SENATE

REPORT 116–75

APPALACHIAN ENERGY FOR NATIONAL SECURITY ACT

AUGUST 16, 2019.—Ordered to be printed

Filed, under authority of the order of the Senate of August 1, 2019

Ms. Murkowski, from the Committee on Energy and Natural Resources, submitted the following

REPORT

[To accompany S. 1064]

[Including cost estimate of the Congressional Budget Office]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 1064) to require the Secretary of Energy to conduct a study on the national security implications of building ethane and other natural-gas-liquids-related petrochemical infrastructure in the United States, and for other purposes, having considered the same, reports favorably thereon with an amendment, and recommends that the bill, as amended, do pass.

The amendment is as follows:

On page 5, line 12, insert "and" after "national".

PURPOSE

The purpose of S. 1064 is to require the Secretary of Energy (Secretary) to conduct a study on the national security implications of building ethane and other natural-gas-liquids-related petrochemical infrastructure in the United States.

BACKGROUND AND NEED

In November 2018, the Department of Energy (DOE) examined the feasibility of establishing an ethane storage and distribution hub in the United States, and issued a report entitled "Ethane Storage and Distribution Hub in the United States." The report noted that domestic natural gas production is expected to more than double from 2017 to 2050. The main driver of total growth in domestic natural gas production is the continued development of

the Marcellus and Utica shale plays in the eastern United States. If the Appalachian Basin were an independent country, it would be

the third largest producer of natural gas in the world.

The report highlighted the potential for the new hub to be built in Appalachia, as well as the economic and strategic benefits of such a hub. For example, the report noted that 95 percent of current ethylene production capacity in the United States is clustered along the Gulf Coast in Louisiana and Texas. This geographic concentration of assets and operations may pose a strategic risk to the economy of the United States as extreme weather has significantly impaired domestic production in the past.

LEGISLATIVE HISTORY

S. 1064 was introduced by Senator Manchin on April 8, 2019. The Subcommittee on Energy held a legislative hearing on S. 1064 on July 9, 2019.

The Committee on Energy and Natural Resources met in open business session on July 16, 2019, and ordered S. 1064 favorably reported, as amended.

COMMITTEE RECOMMENDATION

The Senate Committee on Energy and Natural Resources, in open business session on July 16, 2019, by a majority voice vote of a quorum present, recommends that the Senate pass S. 1064, if amended as described herein.

COMMITTEE AMENDMENT

During its consideration of S. 1064, the Committee adopted an amendment to make a technical correction.

SECTION-BY-SECTION ANALYSIS

Section. 1. Short title

Section 1 sets forth the short title of the bill.

Sec. 2. Findings

Section 2 sets forth Congressional findings based on the 2018 DOE study regarding the economic implications and feasibility of a potential hub.

Sec. 3. Study and reports on building ethane and other natural-gasliquids-related petrochemical infrastructure

Subsection (a) directs the Secretary to conduct a study within one year of enactment, in consultation with the Secretaries of Defense and Treasury, and the heads of other relevant Federal departments and agencies, regarding the potential national and economic security impacts of building ethane and other natural-gasliquids-related petrochemical infrastructure in the vicinity of the Marcellus, Utica, and Rogersville shale plays. This subsection requires the study to identify the potential benefits of the proposed infrastructure to national and economic security, as well as the potential risks to national and economic security posed by foreign ownership and control of United States domestic petrochemical resources. It also requires an examination of the types of additional infrastructure needed to fully optimize the potential national secu-

rity benefits of the hub; whether geopolitical diversity of export destinations would undermine or bolster national security; the necessity of evaluating public interest with respect to exports for national security; and the potential benefits of locating the proposed hub in the area near the Marcellus, Utica, and Rogersville shale plays.

Subsection (b) provides that the relevant Congressional committees may request and receive periodic status reports on the development of the required study. This subsection also requires the Secretary to submit the completed study to the relevant Congressional committees and publish the report on the DOE website.

