COMMITTEE ON
ENERGY & COMMERCE
CHAIRMAN FRANK PALLONE, JR.

MEMORANDUM

June 12, 2020

To: Subcommittee on Energy Members and Staff

Fr: Committee on Energy and Commerce Staff

Re: Hearing on "Reviving Our Economy: COVID-19's Impact to the Energy Sector"

On **Tuesday June 16, 2020, at 12 p.m. (EDT) via Cisco Webex online video conferencing**, the Subcommittee on Energy will hold a hearing entitled, "Reviving Our Economy: COVID-19's Impact to the Energy Sector." The hearing will examine the wide-spreading effects of the COVID-19 pandemic and resulting economic downturn on the energy sector.

I. COVID-19 AND ENERGY SECTOR JOB LOSSES

COVID-19 has significantly impacted the U.S. economy, with unemployment rates reaching at least 13.3 percent in May 2020.[1] These effects have significantly affected all economic sectors, including the energy sector. As of mid-May, the U.S. energy sector lost a total of 1.3 million jobs, marking a 13 percent decline in sector employment since the start of March.[2]

The clean energy industry – which encompasses jobs in solar and wind energy, energy efficiency, energy storage, clean vehicles, and more[3] – has lost nearly 600,000 jobs since the beginning of the pandemic.[4] Project delays, social distancing protocols, and supply chain disruptions have contributed to these job losses. Clean energy job losses have been reported throughout the country; the states of California, Texas, Michigan, and Florida have been the hardest hit.

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[1] U.S. Bureau of Labor Statistics, *The Employment Situation – May 2020* (Jun. 5, 2020) (bls.gov/news.release/pdf/empsit.pdf).

[2] 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).

[3] E2, *Clean Jobs America 2020* (Apr. 2020) (e2.org/wp-content/uploads/2020/04/E2-Clean-Jobs-America-2020.pdf).

[4] American Council on Renewable Energy, *America has lost 594,300 clean energy jobs; 850,000 expected by June 30* (acore.org/april-clean-energy-job-losses) (May 13, 2020).

Clean energy jobs cover a wide range of occupations – from manufacturing to construction and installation. Among the clean energy industries affected by the COVID-19 pandemic, energy efficiency jobs have been the most negatively affected, since such work requires entering homes and buildings for installation and maintenance. As a result, the energy efficiency sector accounted for almost 70 percent of all clean energy job losses in April.[5]

According to Department of Labor data, 17.8 percent of the clean energy industry's workforce filed for unemployment benefits in April and March, representing more than double the clean energy jobs created since 2017.[6] Additionally, unemployment in the renewable energy sector increased at more than triple the national unemployment rate in March.[7]

Prior to the pandemic, the clean energy industry enjoyed significant and steady growth, growing 10.4 percent since 2015, and employing 3.4 million Americans by the end of 2019.[8] Clean energy employs almost three times as many people as the fossil fuel industry, becoming the largest employer in all energy occupations. However, forecasts show that if current trends continue, 850,000 clean energy workers will file for unemployment by June 30, 2020. At that rate, one out of every four clean energy workers employed at the start of 2020 will have lost their jobs over the last six months.[9]

Job loss in the energy industry generally has also disproportionately affected Hispanic and Latino employees. The energy industry is about 14 percent Hispanic and Latino, but an estimated 23 percent of job losses in the energy industry were Hispanic and Latino workers.[10]

The global pandemic has also adversely affected the fossil fuel industry. Decreased mobility and travel have 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.[11] Nearly 89,000 oil and gas drilling jobs have been lost since March, a decline of more than 16 percent.[12] These numbers negate about five to seven

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[5] *Id*.

[6] *Id*.

[7] American Council on Renewable Energy, *COVID-19 Hinders Progress in U.S. Renewable Energy Job Growth* (acore.org/covid-19-hinders-progress-in-u-s-renewable-energy-job-growth/) (Apr. 23, 2020).

[8] *See* note 4.

[9] *Id*.

[10] BW Research Partnership, *Clean Energy Employment Initial Impacts from the COVID-19 Economic Crisis Memo* (May 13, 2020) (e2.org/wp-content/uploads/2020/05/Clean-Energy-Jobs-April-COVID-19-Memo-FINAL.pdf).

