/purl/1467102>.

BLM. The bill would modify the federal timeline determining production royalties to accommodate modern geothermal project developments—projects with multiple generation units coming online at different dates. The bill would modify an existing CE under the NEPA for oil and gas exploration to also include geothermal exploration.⁹¹

Environmental Reviews

If Congress is concerned about the time required to complete environmental reviews for federal actions associated with O&G and geothermal development, it could consider whether changes to the existing statutory framework are warranted. Congress could seek to improve timeliness by addressing either the duration of NEPA reviews or the circumstances in which environmental documents (i.e., EAs or EISs) are required. Alternatively, Congress could maintain the existing framework, which already includes generally applicable NEPA deadlines and mechanisms intended to facilitate timely review, and allow additional experience with their implementation to inform whether further legislative changes are warranted. These options present different potential effects and tradeoffs regarding review times, agency resources, and environmental analysis, and are described in more detail below.

Congress may choose to establish environmental review deadlines specifically for O&G and geothermal development that are shorter than NEPA's generally applicable one- and two-year deadlines. The most direct effect of this option would be greater predictability regarding the maximum duration of NEPA review. Deadlines primarily regulate how long agencies have to perform review, rather than reducing the analytical work required. Proposed actions with complex environmental issues, incomplete applications, additional consultation requirements, or limited available staff could, therefore, be more difficult for agencies to review within the shorter deadlines. Energy developers and industry organizations have generally supported efforts to establish more predictable and timely federal environmental reviews, arguing that lengthy or uncertain review periods can increase project costs, complicate investment decisions, and delay energy development.⁹² Critics of mandatory deadlines argue that shorter review periods could strain agencies' ability to evaluate complex environmental effects or to provide opportunities for public participation, and that shorter review periods may not necessarily address the underlying sources of delay, such as incomplete applications, requirements under other environmental statutes, agency capacity, and state and local permitting requirements, among other things.⁹³

Congress may choose to authorize additional CEs or to direct agencies to establish CEs for certain O&G and geothermal activities.⁹⁴ CEs offer one tool to expedite environmental reviews under NEPA. By allowing agencies to forgo preparation of an EA or an EIS, CEs may produce greater time savings than shortening environmental review deadlines, can reduce documentation requirements, and may shorten review timelines. For geothermal activities specifically, some

⁹¹ Bills from previous Congresses include S. 2151 from the 115th Congress, which would have streamlined the O&G permitting process, and H.R. 1449 and H.R. 1 from the 118th Congress, which would have established deadlines for the consideration, notification, and issuance of geothermal drilling permits.

⁹² See, for example, testimony of Dustin Meyer, Senior Vice President of Policy, Economics and Regulatory Affairs, American Petroleum Institute in U.S. Congress, Senate Environment and Public Works Committee, *Hearing to Examine the Federal Environmental Review and Permitting Processes, Part II*, 119th Cong., 2nd sess., January 28, 2026, S.Hrg. 119-405 (GPO, 2026), pp. 51-64.

⁹³ See, for example, Edward (Ted) Boling and Kerensa Gimre, *NEPA Permitting Process Crucial to Renewable Infrastructure Project Success*, Center for American Progress, September 7, 2023, <https://www.americanprogress.org/article/nepa-permitting-process-crucial-to-renewable-infrastructure-project-success/>.

⁹⁴ For additional information on the mechanisms Congress has used to develop CEs, see CRS Report R48595, *Legislative Categorical Exclusions Under the National Environmental Policy Act*, by Heather McPherron.

Members of Congress introduced bills that would have amended the CE created by Section 390 of the Energy Policy Act of 2005⁹⁵ or would have added a CE under the Geothermal Steam Act of 1970.⁹⁶ Policy considerations include the types of O&G and geothermal power activities involved, whether a CE would be appropriate for certain types of projects regardless of the significance of the environmental effects, and opportunities for public input. Energy developers and industry organizations have generally supported expanded use of CEs, contending that requiring an EA or EIS for activities with predictable or limited environmental effects can add time and cost to a project without necessarily producing substantially new information about environmental impacts.⁹⁷ Environmental and conservation organizations have generally raised concerns about broadly defined CEs, particularly where statutory CEs do not incorporate consideration of extraordinary circumstances that allow agencies to conduct additional analysis where there could be significant site-specific effects.⁹⁸

Congress could also decide that no additional legislative changes are warranted. In 2023, Congress amended NEPA to include several mechanisms directed at timeliness: Section 107(f) permits applicants to prepare environmental documents under agency supervision; Section 107(g)(1) establishes two-year deadlines for EISs and one-year deadlines for EAs; and Section 107(g)(3) provides a judicial mechanism for enforcing those deadlines.⁹⁹ Congress also recently established an option for project sponsors to pay a fee in order to obtain shorter statutory deadlines in Section 112 of NEPA.¹⁰⁰ Under this approach, BLM would continue to conduct environmental reviews following long-standing NEPA practice, recently enacted provisions intended to expedite environmental reviews enacted in the Fiscal Responsibility Act of 2023 (P.L. 118-5), and DOI's alternative arrangements for NEPA compliance associated with the energy emergency declared in EO 14156. Maintaining the existing NEPA framework could allow agencies to use existing mechanisms to address project-specific circumstances while also providing Congress with an opportunity to evaluate whether recently enacted reforms have reduced review times as intended.

Regardless of whether Congress maintains the existing framework or adopts additional measures to expedite environmental reviews, the time required to advance O&G and geothermal development may depend on factors outside the NEPA process itself. Project timelines may be affected by the completeness of applicant submissions, agency staffing and resources, consultation and permitting requirements under other federal laws, state and local requirements, and changes to project proposals. Accordingly, measures that reduce the time or effort required

⁹⁵ See, for example, from the 119th Congress, H.R. 1077 and S. 456; from the 118th Congress, H.R. 6474; and from the 117th Congress, S. 2949.

⁹⁶ See, for example, from the 118th Congress, S. 3954 and S. 879; and from the 117th Congress, H.R. 7094, S. 3762, S. 2949, H.R. 5350, H.R. 2824, and H.R. 4334.

⁹⁷ See, for example, letter from Dustin Meyer, Senior Vice President of Policy, Economics and Regulatory Affairs, American Petroleum Institute, et al. to Brenda Mallory, Chair, CEQ, September 29, 2023, <https://www.api.org/-/media/files/news/2023/09/29/api-joint-trades-comments-nepa-phase-2.pdf>. See also, for example, Bipartisan Policy Center, *The Role of Categorical Exclusions in Achieving Net-Zero by 2050*, September 27, 2022, <https://bipartisanpolicy.org/report/categorical-exclusions/>.

⁹⁸ See, for example, letter from Christopher D. Eaton, Earthjustice, et al. to Debra Haaland, Secretary of the Interior, July 12, 2023, https://www.biologicaldiversity.org/campaigns/offshore_oil_drilling/pdfs/BOEM-petition-re-categorical-exclusions-7-12-23.pdf.

⁹⁹ Section 321 of the Fiscal Responsibility Act of 2023 (P.L. 118-5), enacted on June 3, 2023, amended NEPA by including several provisions aimed at facilitating a more efficient, effective, and timely environmental review process.

¹⁰⁰ Section 60026 of P.L. 119-21, enacted on July 4, 2025, established project sponsor opt-in fees for environmental reviews that allow a project sponsor to pay certain fees for halved environmental review deadlines—one year for an EIS and 180 days for an EA.

for NEPA review may not result in equivalent reductions in the overall time required for O&G or geothermal projects to go into production.

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