HOUSE COMMITTEE ON

NATURAL RESOURCES

CHAIRMAN BRUCE WESTERMAN

To:	House Committee on Natural Resources Republican Members
From:	Energy and Mineral Resources Subcommittee Staff, Rob MacGregor – Robert.MacGregor@mail.house.gov, x6-2466 and Will King – Will.King@mail.house.gov, x5-9297
Date:	Tuesday, July 23, 2024
Subject:	Legislative Hearing on H.R. 7053, H.R. 8665, H.R. 8954, and a Discussion Draft of H.R. ____ (Rep. Hunt)

The Subcommittee on Energy and Mineral Resources will hold a legislative hearing on H.R. 7053 (Rep. Thompson of PA), *"Orphan Well Grant Flexibility Act of 2024"*; H.R. 8665 (Rep. Lucas), *"Supercritical Geothermal Research and Development Act"*; H.R. 8954 (Rep. Gosar), *"Public Lands Renewable Energy Development Act of 2024"*; and a Discussion Draft of H.R. ____ (Rep. Hunt), "*Comprehensive Offshore Resource Evaluation Act"* or the *"CORE Act,"* on **Tuesday, July 23, 2024, at 10:30am in 1334 Longworth House Office Building**

Member offices are requested to notify Jacob Greenberg (Jacob.Greenberg@mail.house.gov) by 4:30 p.m. on Monday, July 22, 2024, if their Member intends to participate in the hearing.

I. KEY MESSAGES

- Renewable energy projects on federal lands currently pay fees to the federal government, but those fees are not shared to host states in the same manner as conventional energy production on federal lands. H.R. 8954 would fix this problem by ensuring states and counties secure the benefits of energy production within their borders.
- The Biden administration has unilaterally added new requirements for funding to plug orphaned wells, resulting in less wells being plugged. H.R. 7053 would further clarify the law to ensure plugging of orphaned wells can continue efficiently.
- The CORE Act addresses the urgent need to modernize Bureau of Ocean Energy Management's (BOEM) resource assessments and ensure more accurate data collection for offshore oil and gas production. This will enhance U.S. energy security and economic stability by bolstering domestic energy supply, reducing reliance on imports, and increasing support for local economies through state revenue and job creation.

II. WITNESSES

Panel I:

- **Members of Congress (To Be Announced)**

Panel II:

- **Dr. Steve Feldgus,** Principal Deputy Assistant Secretary for Land and Minerals Management, Department of the Interior, Washington, D.C. *[H.R. 7053]*
- **Mr. JC Sandberg,** Chief Advocacy Officer, The American Clean Power Association, Washington, D.C. *[H.R. 8954]*
- **Mr. Dustin Van Liew,** Vice President, EnerGeo Alliance, Houston, TX *["CORE Act" Discussion Draft]*
- **Mr. Jim Wright,** Commissioner, the Railroad Commission of Texas**,** Austin, Texas, *[H.R. 7053]*
- **Ms. Terra Rogers**, Program Director, Superhot Rock Energy, Clean Air Task Force, Boston, Massachusetts *[H.R. 7053 & H.R. 8665] [Minority Witness]*

III. BACKGROUND

Discussion Draft of H.R. ____ (Rep. Hunt), *"Comprehensive Offshore Resource Evaluation Act"* or the *"CORE Act"*

The Outer Continental Shelf (OCS) plays a critical role in the United States' energy strategy, providing substantial oil and gas resources that contribute to national energy security, economic stability, and coastal resiliency goals. The BOEM periodically conducts resource assessments and regularly prepares 5-year leasing plans as mandated by the Outer Continental Shelf Lands Act (OCSLA).[1] These assessments, which include Undiscovered Technically Recoverable Resources (UTRR) and Undiscovered Economically Recoverable Resources (UERR), are crucial for informed decision-making and contribute to 5-year program planning and development.[2] UTRR and UERR are critical components of BOEM's comprehensive inventory and analysis of oil and natural gas resources beneath OCS waters. These components are reported to Congress every five years, as required by the Energy Policy Act of 2005 (EPAct05).[3]

The CORE Act seeks to amend EPAct05 to incorporate specific instructions for future comprehensive inventories, ensuring that resource assessments include the latest data and methodologies for accurate and reliable estimates. BOEM's current processes face challenges in data acquisition, technological integration, and environmental impact considerations.

