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March 9, 2018

Ms. Kelly Hammerle, Chief
National Oil and Gas Leasing Program Development and Coordination Branch
Leasing Division
Office of Strategic Resources
Bureau of Ocean Energy Management (VAM-LD)
45600 Woodland Road
Sterling, VA 20166-9216
Electronically submitted

Re: Comments for the 2019-2024 Draft Proposed National Oil and Gas Leasing Program (Docket ID: BOEM-2017-0074-0001)

Dear Ms. Hammerle,

The Southern Alliance for Clean Energy (SACE) is a regional membership organization that promotes responsible energy choices that create global climate change solutions and ensure clean, safe and healthy communities throughout the Southeast. We welcome this opportunity to engage in a thoughtful discussion on offshore energy and thank you for your willingness to accept comments and incorporate feedback in the formulation of the 2019-2024 Outer Continental Shelf (OCS) Five Year Program.

On behalf of SACE and our more than 50,000 members throughout the Southeast, we submit the following information to help inform the 2019-2024 program. Upon examining the economic, social, and environmental factors that the program will affect, the evidence points to the conclusion that the expansion of leasing for oil and gas in the Atlantic and Gulf of Mexico would cause much more harm than benefit to our country and its citizens. We encourage you to cancel development of this new, unnecessary and unwanted program and instead rely upon the already established 2017-2022 program.

In our August 2017 comment letter in response to the Request for Information and Comments on the Preparation of the 2019–2024 National Outer Continental Shelf Oil and Gas Leasing Program (Docket ID: BOEM 2017–0050),[1] we outlined our concerns with expanded leasing in the Atlantic and Gulf of Mexico. In particular, we emphasized:

- the overwhelming local and state-level opposition to offshore drilling along the Atlantic coast;
- the weak prospects for Atlantic oil and gas production having significant measurable effects on reducing domestic fuel prices or increasing energy security/independence;
- the severe risk that offshore drilling would impose on the currently thriving coastal tourism economy and coastal quality of life;
- the strong likelihood of an eventual catastrophic oil spill in any newly opened OCS areas;
- the largely overlooked public health impacts of oil spills;

[1] Southern Alliance for Clean Energy. Comments on the Preparation of the 2019– 2024 National Outer Continental Shelf Oil and Gas Leasing Program (Docket ID: BOEM 2017–0050). https://www.regulations.gov/document?D=BOEM-2017-0050-49545

- and, the harmful environmental impacts of seismic airgun exploration.

Due to those points, we requested that the Bureau of Ocean Energy Management (BOEM) and U.S. Department of the Interior (DOI) adhere to the lease schedule in the 2017-2022 program in the Atlantic and cancel the remaining scheduled lease sales for the Gulf of Mexico. After reviewing the Draft Proposed Program (DPP), we wish to reiterate our request, highlight these same concerns again, and emphasize that ***our concerns are even greater now given the expansive geographic scope*** proposed in the draft program.

Oil Demand Will Decline

We wish to inject a new consideration into the drafting of the program: the likelihood of declining petroleum demand due to the electrification of vehicles and other gains in fuel efficiency. A perspective widely shared across much of the oil industry and among some financial analysts is that a combination of more stringent fuel efficiency standards, the electrification of vehicles, and the emergence of shared autonomous vehicles will bring down overall oil demand over the next couple decades.

Royal Dutch Shell, a major oil and natural gas development company, estimates that global oil demand may peak in the late 2020s or early 2030s and decline thereafter.[2] Meanwhile, BP plc, formerly British Petroleum, says that oil demand will peak in the late 2030s.[3] Bank of America Merrill Lynch forecasts peak oil demand to occur in 2030.[4]

