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U.S. Department of Energy (FE–34)
Office of Regulation and International Engagement
Office of Fossil Energy
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Director Sweeney,

Sierra Club submits these comments on the U.S. Department of Energy's (DOE) study, Macroeconomic Outcomes of Market Determined Levels of U.S. LNG Exports (2018 LNG Export Study or Study). This study supplements prior macroeconomic analyses published by DOE in 2012 and 2015. Although Sierra Club agrees that those prior studies fail to address current market conditions or the cumulative volume of exports currently proposed to DOE, we are disappointed by the 2018 LNG Export Study's failure to correct the methodological flaws of those prior analyses. Most importantly, because all of these studies fail to adequately consider distributional impacts, and because they provide no analysis whatsoever of environmental impacts, these studies do not provide an adequate basis for DOE to determine whether exports are consistent with the public interest.

# The Study *Drastically* Overstates Global Gas Demand, and Thus Market Support for U.S. LNG Exports

The Study overstates global gas demand, and thus market support for U.S. LNG exports, by assuming that the most likely scenario is for the rest of the world to take *no* further action to limit greenhouse gas emissions. Study at 41-43. This "high" demand scenario assumes that 2016 is the last year in which the global community undertakes any effort to limit greenhouse gas emissions, *i.e.*, that no further action is taken between 2018 and 2040. This myopic view ignores the consistent trajectory of ever-increasing global efforts to reduce greenhouse gas emissions. Although this scenario might represent a useful hypothetical "ceiling" on global gas demand, the Study does not demonstrate that it is plausible; much less that it is the *most likely* scenario.

Nor does the Study support its conclusion that the "low" global demand scenario, in which "every country adopts policies sufficient to keep global greenhouse gas concentrations under 450 ppm $CO_2e$," Study at 41, has only a 5% chance of occurring. *Id.* at 41, 43.

Overstating the probability of high global demand for natural gas, and thus for US LNG exports, significantly skews the Study's overall analysis and conclusions. A more appropriate analysis of the international community's likelihood of action to address global warming, and thus of global gas demand, would show much lower global market support for U.S. LNG exports.

## The Macroeconomic Outcomes Section Fails to Properly Address Distributional Impacts

As the Study recognizes, "U.S. LNG exports have positive effects on some segments of the U.S. economy and negative effects on others." Study at 64. However, the Study glosses over the fact that these benefits and harms are not equally or evenly distributed. Exports will harm *all* Americans by increasing gas prices, Study at 19, 64, and thus prices paid for household energy consumption and by energy-intensive industries. Indeed, energy-intensive industries will likely experience relative job losses as a result of LNG exports. Study at 21. On the other hand, the primary benefits of LNG exports will only accrue to the shareholders of natural gas production and export companies. Study at 67. As Sierra Club has repeatedly explained, ownership of these companies, and of stocks in general, is not evenly distributed: only a small fraction of American households own stock, and an even smaller fraction own stock in natural gas industries. The Study, however, inappropriately simply asserts that "households" in general own the production processes and industries, without providing any analysis or discussion of which households own this stock. Thus, by only discussing the impacts on the "average" household, without providing any analysis of how households differ, the Study fails to provide *any* analysis of how the benefits and harms of exports will be distributed among the American public.

## Environmental Impacts

As DOE is well aware, every stage of the LNG lifecycle has important environmental impacts. These impacts must be addressed, directly, in determining whether any particular export application is consistent with the public interest. To date, DOE has failed to adequately do so. These impacts also have important economic impacts, which DOE must acknowledge.

Again, Sierra Club reiterates its prior comments on this issue. Although the 2018 LNG Export Study, like the 2015 and 2012 macroeconomic analyses before it, entirely fails to address environmental impacts, DOE has demonstrated that it plainly has the tools needed to consider these issues.

## Conclusion

Although we agree with DOE that the prior export studies do not reflect presently-proposed export volumes or market conditions, and that updates were therefore required, the 2018 Study continues to present a misleadingly incomplete picture of the consequences of LNG exports. DOE must consider both the distributional and equitable economic effects of exports, as well as the environmental effects (both monetizable and otherwise). Absent such analysis, DOE cannot conclude that exports are consistent with the public interest.

Sincerely,

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