

**Calendar No. 177**116TH CONGRESS  
1ST SESSION**S. 1064****[Report No. 116-75]**

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.

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**IN THE SENATE OF THE UNITED STATES**

APRIL 8, 2019

Mr. MANCHIN introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

AUGUST 16, 2019

Reported under authority of the order of the Senate of August 1, 2019, by  
Ms. MURKOWSKI, with an amendment

[Insert the part printed in italic]

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**A BILL**

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.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Appalachian Energy  
3 for National Security Act”.

4 **SEC. 2. FINDINGS.**

5 Congress finds that—

6 (1) the Energy Information Administration  
7 projects that—

8 (A) domestic natural gas production from  
9 shale resources will more than double between  
10 2017 and 2050; and

11 (B) continued development of the  
12 Marcellus and Utica shale plays in the eastern  
13 United States is the main driver of growth in  
14 total domestic natural gas production across  
15 most scenarios;

16 (2) the Department of Energy has found that—

17 (A) the shale resource endowment of the  
18 Appalachian Basin is so bountiful that, if the  
19 Appalachian Basin were an independent coun-  
20 try, the Appalachian Basin would be the third  
21 largest producer of natural gas in the world;

22 (B) with more than \$300,000,000,000 of  
23 net revenue, 900,000 workers, and 7,500 estab-  
24 lishments, Appalachia and surrounding areas  
25 account for nearly a third of United States ac-  
26 tivities in 13 petrochemical industries; and

1 (C) the aggregate revenue growth from  
2 commodity chemicals that can be derived from  
3 ethane (commonly known as the “value chain”)  
4 is projected to be \$716,000,000,000 between  
5 2018 and 2040;

6 (3) geographical diversity and structural resil-  
7 ience is critical, given that the Department of En-  
8 ergy has found that—

9 (A) 95 percent of ethylene production ca-  
10 pacity in the United States currently exists in  
11 the States of Louisiana and Texas;

12 (B) this concentration of assets and oper-  
13 ations may pose a strategic risk to the economy  
14 of the United States as extreme weather events  
15 impacting the production of petrochemicals (in-  
16 cluding plastic resin) on the Gulf Coast can  
17 limit the availability of feedstocks to manufac-  
18 turers across the United States; and

19 (C) in August 2017, many Gulf Coast re-  
20 fineries and petrochemical facilities shut down,  
21 which affected 54 percent of United States  
22 ethylene production and 36 percent of United  
23 States ethylene consumption capacity;

24 (4) there are economic efficiencies and economic  
25 security benefits to maintaining all elements of the

1 value chain for ethane and other natural gas liquids  
2 in clusters in various geographical regions, provided  
3 each cluster includes natural gas production, natural  
4 gas processing plants, natural gas liquids fraction-  
5 ation plants, natural gas liquids transportation in-  
6 frastructure, natural gas liquids storage, and ethane  
7 and other natural gas liquids petrochemical infra-  
8 structure;

9 (5) there are economic efficiencies to building  
10 ethane and other natural-gas-liquids-related petro-  
11 chemical infrastructure, including storage and dis-  
12 tribution systems, within the Appalachian region, be-  
13 cause of the close proximity of the region to the in-  
14 dustrial Midwest and manufacturers in the Eastern  
15 United States that use petrochemicals, such as plas-  
16 tic resins, as manufacturing inputs; and

17 (6) it is a priority of the United States to mini-  
18 mize effects of volatility in any individual market by  
19 maintaining—

20 (A) a robust domestic natural gas liquids  
21 resource base;

22 (B) the requisite physical assets along the  
23 value chain for ethane and other natural gas  
24 liquids; and

1 (C) diversity in customers, both domesti-  
2 cally and internationally.

3 **SEC. 3. STUDY AND REPORTS ON BUILDING ETHANE AND**  
4 **OTHER NATURAL-GAS-LIQUIDS-RELATED PE-**  
5 **TROCHEMICAL INFRASTRUCTURE.**

6 (a) STUDY.—

7 (1) IN GENERAL.—Not later than 1 year after  
8 the date of enactment of this Act, the Secretary of  
9 Energy (referred to in this section as the “Sec-  
10 retary”), in consultation with the Secretary of De-  
11 fense, the Secretary of the Treasury, and the heads  
12 of other relevant Federal departments and agencies  
13 and stakeholders, shall conduct a study assessing the  
14 potential national *and* economic security impacts of  
15 building ethane and other natural-gas-liquids-related  
16 petrochemical infrastructure in the geographical vi-  
17 cinity of the Marcellus, Utica, and Rogersville shale  
18 plays in the United States.

19 (2) CONTENTS.—The study conducted under  
20 paragraph (1) shall include—

21 (A) the identification of potential benefits  
22 of the proposed infrastructure to national and  
23 economic security, including the identification  
24 of potential risks to national and economic se-  
25 curity of significant foreign ownership and con-

1           trol of United States domestic petrochemical re-  
2           sources; and

3                   (B) an examination of, with respect to the  
4           proposed infrastructure—

5                       (i) types of additional infrastructure  
6                       needed to fully optimize the potential na-  
7                       tional security benefits;

8                       (ii) whether geopolitical diversity in  
9                       areas to which the ethane and other nat-  
10                      ural gas liquids will be exported from the  
11                      producing region would undermine or bol-  
12                      ster national security;

13                      (iii) the necessity of evaluating the  
14                      public interest with respect to exports of  
15                      ethane, propane, butane, and other natural  
16                      gas liquids, to ensure the potential stra-  
17                      tegic national and economic security bene-  
18                      fits are preserved within the United States;  
19                      and

20                      (iv) the potential benefits, with re-  
21                      spect to significant weather impacts, com-  
22                      pared to other regions, of locating the pro-  
23                      posed infrastructure in the geographical vi-  
24                      cinity of the Marcellus, Utica, and  
25                      Rogersville shale plays.

1 (b) REPORTS.—

2 (1) STATUS REPORTS.—Prior to completion of  
3 the study under subsection (a), the Committees on  
4 Energy and Natural Resources and Armed Services  
5 of the Senate and the Committees on Energy and  
6 Commerce and Armed Services of the House of Rep-  
7 resentatives, from time to time, may request and re-  
8 ceive from the Secretary status reports with respect  
9 to the study, including any findings.

10 (2) SUBMISSION AND PUBLICATION OF RE-  
11 PORT.—On completion of the study under subsection  
12 (a), the Secretary shall—

13 (A) submit to the Committees on Energy  
14 and Natural Resources and Armed Services of  
15 the Senate and the Committees on Energy and  
16 Commerce and Armed Services of the House of  
17 Representatives a report describing the results  
18 of the study; and

19 (B) publish the report on the website of  
20 the Department of Energy.

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116<sup>TH</sup> CONGRESS  
1<sup>ST</sup> Session

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