[11] *See* note 2.

[12] *Id*.

years of job growth in the industry.[13] Additionally, job losses are significantly higher when ancillary jobs, such as manufacturing of drilling equipment, are also considered.[14]

While COVID-19 related job losses have occurred throughout the country, some areas, such as the Midland-Odessa region of West Texas, are experiencing concentrated effects. More than 40 percent of the workforce in that region is employed by industries at high risk of negative economic impacts due to the pandemic, such as oil and gas exploration and production.[15]

Recent analyses suggest that post-pandemic economic recovery can both restore and expand energy sector employment, while simultaneously reducing greenhouse gas emissions.[16] According to the World Resources Institute, for instance, investing between $12 billion and $16 billion in grid modernization annually through 2030 could stimulate $30 billion to $40 billion in annual economic activity, creating 150,000 to 200,000 full-time jobs each year.[17]

By one estimate, a clean energy- and climate-focused economic recovery could stimulate the creation of 9.1 million jobs annually for ten years.[18] That projection includes 1.86 million jobs in the electricity sector and 3.17 million jobs repairing gas pipeline leaks, spread over a ten-year period.

II. THREATS TO INVESTMENTS AND CURRENT PROJECTS

The financial impacts of COVID-19 on the energy sector have been widespread, including impacts on energy investment, the transition to clean and distributed energy resources, and energy projects that are currently under construction. 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.[19]

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[13] *The Oil Industry Shed 51,000 Jobs in March (And Things Look Set to Get Worse)*, Bloomberg (Apr. 21, 2020).

[14] *Id.*

[15] Brookings, *The Places a COVID-19 Recession Will Likely Hit Hardest* (Mar. 17, 2020), (brookings.edu/blog/the-avenue/2020/03/17/the-place).

[16] *See*, e.g., C2ES, *Restoring the Economy with Climate Solutions: Recommendations to Congress* (May 2020); Rocky Mountain Institute, *US Stimulus Strategy: Recommendations for a Zero-Carbon Economic Recovery* (Jun. 2020); and Climate Action Tracker, *A government roadmap for addressing the climate and post COVID-19 economic crises* (Apr. 2020).

[17] World Resources Institute, *Grid Modernization: Creating Jobs, Cutting Electric Bills, and Improving Resiliency* (Apr. 2020).

[18] Political Economy Research Institute at the University of Massachusetts Amherst, *Job Creation Estimates Through Proposed Economic Stimulus Measures* (May 21, 2020).

[19] Congressional Research Service, *COVID-19: Potential Impacts on the Electric Power Sector* (Apr. 1, 2020) (IN11300).

Due to COVID-19, the United States deployed 37 percent less solar capacity than forecasted during the second quarter of 2020.[20] Additionally, as the economic downturn has negatively affected tax equity markets, developers have had difficulty securing financing for solar projects. These challenges have a disproportionate impact on small businesses and newer companies.[21]

COVID-19 also threatens 25 gigawatts of wind projects currently planned or in development, representing $35 billion in investment.[22] Due to delays caused by the pandemic, some U.S. wind projects may be unable to come online in time to meet financial obligations. The economic losses from these delays or cancellations will have a significant impact on rural America, where 99 percent of wind projects are located.[23]

On March 27, 2020, the Internal Revenue Service adjusted the safe harbor deadlines for renewable energy projects.[24] This is designed to address delays to project construction caused by the pandemic, extending tax credit eligibility for projects that were otherwise near completion. The decision provides an additional year for renewable energy projects to qualify for the Production Tax Credit and Investment Tax Credit.

The wind and solar sectors would benefit from action from Congress. According to Wood Mackenzie, nine gigawatts of wind capacity – representing over $10 billion in investment – was already at risk of missing planned 2020 deadlines prior to the pandemic;[25] without the IRS decision to extend the safe harbor, these risks would have been amplified. Additionally, a multi-year extension of the Section 48 and Section 25D solar Investment Tax Credit would help address critical industry financing concerns and enable companies to retain employees in anticipation of future projects.[26]

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[20] Solar Energy Industries Association, *COVID-19 Impacts on the U.S. Solar Industry* (May 2020) (seia.org/sites/default/files/2020-05/SEIA-COVID-Impacts-National-Factsheet.pdf).