Resource Assessments and Offshore Oil and Gas Leasing

The resource assessment process has unfortunately become weaponized under the Biden administration. The assessments, conducted every five years and historically two years before the comprehensive inventory mandated by the EPAct05, are critical for accurate resource estimation. These undiscovered resource assessments aim to provide appraisals of unknown, technically, and economically recoverable oil and gas on the OCS. BOEM asserts that these assessments utilize the latest geophysical, geological, technological, and economic data to draw their conclusions

[1] U.S. Congress. (1953). Outer Continental Shelf Lands Act, as amended. Pub.L. 83–212.
[2] BOEM. (2021). 2021 Undiscovered Technically Recoverable Resources (UTRR) by Play. Retrieved July, 2024, from https://www.boem.gov/sites/default/files/documents/oil-gas-energy/resource-evaluation/2021%20UTRR%20by%20Play.pdf
[3] U.S. Congress. (2005). Energy Policy Act of 2005, as amended. Pub.L. 109–58.

but massive fluctuations in resource potential from report to report, outdated inputs, and seemingly outdated methodology and processes have sparked oversight of BOEM's procedures.[4] Further underscoring their importance, UTRR and UERR assessments influence the Environmental Impact Statements (EIS) required under the National Environmental Policy Act (NEPA) for 5-year leasing programs. Accurate assessments ensure that potential oil and gas resources are thoroughly analyzed, which is essential for informed decision-making and planning.

Before unveiling their abhorrent 5-year plan, the Biden administration issued the 2021 Assessment of Undiscovered Oil and Gas Resources of the Nation's Outer Continental Shelf. This assessment showed dramatic fluctuations from the previous estimate under the Obama administration. In 2016, BOEM reported 91 billion barrels of oil (BBO), 328 trillion cubic feet (TCF) of gas, and 149 billion barrels of oil equivalent (BOE).[5] By 2021, these figures had dropped to 68 BBO, 229 TCF of gas, and 109 BOE.[6] Such changes, not primarily attributable to drilling, production, or seepage, indicate potentially poor data or possible manipulation by insertion of inconsistent assumptions, leading to reduced estimates and misguided policy decisions.

This assessment informed an unacceptable 5-year leasing plan which offered the lowest number of offshore oil and gas lease sales in the nation's history. This has raised concerns about the United States' long-term energy strategy, economic impact on Gulf Coast states, and national energy security.

The CORE Act seeks to address these issues by improving the resource assessment process and ensuring comprehensive and up-to-date data inform federal decision-making. By stipulating specifically what BOEM should consider in each assessment, there is a lesser chance that future assessments will be subject to weaponization.

National Security and Transboundary Hydrocarbon Agreements

Bilateral maritime boundary treaties, such as the 1990 US-Soviet Union (now Russia) Maritime Boundary Agreement and the 2000 US-Mexico Maritime Boundary Agreement, include provisions on sovereign rights over natural resources.[7] These agreements ensure that neither country can claim resources on the other's side of the boundary. The 2000 US-Mexico Agreement also addresses transboundary hydrocarbon reservoirs, establishing a framework for

[4] House Committee on Natural Resources. "Hearing on Offshore Energy Development." February 26, 2020. https://naturalresources.house.gov/calendar/eventsingle.aspx?EventID=415851
[5] Bureau of Ocean Energy Management. "2016 Undiscovered Technically Recoverable Resources (UTRR) by Play." 2017. https://www.boem.gov/sites/default/files/oil-and-gas-energy-program/Resource-Evaluation/Resource-Assessment/2016-UTRR-by-Play_2017-update-%281%29.pdf
[6] BOEM. (2021). 2021 Undiscovered Technically Recoverable Resources (UTRR) by Play. Retrieved July, 2024, from https://www.boem.gov/sites/default/files/documents/oil-gas-energy/resource-evaluation/2021%20UTRR%20by%20Play.pdf
[7] U.S. Department of State. "Agreement Between the United States of America and the Union of Soviet Socialist Republics on the Maritime Boundary." June 1, 1990. https://www.state.gov/wp-content/uploads/2020/02/US_Russia_1990.pdf#page=5

equitable and efficient development of such resources.[8] The 2012 US-Mexico Transboundary Hydrocarbon Reservoirs Agreement further promotes unitization and cooperation.[9]

The CORE Act addresses the critical need for enhanced assessment of transboundary hydrocarbon reservoirs, which are essential in areas where the U.S. shares oil and gas reserves with neighboring countries. The current lack of comprehensive data and clear frameworks leaves BOEM ill-equipped to assess resource potential, jurisdiction, and bilateral collaboration opportunities in these shared reservoirs. The CORE Act seeks to rectify this by mandating improved data acquisition and legal frameworks, ensuring that the U.S. can effectively lease and manage its resources while coordinating with other nations for equitable and efficient development. This approach secures our national interests and fosters international cooperation in resource management.

