



**MEMORANDUM**

**July 10, 2020**

**To: Subcommittee on Energy Members and Staff**

**Fr: Committee on Energy and Commerce Staff**

**Re: Hearing on “Oversight of DOE During the COVID-19 Pandemic”**

On Tuesday, July 14, 2020, at 12 p.m. in the John D. Dingell Room, 2123 of the Rayburn House Office Building, and via Cisco Webex online video conferencing, the Subcommittee on Energy will hold a hearing entitled, “Oversight of DOE During the COVID-19 Pandemic.”

**I. COVID-19 AND THE ENERGY SECTOR**

**A. The Department of Energy’s COVID-19 Response**

The Department of Energy’s (DOE) coronavirus disease of 2019 (COVID-19) response involves both pandemic-related research and workforce adjustments. DOE’s National Laboratories have been conducting research on the structure of the COVID-19 virus, modeling the spread of the virus, screening drugs with the potential to fight COVID-19, and making facilities available to others in the scientific community.<sup>1</sup> Los Alamos National Laboratory also created a COVID-19 genome website to help with virus research and analysis.<sup>2</sup> Additionally, DOE serves as a co-chair of the COVID-19 High Performance Computing Consortium, a public-private partnership designed to provide supercomputing access for coronavirus research. Five DOE National Labs participate in the partnership.<sup>3</sup>

DOE’s Office of Cybersecurity, Energy Security, and Emergency Response (CESER) has also been part of the pandemic response. CESER identifies regional energy needs and facilitates the sharing of guidance and advisories among energy sector partners on cybersecurity threats,

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<sup>1</sup> Department of Energy, *How DOE and Our Labs Are Combating COVID-19* (energy.gov/articles/how-doe-and-our-labs-are-combating-covid-19) (Mar. 18, 2020).

<sup>2</sup> Department of Energy, *Los Alamos National Laboratory COVID-19 Genome Website* (energy.gov/articles/los-alamos-national-laboratory-covid-19-genome-website) (Jun. 19, 2020).

<sup>3</sup> Lawrence Livermore National Laboratory, *New partnership to unleash U.S. supercomputing resources in the fight against COVID-19* (llnl.gov/news/new-partnership-unleash-us-supercomputing-resources-fight-against-covid-19) (Mar. 26, 2020).

such as COVID-19 themed and other phishing emails.<sup>4</sup> Additionally, DOE is working with the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC) to assess supply chain disruptions and ensure continued electric reliability.<sup>5</sup>

Due to pandemic-related safety concerns, DOE significantly scaled back operations at environmental management facilities, such as the Hanford site in Washington State and the Savannah River Site in South Carolina. Some sites with scaled back operations are now in the process of reopening.<sup>6</sup>

In an effort to mitigate the economic impacts of COVID-19 on the oil industry, DOE announced in April 2020 a solicitation to make 30 million barrels of the Strategic Petroleum Reserve's (SPR) oil storage capacity available to U.S. oil producers and has proposed filling the SPR to its full capacity.<sup>7</sup> DOE also intends to make an additional 47 million barrels of storage available in the future.<sup>8</sup> In May 2020, DOE issued another solicitation for a purchase of up to one million barrels of oil from small to medium producers to test the current conditions of crude oil available to the SPR.<sup>9</sup> It is not clear, however, that DOE has legal authority to narrow its supplier choices based on size.

## **B. Energy Sector Job Losses**

The COVID-19 pandemic has significantly impacted the U.S. economy, with unemployment rates reaching at least 11.1 percent in June 2020.<sup>10</sup> As of mid-May, the U.S.

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<sup>4</sup> Department of Energy, *COVID-19 Energy Sector Response Efforts and Frequently Asked Questions* (energy.gov/ceser/articles/covid-19-energy-sector-response-efforts-and-frequently-asked-questions) (Jun. 18, 2020).

<sup>5</sup> Department of Energy, *U.S. Department of Energy, FERC and NERC Coordinating Efforts Against COVID-19* (Mar. 2020) (energy.gov/sites/prod/files/2020/03/f72/COVID-19\_Release\_DOE\_FERC\_NERC\_0320\_FINAL.pdf).

<sup>6</sup> Department of Energy, *Savannah River Site Status* (energy.gov/srs/articles/site-status) (accessed Jun. 30, 2020).

<sup>7</sup> U.S. Department of Energy, *U.S. Department of Energy to Make Strategic Petroleum Reserve Storage Capacity Available to Struggling U.S. Oil Producers* (energy.gov/articles/us-department-energy-make-strategic-petroleum-reserve-storage-capacity-available-struggling) (Apr. 2, 2020).

