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Via Electronic Submittal: www.ahs.dep.pa.gov/eComment

Policy Office

PA Department of Environmental Protection (“Department”)

Rachel Carson State Office Building

P.O. Box 2063

Harrisburg, PA 17105-2063

***Re: Comments to Proposed Designation Recommendations for the 2015 Ozone Standards
46 Pa. Bulletin 5162 – August 20, 2016***

Dear Sir or Madam:

Please find below the comments of NRG Energy (“NRG”) to the above-referenced proposed designation recommendations for the 2015 ozone standard. NRG understands that based on air quality monitoring data for 2013—2015, demographic information and other criteria as recommended by the U.S. EPA, the Department is proposing to recommend that

- Allegheny, Armstrong, Beaver, Butler, Washington, Fayette and Westmoreland Counties be designated as a multicounty nonattainment area;
- Indiana County be designated as a single county nonattainment area;
- Lebanon County be designated as a single county nonattainment area;
- Bucks, Chester, Delaware, Montgomery and Philadelphia Counties be designated as a multicounty interstate nonattainment area; and
- the remainder of the Commonwealth be designated as unclassifiable/attainment.

NRG also understands that U.S. EPA anticipates making final designations by October 1, 2017. In the interim, the Department will continue with its ambient air monitoring activities and related data reporting to U.S. EPA in calendar year 2016 at the most (if not all) monitoring sites that provided data for the proposed designation recommendations. Consequently, NRG recommends that once the calendar year 2016 ambient air monitoring and data reporting activities are completed, the Department should complete its data validation activities as soon as practicable and afterwards provide updated recommendations based on the air quality monitoring data for 2014—2016, demographic information and other criteria as recommended by the U.S. EPA. NRG believes that the ozone design values calculated from the air quality monitoring data for 2014-2016 may be less than the 70 ppbv ozone NAAQS, perhaps due in part of the significant decrease in nitrogen oxide (NO_x) emissions. NO_x is one of the precursor pollutants to ground-level ozone concentrations. In one of its summaries for the 2014 National Emissions Inventory (“NEI”), U.S. EPA noted that NO_x emissions in the Commonwealth are primarily attributable to the following source categories:

Source Category *	State-Wide NOx Emissions (1000 tons)		
	CY 2012	CY 2013	CY 2014
Highway Vehicles	188.40	172.73	157.06
Fuel Combustion Electric Utilities	122.36	130.40	118.99
Off-Highway	71.63	66.86	62.09

*: Top 3 source categories only listed

Reference: <https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data>

Recent annual NOx emissions from the electric utility industry as reported to U.S. EPA Clean Air Markets Division show a similar trend.

State	Year	NOx Emissions (1000 tons)	Heat Input (MMBtu)	Gross Load (MW-h)	Average NOx Emission Rate (lb/MMBtu)	Average NOx Emission Rate (lb/MW-h)
PA	2013	133.82	1.28E+09	1.34E+08	0.21	1.99
	2014	122.70	1.21E+09	1.26E+08	0.20	1.95
	2015	96.82	1.13E+09	1.18E+08	0.17	1.64
	2016 Jan-Jun	39.15	4.92E+08	5.05E+07	0.16	1.55

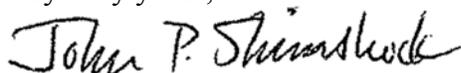
Reference: <https://ampd.epa.gov/ampd/>

Lastly, additional NOx emission reductions are expected beginning in CY 2017 in response to the following:

1. U.S. EPA's Tier 3 Vehicle Emission and Fuel Standards Program (reference: <https://www3.epa.gov/otaq/tier3.htm>). Per U.S. EPA, estimated NOx emission reductions from the Final Tier 3 Standards for the U.S. are 264,369 short tons in CY 2018 (10% of on-road inventory) and 328,509 short tons in CY 2030 (25% of on-road inventory) – reference [EPA-420-F-14-009](#), March 2014.
2. The Department's NOx and VOC RACT II rule (reference: 25 Pa. Code §§129.96-129.100), which included the following in the preamble to the final-form rulemaking: *The expected NOx emissions from coal-fired EGUs that are not scheduled for retirement or fuel-switching, based on 2013 production rates and the NOx emission limitations in the final-form rulemaking, are 59,039 tpy. This is an anticipated reduction in actual emissions of approximately 36% from this sector.* 46 Pa. Bulletin 2045 – April 23, 2016.

NRG appreciates the opportunity to provide comments to the proposed designation recommendations. Please contact Mr. Keith Schmidt (724-597-8193, Keith.Schmidt@nrg.com) or me via telephone or email as listed above with any questions or concerns regarding these comments.

Very truly yours,



John P. Shimshock

Sr. Air Environmental Specialist