Industry consultancy firm DNV GL takes a deep dive in its 2017 *Energy Transition Outlook* report and expects global oil demand to peak by 2022, and natural gas demand to peak in the United States around 2020 and globally around 2035.[5] Accordingly, DNV GL expects global offshore oil production to decline to just half of what was produced in 2015: "Offshore oil production is likely to gradually decline over the forecast period, from today's level at 26Mbpd to less than half that amount in 2030. The Middle East and North Africa is the only region for which our model predicts anything approaching a more-or-less sustained level of offshore oil production beyond 2020 […] Every other region will see investment in new capacity of this kind declining from now, and at a rapid pace until 2030."[6,7] Similarly, DNV GL expects North American offshore gas production to peak in 2020 and decline steadily thereafter due to suppressed demand and lower costs of onshore production.[8]

At the same time, additional national or state policy considerations to address carbon emissions and local pollution may hasten the decline in demand of oil for transportation. China, India, the UK, France, and Norway have declared intent to ban the sale of internal combustion engine vehicles, in favor of electric, over the next few decades.[9] Should internal combustion engine bans indeed be enacted in the largest vehicle markets, BP projects that such policies would reduce demand for liquid fuel in

[2] Bousso, Ron and Karolin Schaps. "Shell sees oil demand peaking by late 2020s as electric car sales grow." *Reuters*, July 27, 2017. https://www.reuters.com/article/us-oil-demand-shell/shell-sees-oil-demand-peaking-by-late-2020s-as-electric-car-sales-grow-idUSKBN1AC1MG
[3] BP. *Energy Outlook, 2018 Edition*. http://bp.com/energyoutlook
[4] Longley, Alex. "BofA Sees Oil Demand Peaking by 2030 as Electric Vehicles Boom." *Bloomberg*, January 22, 2018. https://www.bloomberg.com/news/articles/2018-01-22/bofa-sees-oil-demand-peaking-by-2030-as-electric-vehicles-boom
[5] DNV GL. Energy Transition Outlook, 2017: Oil and Gas Forecast to 2050. http://eto.dnvgl.com/2017/oilgas
[6] Ibid. p. 32.
[7] Ibid. p. 34.
[8] Ibid. p. 42.
[9] Petroff, Alanna. *CNN Money*, "These countries want to ban gas and diesel cars." September 11, 2017. http://money.cnn.com/2017/09/11/autos/countries-banning-diesel-gas-cars/index.html

passenger vehicles by more than half by 2040.[10] If the same reduction occurred for trucks as well, then these policies could ultimately reduce the global demand for liquid fuels across all sectors to about 80% of total potential demand by 2040, incrementally decreasing to just 60% of total potential demand.[11] The auto market is poised to deliver this change, with every major car manufacturer in the process of electrifying its fleet.

Natural Gas Demand Will Decline

Meanwhile, advances in the electricity market are indicating that renewable energy and utility-scale batteries may supplant natural gas as preferred fuels for electricity generation. According to financial analysis firm Lazard, in the United States wind and solar energy are the cheapest sources of new electricity generation on a dollars-per-megawatt-hour basis.[12] Their analysis holds true even excluding federal tax credits.

In the United States, the most recent free market test of the competitiveness of renewables was when Xcel Energy subsidiary Public Service Company of Colorado, issued an "all-source Request For Proposals (RFP)," meaning it solicited real market bids from any energy company that could provide power from any energy source.[13] Of the 430 different bids received, 152 were for solar, with a median bid price of $29.50 per MWh. Wind came in even cheaper, with 96 bids at a median price of $18.10 per MWh. Yet the most interesting aspect of the RFP results was the bid prices of renewables paired with battery storage. Eighty-seven bids were submitted for solar plus battery storage, with a median price of $36 per MWh, and eleven wind plus battery storage bids were submitted, with a median price of $21 per MWh.

The most important aspect of the RFP results is that the median bids for dispatchable renewable energy were less expensive than the lowest of Lazard's low cost estimates for new natural gas generation infrastructure.

As renewables plus battery storage continue to become less expensive and outcompete natural gas electricity generation infrastructure both on cost and environmental impacts, then not only will oil demand drop in the transportation sector, but so too will natural gas demand decline in the electricity sector.