<sup>8</sup> *Id.*

<sup>9</sup> Department of Energy, *DOE Acts on President Trump's Order to Purchase Oil for the SPR: Releases RFP Announcing Crude Oil Purchase to Test the Market* (energy.gov/articles/doe-acts-president-trumps-order-purchase-oil-spr-releases-rfp-announcing-crude-oil-purchase) (May 14, 2020).

<sup>10</sup> The unemployment rate for June 2020 does not fully capture the effects of the recent surge in COVID-19 cases, suggesting unemployment is likely to be higher. U.S. Bureau of Labor

energy sector had lost a total of 1.3 million jobs, marking a 13 percent decline in sector employment since the start of March 2020.<sup>11</sup> The clean energy industry, which encompasses jobs in solar and wind energy, energy efficiency, energy storage, clean vehicles, and more,<sup>12</sup> has lost over 600,000 jobs since the beginning of the pandemic.<sup>13</sup>

Unemployment in the clean energy sector may rise further on or around expiration of the Paycheck Protection Program (PPP).<sup>14</sup> Most clean energy firms in the United States are small businesses, and the construction sector – the largest segment of the clean energy economy – is the top recipient of PPP loans (representing 13 percent of all recipients).<sup>15</sup>

The global pandemic has also adversely affected the fossil fuel industry, as decreased mobility and travel dramatically reduced oil demand. Meanwhile, the shuttering of factories and manufacturing facilities has further cut demand for oil and natural gas. The pandemic, coupled with broader instability in global oil markets, contributed to a loss of 167,000 fossil fuel jobs between March and April 2020.<sup>16</sup>

### C. Energy Investment

COVID-19 has also impacted energy investment and the transition to clean and distributed energy resources. Some companies, for instance, may not be able to complete planned construction activities in time to meet deadlines for expiring tax credits for wind, solar, and carbon capture projects. Additionally, supply chain interruptions and a lack of capital could further delay clean energy projects.<sup>17</sup>

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Statistics, *The Employment Situation – June 2020* (Jul. 2, 2020) ([bls.gov/news.release/pdf/empstat.pdf](https://www.bls.gov/news.release/pdf/empstat.pdf)).

<sup>11</sup> BW Research Partnership, *US Energy Employment Initial Impacts from the COVID-19 Economic Crisis Memo* (May 2020) ([bwresearch.com/covid/docs/BWResearch\\_EnergyJobsAprilCOVID-19Memo\\_05-18-2020.pdf](https://www.bwresearch.com/covid/docs/BWResearch_EnergyJobsAprilCOVID-19Memo_05-18-2020.pdf)).

<sup>12</sup> E2, *Clean Jobs America 2020* (Apr. 2020) ([e2.org/wp-content/uploads/2020/04/E2-Clean-Jobs-America-2020.pdf](https://www.e2.org/wp-content/uploads/2020/04/E2-Clean-Jobs-America-2020.pdf)).

<sup>13</sup> BW Research Partnership, *Clean Energy Employment Initial Impacts from the COVID-19 Economic Crisis* (May 2020) ([e2.org/wp-content/uploads/2020/06/Clean-Energy-Jobs-May-COVID-19-Memo-Final.pdf](https://www.e2.org/wp-content/uploads/2020/06/Clean-Energy-Jobs-May-COVID-19-Memo-Final.pdf)).

<sup>14</sup> On July 1, 2020, Congress approved an extension of the PPP through August 8, 2020.

<sup>15</sup> See note 13.

<sup>16</sup> See note 11.

<sup>17</sup> Congressional Research Service, *COVID-19: Potential Impacts on the Electric Power Sector* (Jun. 12, 2020) (IN11300).

Investments in oil and gas have also significantly declined. Energy companies are expected to spend \$383 billion in 2020 on drilling and pumping for oil and gas – 29 percent less than was spent in 2019.<sup>18</sup>

Loss of income across many American households might also affect consumers' ability to pay their electricity bills. Many utilities have temporarily suspended shutoffs, due to voluntary action or local and state shutoff bans. It is unclear how this loss of utility revenue will be recovered or how unpaid utility bills during the pandemic will be addressed.<sup>19</sup>

#### **D. Energy Demand**

Prolonged economic downturns due to the pandemic will continue to impact energy demand. Overall, global energy demand declined by 3.8 percent in the first quarter of 2020.<sup>20</sup> In the United States, electricity demand across many states declined between nine percent and 13 percent in March and April 2020, relative to previous years. As a result, overall electricity demand is expected to decline by 5.7 percent in 2020.<sup>21</sup> Additionally, prices in most wholesale electricity markets declined between 22 and 37 percent between mid-February and mid-April 2020.<sup>22</sup>

Global oil demand is projected to drop by nine percent, on average, for 2020.<sup>23</sup> U.S. oil drilling fell by over 52 percent in March and April 2020, and petroleum demand fell almost 27 percent in April 2020.<sup>24</sup> Global natural gas consumption is expected to decrease four percent below 2019 levels, marking the largest-recorded demand shock in the history of natural gas markets.<sup>25</sup>

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<sup>18</sup> *Oil and gas drilling investment forecast to fall to 15-year low*, The Houston Chronicle (Jun. 11, 2020).