[21] *Id.*

[22] American Wind Energy Association, *American Wind Energy Association Releases COVID-19 Outlook* (Mar. 19, 2020) (awea.org/resources/news/2020/american-wind-energy-association-releases-covid-19).

[23] *Id.*

[24] Internal Revenue Service, *Notice 2020-41* (Mar. 2020) (irs.gov/pub/irs-drop/n-20-41.pdf).

[25] Wood Mackenzie, *US wind market worries with USD 10.8b of planned 2020 projects at-risk* (Dec. 10, 2019) (woodmac.com/reports/power-markets-us-wind-market-worries-with-usd-108b-of-planned-2020-projects-at-risk-367261).

[26] Solar Energy Industries Association, *Economic Stimulus for Renewable Energy* (Mar. 19, 2020) (seia.org/sites/default/files/2020-03/Solar%20Industry%20Letter%20COVID-19%20Economic%20Stimulus%203-19-20.pdf).

Investments in oil and gas are also seeing significant decline. Global investment in oil and gas is expected to fall by almost one third in 2020. Investment in shale alone could fall by 50 percent in 2020. [27] 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.[28]

III. COVID-19 AND IMPACTS ON ENERGY DEMAND

As countries grapple with prolonged economic downturns, energy demand will continue to be impacted. Countries with full stay-at-home measures in place have seen an average 25 percent decline in energy demand per week, while countries with partial stay-at-home measures have seen an average 18 percent decline.[29] Overall, global energy demand declined by 3.8 percent in the first quarter of 2020. Projections for global energy demand show a six percent contraction for 2020.[30]

Global electricity demand, especially in the commercial and industrial sectors, has also declined significantly due to lockdowns. Global electricity demand is expected to decline by five percent in 2020, with ten percent reductions in some areas.[31] In the United States, retail electricity sales are forecasted to fall by over nine percent in the commercial sector and nearly seven percent in the industrial sector.[32]

Additionally, global oil demand decreased by five percent in the first quarter of 2020, largely due to restrictions on mobility and aviation. Global oil demand is projected to drop by nine percent, on average, for 2020.[33] U.S. oil drilling fell by over 52 percent over March and April, and petroleum demand fell almost 27 percent in April.[34] Brent crude oil prices averaged $18 per barrel in April and are expected to average $34 per barrel in 2020, down from $64 per barrel in 2019.[35] Additionally, West Texas Intermediate crude oil crashed to a negative spot

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[27] International Energy Agency, *The COVID-19 crisis is causing the biggest fall in global energy investment in history* (May 27, 2020) (iea.org/news/the-covid-19-crisis-is-causing-the-biggest-fall-in-global-energy-investment-in-history).

[28] *Oil and gas drilling investment forecast to fall to 15-year low*, The Houston Chronicle (Jun. 11, 2020).

[29] International Energy Agency, *Global Energy Review 2020* (iea.org/reports/global-energy-review-2020) (Apr. 2020).

[30] *Id.*

[31] *Id.*

[32] U.S. Energy Information Administration, *Short-Term Energy Outlook* (eia.gov/outlooks/steo/) (Jun. 9, 2020).

[33] *See* note 27.

[34] American Petroleum Institute, *Monthly Statistical Report* (May 14, 2020) (api.org/~/media/Files/News/2020/05/Monthly_Statistical_Report_April_2020.pdf).

[35] *See* note 30.

price on April 20, 2020.[36] Natural gas consumption is expected to decrease almost four percent below 2019 daily averages due to lower industrial sector consumption.[37] In an effort to aid the industry, the Department of Energy announced a solicitation in April to make 30 million barrels of the Strategic Petroleum Reserve's oil storage capacity available to U.S. oil producers and has sought funding to fill the Reserve to its full capacity.[38]

IV. WITNESSES

The following witnesses have been invited to testify:

Ernest J. Moniz
President and Chief Executive Officer, Energy Futures Initiative
Former Secretary, U.S. Department of Energy

Gregory Wetstone
President and Chief Executive Officer
American Council on Renewable Energy

Rich Powell
Executive Director
ClearPath

[36] *See* note 32.

[37] *See* note 30.

[38] 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).