Geological and Geophysical Permitting

Geological and Geophysical (G&G) surveys are crucial to the exploration and development of offshore oil and gas resources. These surveys employ advanced technologies such as 3-D and 4-D seismic imaging to map and assess the subsurface geological structures beneath the ocean floor.[10] Accurate G&G data is essential for identifying potential hydrocarbon deposits, estimating their size, and understanding their characteristics. Modern seismic imaging also reduces risk for exploration and production companies by increasing the likelihood that exploratory wells will successfully tap hydrocarbons and decreasing the number of wells that need to be drilled in a given area.[11] This information is foundational for resource assessments, as it provides the data needed to estimate UTRR and UERR.[12] Reliable G&G surveys reduce uncertainty in resource estimates, inform drilling and production decisions, and ultimately support the creation of comprehensive and accurate inventories of offshore oil and gas resources. This process aids in the efficient development of energy resources and ensures BOEM, policymakers and investors have the necessary information to make informed decisions.

The provisions in Section 4 of the CORE Act related to G&G permitting aim to stimulate exploration activity, which informs future assessments and improves the operating environment for geophysical and geotechnical permit applicants. By easing the burdens of permitting delays at BOEM and the National Oceanic and Atmospheric Association and mitigating related litigation, these reforms support the timely delivery of necessary data for accurate resource estimates and energy supply.

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[8] U.S. Department of State. "Treaty Between the Government of the United States of America and the Government of the United Mexican States on the Delimitation of the Continental Shelf in the Western Gulf of Mexico Beyond 200 Nautical Miles." June 9, 2000. https://www.state.gov/wp-content/uploads/2020/02/US_Mexico_2000_withExtension.pdf#page=4

[9] U.S. Department of State. "U.S.-Mexico Transboundary Hydrocarbons Agreement." May 2, 2013. https://2009-2017.state.gov/r/pa/prs/ps/2013/05/208650.htm

[10] Bureau of Ocean Energy Management. "Geological & Geophysical (G&G) Data." Accessed July, 2024. https://www.boem.gov/oil-gas-energy/resource-evaluation/geological-geophysical-gg-data

[11] EnerGeo Alliance. "Introduction to Marine Seismic Technologies." September 6, 2022. https://energeoalliance.org/Marine-Seismic-Technologies

[12] Bureau of Ocean Energy Management. "2021 Assessment of Undiscovered Oil and Gas Resources of the Nation's Outer Continental Shelf." Accessed July 2024. https://www.boem.gov/sites/default/files/documents/oil-gas-energy/2021-Assmt-of-Undiscovered-Oil-Gas-Resources-OCS.pdf

Environmental and Economic Benefits of Offshore Development

Undiscovered oil and gas resources in the OCS have the potential to significantly boost the U.S. economy while promoting a healthier environment. Improving BOEM's data acquisition methods will prompt an increase in domestic oil production which will bring greater energy security, more affordable energy prices, a lower national trade deficit, and increased revenue passed to states for vital coastal restoration and infrastructure projects. Furthermore, energy production occurring in the Gulf of Mexico is 46% less carbon intensive when displacing global production in countries like Russia, China, and Iran.[13] Economic and environmental studies commissioned in this bill will ensure that these benefits are adequately considered in BOEM's leasing programs and across the federal government.

CORE Act Improvements vs. Current Process Deficiencies		
	Proposed Improvements in the CORE Act	**Key Deficiencies in Current Processes**
Data Inputs	Prioritizes the use of advanced geophysical and geotechnical data, along with new modeling technologies, to improve resource estimates.	Existing resource assessments rely on outdated data and lack advanced technological integration, leading to uncertainty in resource estimates.
Economic Considerations	Assesses the impact of undiscovered resource production on the U.S. economy under different production scenarios, considering market dynamics and technological advancements.	There is insufficient analysis of the economic effects of expanded offshore production on the U.S. economy and on trade deficits.
Environmental Considerations	Evaluates the potential net greenhouse gas emission reductions from replacing imported oil and gas with domestic resources.	Current assessments do not fully account for the potential environmental benefits of domestic oil and gas production compared to imports which would occur as a result of non-production
Transboundary Resource Management	Enhances the assessment and management of transboundary hydrocarbon reservoirs, including legal frameworks and cooperation mechanisms with neighboring countries.	Transboundary Resources are not currently considered or specifically discussed in assessments and lack comprehensive analysis.