<sup>19</sup> *See* note 17.

<sup>20</sup> International Energy Agency, *Global Energy Review 2020* (iea.org/reports/global-energy-review-2020) (Apr. 2020).

<sup>21</sup> *See* note 17.

<sup>22</sup> *Id.*

<sup>23</sup> *See* note 20.

<sup>24</sup> American Petroleum Institute, *Monthly Statistical Report* (May 14, 2020) (api.org/~media/Files/News/2020/05/Monthly\_Statistical\_Report\_April\_2020.pdf).

<sup>25</sup> International Energy Agency, *Gas 2020* (iea.org/reports/gas-2020) (Jun. 2020).

## II. BULK POWER SYSTEM EXECUTIVE ORDER

On May 1, 2020, President Trump signed Executive Order 13920, “Securing the United States Bulk-Power System.”<sup>26</sup> The executive order determines that threats to the bulk-power system by foreign adversaries constitute a national emergency and further blocks the installation of bulk power equipment procured from foreign adversaries. The executive order allows for replacement of equipment currently in use. It also establishes a Task Force on Federal Energy Infrastructure Procurement Policies Related to National Security and indicates that the Secretary of Energy can develop an approved list of equipment. However, it does not specify which equipment will be banned, or how existing equipment will be replaced.<sup>27</sup> The executive order also does not require involvement by the electric power industry in establishing an approved list of vendors.<sup>28</sup>

In addition, the executive order does not determine how DOE’s regulatory process will work with approved FERC and NERC supply chain reliability standards. For instance, Reliability Standard CIP-013-1 requires affected entities, such as bulk power system owners, to establish a plan for securing the supply chain management for equipment and services associated with grid operations. FERC approved the standard in 2018, but the implementation deadline was extended to October 2020 due to the COVID-19 pandemic.<sup>29</sup>

## III. DEPARTMENT OF ENERGY FISCAL YEAR 2021 BUDGET

The President’s Fiscal Year (FY) 2021 budget requested \$35.4 billion for DOE, which represents a \$3.15 billion, or eight percent, decrease from the FY 2020 enacted level.<sup>30</sup> Proposed cuts include a 74 percent decrease in funding for the Office of Energy Efficiency and Renewable Energy, as well as elimination of the Weatherization Assistance Program and the State Energy Program. The budget also proposed a 17 percent cut in funding for the Office of Science, a 63 percent cut for the Office of Indian Energy Policy and Programs, and a 22 percent funding cut for the Office of Nuclear Energy. It included an 18 percent increase for the National Nuclear Security Administration, the DOE agency responsible for defense-related nuclear activities, from an enacted level of \$16.7 billion in FY 2020 to \$19.8 billion in the proposal for FY 2021.

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<sup>26</sup> The White House, *Executive Order on Securing the United States Bulk-Power System* (whitehouse.gov/presidential-actions/executive-order-securing-united-states-bulk-power-system) (May 1, 2020).

<sup>27</sup> *Trump’s grid security order sows confusion in power sector — but don’t expect a quick fix*, Utility Dive (Jun. 10, 2020) (utilitydive.com/news/trumps-grid-security-order-sows-confusion-in-power-sector-but-dont-expe/579490).

<sup>28</sup> Congressional Research Service, *E.O. 13920 and Bulk-Power System Supply Chain Security* (Jun. 5, 2020) (IN11417).

<sup>29</sup> *Id.*

<sup>30</sup> Department of Energy, *FY 2021 Budget Justification* (Feb. 2020) (energy.gov/cfo/downloads/fy-2021-budget-justification).

The budget also proposed to eliminate the Advanced Research Programs Agency-Energy (ARPA-E), the Title XVII loan guarantee program for innovative energy technologies, the Advanced Technology Vehicles Manufacturing (ATVM) Program, and the Tribal Energy Loan Program.

**IV. WITNESS**

The following witness has been invited to testify:

**The Honorable Dan Brouillette**

Secretary

U.S. Department of Energy