



GROUP AGAINST SMOG & POLLUTION

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June 29, 2020

VIA e-Mail

Mr. Mark R. Gorog, Regional Air Quality Program Manager
Pennsylvania Department of Environmental Protection
Southwest Regional Office
400 Waterfront Drive
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Mr. Alexander Sandy
Pennsylvania Department of Environmental Protection
Southwest Regional Office
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Re: Plan Approval 63-00922D
Robinson Power Co./Beech Hollow Project
Robinson Township, Washington County

Dear Mr. Gorog and Mr. Sandy:

The Group Against Smog and Pollution (“GASP”) offers the following comments regarding the above-referenced Plan Approval. The Pennsylvania Department of Environmental Protection (the “Department”) published notice of the Plan Approval in the May 30, 2020 Pennsylvania Bulletin. According to that notice, the Department will accept comments on the Plan Approval for thirty days after the date of publication of notice, or through June 29, 2020.

Very truly yours,

/s

John K. Baillie
Senior Attorney

**COMMENTS OF THE GROUP AGAINST SMOG AND POLLUTION
REGARDING PLAN APPROVAL 63-00922D
(ROBINSON POWER COMPANY/BEECH HOLLOW PROJECT)**

In 2017, Robinson Power Company, LLC (“Robinson Power”) applied for a plan approval to install the following equipment at its Beech Hollow Project (the “Project”) in Robinson Township, Washington County:

- Two (2) Siemens, SGT6-8000H (or equivalent), natural gas-fired combustion turbines, 3,051 MMBtu/hr heat input rating (LHV) each, including natural gas-fired duct burners, 618 MMBtu/hr heat input rating each; controlled by SCR and oxidation catalysts; 1,000 MW total net generating capacity;
- One (1) natural gas-fired auxiliary boiler, 30 MMBtu/hr heat input rating;
- One (1) Cummins, QSX15 (or equivalent), diesel-fired fire pump engine, 411 bhp rating; including one (1) diesel fuel storage tank, 100 gallon maximum capacity; and
- Miscellaneous components in natural gas service, and circuit breakers; controlled by leak detection and repair (“LDAR”).¹

The equipment in the 2017 plan approval would have the potential to emit these amounts of pollutants, in tons per year:²

AIR CONTAMINANT	EMISSION RATE
Nitrogen Oxides (“NOx”)	190.44
Carbon Monoxide (“CO”)	142.24
Total Particulate Matter (“PM”)	112.98
Coarse PM (“PM ₁₀ ”)	112.87
Fine PM (“PM _{2.5} ”)	112.85
Sulfur Oxides (“SOx”)	15.42
Sulfuric Acid (“H ₂ SO ₄ ”) Mist	7.67
Volatile Organic Compounds (“VOCs”)	45.42
Hazardous Air Pollutants (“HAPs”)	30.50

¹ 47 Pa. Bull. 3240, 3241 (June 10, 2017).

² *Id.*

Formaldehyde (“HCHO”)	440
Ammonia (“NH ₂ ”)	12.40
Carbon Dioxide Equivalents (“CO _{2e} ”)	2,931,104.00

In 2017, the Department “determined that the proposed facility satisfie[d] BACT, LAER, and the Department’s Best Available Technology (“BAT”) requirements” with such emission rates.³

By its current application for a plan approval, Robinson Power seeks permission to install the following equipment at the Project, which although different in some respects from the 2017 plan approval, would have the same 1000 MW net generating capacity as proposed in 2017:

- Two (2) General Electric 7HA.02 (or equivalent), natural gas-fired combustion turbines, 3,485.8 MMBtu/hr heat input rating (HHV) each; controlled by SCR and oxidation catalysts; 1,000 MW total net generating capacity;
- One (1) natural gas-fired auxiliary boiler, 91.1 MMBtu/hr heat input rating;
- One (1) Cummins, CFP15E-F20 (or equivalent), diesel-fired fire pump engine, 410 bhp rating; including one (1) diesel fuel storage tank, 500-gallon maximum capacity;
- One (1) natural gas-fired dew point heater, 9.69 MMBtu/hr heat input rating;
- One (1) natural gas-fired dew point heater, 3.34 MMBtu/hr heat input rating; and
- Miscellaneous components in natural gas service, and SF6 containing switchgear, controlled by LDAR.⁴

The equipment in the 2020 application for a plan approval would have the following potential to emit:⁵

AIR CONTAMINANT	EMISSION RATE
NO _x	231.70
CO	164.90

³ See *id.*, at 3242.