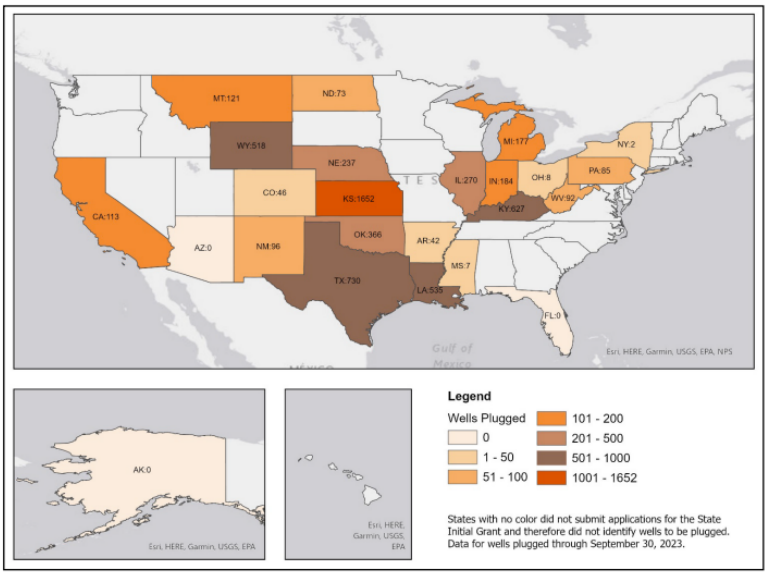
H.R. 7053 (Rep. Thompson of PA), *"Orphan Well Grant Flexibility Act of 2024"*

Orphan wells are oil or gas wells that were not plugged and remediated by energy companies post-production and have no legal owner. The Infrastructure Investments and Jobs Act (IIJA)

[13] National Ocean Industries Association. "GHG Emission Intensity of Crude Oil and Condensate Production." May 2023. https://www.noia.org/wp-content/uploads/2023/05/NOIA-Study-GHG-Emission-Intensity-of-Crude-Oil-and-Condensate-Production.pdf

directed the Secretary of the Interior to establish a program to plug orphaned wells on Federal and Tribal lands and to supplement state orphaned well programs.[14] The IIJA provided $4.7 billion for orphaned well site plugging, remediation and restoration activities on Federal, Tribal, state, and private lands.[15] The IIJA created three types of grants for states to receive funding: Initial Grants, Formula Grants, and Performance Grants.[16] The Initial Grants are for states to bolster their longstanding well plugging programs and build capacity for states to expand or begin well plugging activities. Formula Grants also bolster states' well plugging programs to plug, remediate, and reclaim orphaned wells on state and private lands. Performance Grants are separated into two categories, Matching Grants and Regulatory Improvement Grants. Matching Grants are intended to encourage state orphaned well spending above 2010-2019 spending levels and Regulatory Improvement Grants are intended to incentivize states to enact laws or regulations that will reduce future orphaned wells.

Figure 13: State and private wells plugged under the Initial Grants Program, as of September 30, 2023.



[17]

Through Fiscal Year 2023, $560 million was distributed to twenty-four states through Initial Grants, $102 million was distributed for the federal program and $39 million of Tribal grants were issued.[18] While the Initial Grants have been successfully utilized by states, the Department of the Interior (DOI), through guidance,[19] has added burdensome, non-statutory requirements to the Formula Grants. In the guidance, DOI requires pre and post plugging measurement of potential air and water pollution for each well.[20] While the language in the IIJA does allow for

[14] 42 U.S.C. 15907.
[15] *Id.*
[16] 42 U.S.C. 15907(c).
[17] U.S. Department of the Interior, Orphaned Wells Program Annual Report to Congress, November 2023, https://www.doi.gov/sites/default/files/fy-2023-orphaned-wells-congressional-report.pdf.
[18] Department of the Interior, Orphaned Wells Program Annual Report to Congress, November 2023, https://www.doi.gov/sites/default/files/fy-2023-orphaned-wells-congressional-report.pdf.
[19] U.S. Department of the Interior, State Formula Grant Guidance, 7.07.23, https://www.doi.gov/media/document/state-formula-grant-guidance-07-07-2023-pdf.
[20] *Id.* at 13.

