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TESTIMONY

Statement of

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Before

Committee on the Budget
U.S. Senate

Hearing on

"Denial, Disinformation, and Doublespeak: Big Oil's Evolving Efforts to Avoid Accountability for Climate Change"

May 1, 2024

Congressional Research Service
https://crsreports.congress.gov
TE10101

Chairman Whitehouse, Ranking Member Grassley, Members of the Committee, my name is Michael Ratner. I am a Specialist in Energy Policy at the Congressional Research Service. CRS appreciates the opportunity to testify on the important issues today. I have been asked to provide testimony related to the use of fossil fuels from broad geopolitical and security perspectives. Additionally, I will confine my testimony in accordance with CRS's enabling statutes and guidelines on objectivity and non-partisanship. CRS takes no position on any related proposed or pending legislation or policy.

Introduction

According to U.S. Energy Information Administration (EIA) data, approximately 89% of the world's primary energy consumption, meaning energy used directly or to produce other forms of energy, came from fossil fuels in 2022, being almost evenly split among oil, coal, and natural gas.[1] It would take approximately eight times the current global use of carbon-free resources (including renewable energy, hydropower, and nuclear energy) to replace the current amount of primary energy from fossil fuels. In 2022, fossil fuels comprised 84% of U.S. primary energy.[2] This difference highlights the challenges the world faces to globally replace fossil fuels as an energy source.

In 2022, 61% of worldwide electricity generation came from fossil fuels, led by coal.[3] In the United States, 59% of electricity generation came from fossil fuels, with natural gas the most common fuel.[4] The United States is the largest producer, consumer, and exporter of natural gas in the world. Being self-sufficient in natural gas, which tends to be a regional commodity from a markets and prices perspective, has insulated the United States from natural gas price rises experienced elsewhere.

DOE Permits to Non-FTA Countries

On January 26, 2024, the Biden Administration announced a "temporary pause" in the approval process of natural gas export permits to countries that do not have a free trade agreement (FTA) with the United States.[5] This pause has the potential to affect liquefied natural gas (LNG) exports and the facilities associated with liquefying and exporting natural gas. The Department of Energy's (DOE) non-FTA permit to export natural gas is one component of the federal regulatory process. Two aspects of the permit process have brought it to the forefront: (1) the Natural Gas Act requires DOE to make a public interest determination, which was not defined in the statute, and (2) the only country that the United States has an FTA with and is a major LNG importer is South Korea. Companies seek the non-FTA permit to export to other countries.

The public interest determination underlies the Administration's justification for temporarily pausing the permitting process for LNG exports to non-FTA countries. The Administration has stated that they are updating the underlying economic and environmental analysis used in prior authorizations. The statute

[1] U.S. Energy Information Administration, *International Statistics*, http://www.eia.gov/international/data/world/total-energy/total-energy-consumption.

[2] U.S. Energy Information Administration, *International Statistics*, http://www.eia.gov/international/data/world/total-energy/total-energy-consumption.

[3] U.S. Energy Information Administration, *International Statistics*, http://www.eia.gov/international/data/world/electricity/electricity-generation.

[4] U.S. Energy Information Administration, *International Statistics*, http://www.eia.gov/international/data/world/electricity/electricity-generation.

[5] The White House, "FACT SHEET: Biden-Harris Administration Announces Temporary Pause on Pending Approvals of Liquefied Natural Gas Exports," press release, January 26, 2024, https://www.whitehouse.gov/briefing-room/statements-releases/2024/01/26/fact-sheet-biden-harris-administration-announces-temporary-pause-on-pending-approvals-of-liquefied-natural-gas-exports/.

does not require DOE to pause the permitting process in order to re-evaluate the public interest determination.

The existing U.S. LNG export capacity is about 15 billion cubic feet per day (bcf/d), which represents about a sixth of U.S. consumption. Almost another 30 bcf/d is already fully permitted for construction and exports to FTA and non-FTA countries.[6] This includes approximately 17 bcf/d of liquefaction capacity under construction and approximately another 12 bcf/d of liquefaction capacity that has been approved by the Federal Energy Regulatory Commission (FERC) and DOE, but has not broken ground.[7] This latter category suggests that there existed, before the temporary pause, some market hesitation for company executives that could, in theory, start construction but have chosen not to. Since these projects have already secured a non-FTA permit from DOE, they are not affected by the pause. The pause only affects projects that have not yet secured a DOE permit.

Geopolitics

Since Russia's invasion of Ukraine in 2022, energy security has increased in priority for many countries, particularly with regard to natural gas supply. U.S. LNG and gas piped from Norway are currently the largest sources of natural gas to the European Union and other parts of Europe. Prior to Russia's invasion, U.S. LNG accounted for 6% of Europe's natural gas imports. Since Russia's invasion, U.S. LNG grew to 15% in 2022 and to 18% in 2023.[8] That was the largest rise of any country's exports to Europe.

During the same time period, Russia provided 24% of Europe's natural gas imports in 2022 and 15% in 2023. Part of the decrease in Russian supplies is because Russia cut exports to certain European countries that it deemed hostile and not cooperating in purchasing gas in rubles. Russia can and has used natural gas supply for political and economic gains because the European market has not been able to change its supply sources quickly.

The Biden Administration's temporary pause in LNG permitting has arguably added some degree of uncertainty in the market, particularly when looking at the longer term. The United States is primarily a market-driven economy, and company executives make decisions to invest based, in part, on perceptions of the market and the likelihood of a satisfactory rate of return on their investment. Government regulations set a structure for the companies and any changes can affect perceptions of the market positively or negatively.

[6] Federal Energy Regulatory Commission, *United States LNG Export Terminals—Existing*, April 2, 2024, https://www.ferc.gov/media/us-lng-export-terminals-existing-approved-not-yet-built-and-proposed.

[7] Federal Energy Regulatory Commission, *United States LNG Export Terminals—Approved, Not Yet Built*, April 2, 2024, https://www.ferc.gov/media/us-lng-export-terminals-existing-approved-not-yet-built-and-proposed.

[8] European Commission, *2023 State of the Energy Union Report*, October 24, 2023, p. 14 (Figure 3), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023DC0650.

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