Reduced Demand Leads to Stranded Assets

Financial problems for oil companies from demand reduction could be compounded by the credit market. Fitch Ratings warns that, "A market with structurally falling demand will be a lot more risky for all oil companies, with long periods of low prices and investment uncertainty, as demonstrated by the current slump in oil prices […] there is a risk that capital will act long before any transition occurs. This could reduce oil companies' access to equity and debt capital, increasing funding costs during a crucial period."[14] The combination of reduced oil demand, plus difficulty accessing credit would put

[10] BP. p. 42.
[11] BP. *Energy Outlook* Data pack, p. 72.
[12] Lazard. *Lazard's Levelized Cost of Energy Analysis – Version 11.0*. November 2017. https://www.lazard.com/media/450337/lazard-levelized-cost-of-energy-version-110.pdf
[13] Roselund, Christian. "Xcel reports record low prices for solar plus storage." *PV Magazine*, January 5, 2018. http://pv-magazine-usa.com/2018/01/05/xcel-reports-record-low-prices-for-solar-plus-storage/
[14] Fitch Ratings. "Batteries Could Be Key Credit Disruptor; Oil Most Exposed." October 18, 2016. https://www.fitchratings.com/site/pr/1013282

pressure on oil companies to cut costs and focus on low-cost oil resources, and it is widely accepted that offshore petroleum resources are significantly more expensive to develop than onshore resources.

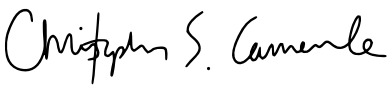
Oil and natural gas demand may already be in decline by the time any newly leased areas from the 2019-2024 program could even come into production. Given the substantial lead time between leasing and production, new wells in previously protected areas would take a decade or more to begin production. Infrastructure and assets for these new areas, including wells, pipelines, or onshore infrastructure, risk becoming stranded assets and abandoned. A preview of this scenario is already playing out in the Gulf of Mexico, where at least 27,000 stranded wells are now abandoned in the Gulf, creating legacy environmental risks.[15, 16] Moreover, the harm to wildlife from seismic surveys could not possibly be justified or be undone.

Offshore oil and gas infrastructure has a multi-decadal lifespan, and failure can occur at any point therein. The Refugio Beach oil spill in 2015, for example, was from a 28-year-old pipeline, transporting oil from a field nearly 40 years into production. Given the extreme environment offshore, leaks can be difficult to identify and repair, and may occur over long stretches of time, such as the ongoing spill from the Taylor Energy Mississippi Canyon 20-A platform that has been releasing oil into the Gulf for the past 12 years and still is not repaired.[17] As such, there are inadequate protections for coastal states to recoup the costs of damage, or reduce the risks of long-term liability caused by abandoned or neglected oil and natural gas infrastructure.

In previous comment letters, we have contended that Atlantic drilling does not make economic sense for a multitude of reasons. Particularly given current and foreseeable oil and gas prices, there is no compelling reason to grant leases to any of our nation's waters that are proposed in the new DPP. When considering the new evidence forecasting a long-term decline in oil and gas demand, the issuance of leases becomes even more unreasonable. Neither short-term nor long-term market trends demonstrate that a major expansion of drilling in our nation's waters would substantially benefit Americans, while at the same time, such leasing may facilitate the development of stranded assets that would become both economic and environmental hazards in the future.

Thank you for this opportunity to comment.

Sincerely,



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[15] Wray, Richard. "Abandoned oil wells make Gulf of Mexico 'environmental minefield.'" *The Guardian*, July 7, 2010. http://www.theguardian.com/business/2010/jul/07/abandoned-oil-wells-gulf-mexico

[16] Zurik, Lee. "Orphan wells and the deadbeats who leave them." WVUE Fox 8 Live, November 2, 2017. http://www.fox8live.com/story/36750057/zurik-orphan-wells-and-the-deadbeats-who-leave-them

[17] Associated Press. "Collapsed Gulf oil platform has been leaking since 2004, investigation finds." *The Times-Picayune*, April 16, 2015. http://www.nola.com/environment/index.ssf/2015/04/gulf_oil_spill_hidden_2004.html