states to use funding to measure and track pollution, it is clearly optional and not required.[21] This requirement has greatly driven up the cost of plugging wells and has forced some states to forgo the Formula Grant funding. To make matters worse, DOI has added more requirements in their Formula Grant awards[22] that force states to comply with the Endangered Species Act and the National Historic Preservation Act.

H.R. 7053 aims to solve this problem by clarifying that states are not required to conduct pre-plugging or post-plugging pollution monitoring. By cutting this unnecessary red tape, this bill will unencumber states so that they may plug more orphaned wells. The bill would also direct the National Academy of Sciences (NAS) to evaluate the results of the program with a specific focus on the impacts on economic development, housing trends, and other potential benefits.

This bill has bipartisan support, with 10 Republicans and 3 Democrats in the Senate including Senators Ted Cruz, John Cornyn, Mike Lee, John Fetterman, and Robert Casey. On the House side, it is cosponsored by 4 Republicans and 1 Democrat, including Rep. Estes, Rep. Reschenthaler, Rep. Hunt, and Rep. Deluzio.

H.R. 8665 (Rep. Lucas), *"Supercritical Geothermal Research and Development Act"*

Supercritical geothermal is an experimental technology that requires deep drilling to access dry rocks at temperatures around 400°C or greater. Water or other liquids are then injected at depths of 4 kilometers or deeper and, utilizing natural heat deep within the Earth's crust, returned to the surface at supercritical conditions to power a turbine and generate energy.[23] If commercialized, supercritical geothermal has the potential to produce energy at significantly higher capacities compared to conventional geothermal systems.[24] The Department of Energy (DOE) estimates that next-generation geothermal technologies including supercritical geothermal could provide 90 GW or more of clean firm power to the U.S. grid by 2050.[25]

The United States Geological Survey (USGS) currently operates several programs that support research and development of geothermal energy resources. The Geothermal Steam Act of 1970 directs USGS to conduct national scale assessments of geothermal resources, the most recent of which was published in 2008.[26] Additionally, the agency's Earth Mapping Resources Initiative (Earth MRI) coordinates priorities with DOE's Geothermal Technologies Office (GTO) to collect useful data for both critical mineral and geothermal resources.[27]

H.R. 8665 establishes a supercritical geothermal research program at DOE and provides grant opportunities for supercritical geothermal technologies. The bill also requires DOE and DOI to enter a memorandum of understanding (MOU) on geothermal data collection and analysis and directs USGS to update its national geothermal resource assessment within 180 days of

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[21] 42 U.S.C. 15907(c)(2).
[22] U.S. Department of the Interior, Notice of Award, Texas Railroad Commission, 1/12/24.
[23] https://science.house.gov/_cache/files/e/e/eebed5c7-3784-4b3b-b0c5-04c5456dfa77/8600498DE7130020CA43490E64B3ACBA.h.r.-8665-one-page-summary.pdf
[24] *Id.*
[25] https://liftoff.energy.gov/wp-content/uploads/2024/03/LIFTOFF_DOE_NextGen_Geothermal_v14.pdf
[26] https://www.usgs.gov/centers/gmeg/science/geothermal-resource-investigations-project
[27] https://d9-wret.s3.us-west-2.amazonaws.com/assets/palladium/production/s3fs-public/media/files/USGS%20BIL%20Spend%20Plan_FINAL.pdf

enactment. Lastly, H.R. 8665 orders DOI, in consultation with DOE, to commission the drilling of exploration boreholes deeper than 8 kilometers to provide control points for supercritical heat mapping and geothermal development. H.R. 8665 authorizes $5 million for each of fiscal years 2026 through 2030.

