February 18, 2024

Dear Editor,

Please find attached to this letter the re-submitted manuscript entitled “Characterizing Air Quality Impacts Related to North Atlantic Offshore Wind Energy Projects” for consideration for publication in *Environmental Science & Technology - Air.*

We very much appreciate the useful and thoughtful comments provided by the reviewers and feel that the changes made based on those comments result in an improved manuscript.

This manuscript details a novel assessment of air quality and human health impacts from emissions related to new wind energy projects built off the northern Atlantic coast of the U.S. In addition to characterizing emissions related to the installation (construction phase) and operation of offshore wind turbines this study also provides an estimate of impacts related to changing emissions of onshore electrical generating units because of the increased energy capacity available from these offshore wind energy projects. Here we illustrate that emissions and resulting human exposure from air quality impacts related to offshore wind energy project construction and operation get offset by reductions in onshore EGUs due to the increased energy capacity provided by these offshore projects. We believe this is a unique assessment and is timely since many offshore wind energy projects have started being developed off the Atlantic coast of the U.S. and many more are planned in the future.

All information presented in this manuscript has not been previously published, nor is it under consideration elsewhere (including the internet). I hope you find this discussion of my work desirable for publication in *Environmental Science & Technology - Air*. Thank you very much for your consideration of this manuscript.

Sincerely,

Kirk Baker, Ph.D.

U.S. Environmental Protection Agency

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