COST AND BUDGETARY CONSIDERATIONS

The following estimate of the costs of this measure has been provided by the Congressional Budget Office:

By Fiscal Year, Millions of Dollars	2019		2019-2024	2019-2029
Direct Spending (Outlays)	0		0	0
Revenues	0		0	0
Increase or Decrease (-) in the Deficit	0		0	0
Spending Subject to Appropriation (Outlays)	0		1	4. j
Statutory pay-as-you-go procedures apply?	No		Mandate I	Effects
Increases on-budget deficits in any of the four consecutive 10-year	No	Contains intergovernmental mandate? No		
periods beginning in 2030?		Contains p	rivate-sector mandate	e? No

S. 1064 would require the Department of Energy (DOE) to conduct a study on the national and economic security implications of building petrochemical facilities for ethane and other natural gas liquids in the geographic area covered by parts of Ohio, West Virginia, Pennsylvania, and New York. DOE would be required to coordinate with several different agencies to evaluate the benefits and potential risks to economic and national security.

Using information from DOE, CBO estimates that conducting this study would cost \$1 million; such spending would be subject

to the availability of appropriated funds.

The CBO staff contact for this estimate is Madeleine Fox. The estimate was reviewed by H. Samuel Papenfuss, Deputy Assistant Director for Budget Analysis.

REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out S. 1064. The bill is not a regulatory measure in the sense of imposing Government-established standards or significant economic responsibilities on private individuals and businesses.

No personal information would be collected in administering the program. Therefore, there would be no impact on personal privacy. Little, if any, additional paperwork would result from the enactment of S. 1064, as ordered reported.

CONGRESSIONALLY DIRECTED SPENDING

S. 1064, as ordered reported, does not contain any congressionally directed spending items, limited tax benefits, or limited tariff benefits as defined in rule XLIV of the Standing Rules of the Senate

EXECUTIVE COMMUNICATIONS

The testimony provided by the Department of Energy at the July 9, 2019, hearing on S. 1064 follows:

TESTIMONY OF THE HONORABLE BRUCE J. WALKER, ASSIST-ANT SECRETARY, OFFICE OF ELECTRICITY, U.S. DEPART-MENT OF ENERGY

INTRODUCTION

Chairman Cassidy, Ranking Member Heinrich, and Members of the Subcommittee, it is an honor and a privilege to serve at the Department of Energy (DOE or the Department), as Assistant Secretary for the Office of Electricity. DOE is charged with, among other important responsibilities, providing our Nation with premier energy research and development (R&D) activities. The work being conducted by DOE is setting the course for various advancements in the energy field and beyond. Issues like energy storage, improving energy efficiency, creating breakthroughs in how we extract and utilize our Nation's fossil fuels, and Artificial Intelligence are just some of the important areas of DOE research. These are also the topics being covered at today's hearing.

Thank you for the opportunity to testify today on behalf of the Department regarding these various pieces of legislation. The Administration continues to review all eleven of these bills. Below are some highlights and perspectives regarding the legislation being discussed today.

S. 1064—Appalachian Energy for National Security Act

The United States is now the top producer of oil and natural gas in the world, with an additional benefit in the form of increased natural gas liquids (NGL), including ethane. Ethane is particularly useful as a feedstock for petrochemical manufacturing.

The Appalachian region has experienced near-exponential growth in natural gas production, and that production is expected to increase for decades to come. According to the Energy Information Administration, through April of this year, natural gas production in the Appalachian Basin has represented 35 percent of total U.S. natural gas production, and that number is expected to increase. In addition, NGL processing and fractionating capacity in Appa-

lachia has grown quickly to match this increase in natural

gas production.

S. 1064 requires a report to Congress on the "national and economic security" impacts of petrochemical infrastructure near the Marcellus, Utica, and Rogersville shale plays. Under the bill, DOE has the lead for preparation of the report, in consultation with the Departments of Defense and Treasury (and other agencies and stakeholders).

DOE appreciates Congress' attention to the vast energy resources in Appalachia. This legislation builds upon current efforts by the Administration. In December of 2018, DOE issued a report to Congress entitled Ethane Storage and Distribution Hub in the United States. The report highlights the potential in Appalachia for the development of a new ethane hub based on the resource from the Marcellus and Utica shales, and the accompanying security and reliability benefits derived from geographic diversity in the nation's petrochemicals manufacturing base.

This past April, the President issued Executive Order 13868 ("Promoting Energy Infrastructure and Economic Growth"), part of which requires DOE to issue a report on economic development in Appalachia in the petrochemical industry. The Department is currently working on this report, and will share the results with Congress and other

interested parties.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, the Committee notes that no changes in existing law are made by the bill as ordered reported.