H.R. 8954 (Rep. Gosar), *"Public Lands Renewable Energy Development Act of 2024"*

Title V of the Federal Land Policy and Management Act (FLPMA)[28] generally requires right-of-way (ROW) grant holders, leaseholders, or both to "pay in advance the fair market value" for use of the public lands, subject to certain exceptions. For solar and wind generation, the Bureau of Land Management (BLM) collects from ROW holders the greater of either an acreage rent or a capacity fee.[29] The BLM assesses acreage rent by applying the rate schedule, based on a survey of values for pastureland from the National Agricultural Statistics Service Cash Rents Survey to the number of acres that the ROW authorizes for use. Capacity fees reflect the value of generating electricity from solar and wind energy resources, which are quantified by the number of megawatt hours of electricity produced on public lands.[30] Under the Geothermal Steam Act of 1970,[31] geothermal energy producers on federal lands pay royalties on electricity produced and mineral byproducts derived from production along with rental fees for the leased acreage. Unlike solar and wind energy revenues which are not shared with states and counties, 50 percent of geothermal development revenues are disbursed to the states and 25 percent of revenues are disbursed to the counties where production occurs.[32]

H.R. 8954, the Public Lands Renewable Energy Development Act (PLREDA), would establish a revenue sharing mechanism with renewable energy producing states and counties while also supporting conservation efforts to offset the footprint of renewable energy projects on federal lands. Specifically, the bill would disseminate revenues for onshore wind and solar production on federal lands according to the following formula: 25% to the State hosting the production; 25% to the county hosting the production; 25% to the Renewable Energy Resource Conservation Fund (established by PLREDA to facilitate conservation, habitat restoration, and outdoor access); and 25% to aid agencies in the processing of renewable energy permits on federal lands.

IV. MAJOR PROVISIONS & ANALYSIS

Discussion Draft of H.R. ____ (Rep. Hunt), *"Comprehensive Offshore Resource Evaluation Act"* or the *"CORE Act"*

- Enhances offshore resource assessments by mandating the use of advanced data and modeling technologies.
- Requires BOEM to analyze economic impacts and greenhouse gas emission reductions of increased offshore energy production.
- Assesses the impact of withdrawals on oil and gas exploration and production.

[28] 43 U.S.C. 1761-1772.
[29] Bureau of Land Management, Rights-of-Way, Leasing, and Operations for Renewable Energy, 5,01,24, 89 FR 35634, https://www.federalregister.gov/documents/2024/05/01/2024-08099/rights-of-way-leasing-and-operations-for-renewable-energy
[30] *Id.*
[31] 30 U.S.C. 1004.
[32] 30 U.S.C. 1019.

- Analyzes existing and potential transboundary hydrocarbon reservoirs.
- Enhances cooperation and coordination with neighboring countries.
- Maintains incidental take regulations for geophysical and geological surveys.
- Authorizes geological and geophysical surveys in the Gulf of Mexico.
- Establishes expedited judicial review and enforcement processes.
- Requires monthly reporting on permit application processing times.

H.R. 7053 (Rep. Thompson of PA), *"Orphan Well Grant Flexibility Act of 2024"*

- Amends the Orphaned Well Site Plugging, Remediation and Restoration program in the IIJA by further clarifying that pre and post environmental measuring is not mandatory.
- Requires the NAS to evaluate the results of the program with a specific focus on the impacts on economic development, housing trends, and other potential benefits.

H.R. 8665 (Rep. Lucas), *"Supercritical Geothermal Research and Development Act"*

- Establishes a program at DOE to focus on supercritical geothermal research and provides grant opportunities for supercritical geothermal technologies.
- Requires DOE and DOI to enter a MOU on geothermal data collection and analysis.
- Directs USGS to update its national geothermal resource assessment within 180 days of enactment.
- Orders DOI, in consultation with DOE, to commission the drilling of exploration boreholes deeper than 8 kilometers to provide control points for supercritical heat mapping and geothermal development.
- Authorizes $5 million for each of fiscal years 2026 through 2030.

H.R. 8954 (Rep. Gosar), *"Public Lands Renewable Energy Development Act of 2024"*

- Creates a revenue sharing mechanism for wind and solar energy on public lands (25% to the State hosting the production; 25% to the county hosting the production; 25% to the Renewable Energy Resource Conservation Fund; and 25% to aid agencies in the processing of renewable energy permits on federal lands).
- Establishes a Renewable Energy Resource Conservation Fund to restore and protect landscapes in regions where renewable energy development occurs.

V. COST

The Congressional Budget Office has not scored any of these bills.

VI. ADMINISTRATIVE POSITION

Unknown.

VII. EFFECT ON CURRENT LAW (RAMSEYER)

Discussion Draft of "The CORE Act"

H.R. 7053

H.R. 8665