⁴ 50 Pa. Bull. 2760, 2760 (May 30, 2020).

⁵ *Id.*

PM	144.50
PM ₁₀	144.50
PM _{2.5}	144.50
SO _x	36.00
H ₂ SO ₄	53.14
VOCs	42.00
HAPs	16.03
HCHO	6.18
NH ₂	205.90
CO _{2e}	3,842,430.00

This table shows the increase (or decrease) in between the Project's potential to emit under the 2017 plan approval and its potential to emit under the 2020 plan approval:

AIR CONTAMINANT	EMISSION RATE 2017 (TPY)	EMISSION RATE 2020 (TPY)	INCREASE (DECREASE) FROM 2017 TO 2020 (TPY)
NO _x	190.44	231.70	41.26
CO	142.24	164.90	22.66
PM	112.98	144.50	31.52
PM ₁₀	112.87	144.50	31.63
PM _{2.5}	112.85	144.50	31.65
Sox	15.42	36.00	20.58
H ₂ SO ₄	7.67	53.14	45.47
VOCs	45.42	42.00	(3.42)
HAPs	30.50	16.03	(14.47)
HCHO	4.40	6.18	1.78
NH ₂	12.40	205.90	193.50
CO _{2e}	2,931,104.00	3,842,430.00	911,326.11

The notice published for the proposed modifications to the Project provides no explanation for these substantial increased emissions rates.⁶

I. THE PROJECT'S NO_x EMISSIONS DO NOT COMPLY WITH THE CLEAN AIR ACT'S "LOWEST ACHIEVABLE EMISSION RATE" REQUIREMENT

All areas of Pennsylvania are included in the Ozone Transport Region created by section 184(a) of the Clean Air Act.⁷ Accordingly, new major stationary sources of NO_x (and VOCs) in Pennsylvania must comply with the Nonattainment New Source Review ("NNSR") requirements of Part D, Subpart 2 of the Act,⁸ which mandate that such sources "comply with the lowest achievable emission rate," or "LAER."⁹

In 2017, the Department acknowledged that the Project's NO_x emissions were subject to the LAER requirement and determined that the Project's NO_x emissions satisfied that requirement at a rate of 190.44 tons per year.¹⁰ In 2017, as in 2020, the Project was described as a 1000 MW natural gas-fired combined cycle power plant. The Department now proposes to authorize the Project to increase its NO_x emissions to 231.70 tons per year, despite acknowledging that such emissions are still subject to the LAER requirement, and despite its earlier determination that LAER limited the Project's NO_x emissions to 190.44 tons per year.

If LAER for the NO_x emissions from a 1000 MW natural gas-fired combined cycle power plant was 190.44 tons per year in 2017, it cannot be 231.70 tons per year now. Robinson Power must be required to construct the Project as proposed in 2017 so that it achieves an

⁶ See *id.*, at 2760-63.

⁷ See 42 U.S.C. § 7511c(a).

⁸ See 42 U.S.C. § 7511a(f).

⁹ See 42 U.S.C. §§ 7502(c)(5) and 7503(a)(2).

¹⁰ See 47 Pa. Bull., at 3242.

emission rate of 190.44 tons per year of NOx, rather than 231.70 tons per year of NOx as currently proposed.

II. THE PROJECT’S EMISSIONS DO NOT COMPLY WITH THE CLEAN AIR ACT’S “BEST AVAILABLE CONTROL TECHNOLOGY” REQUIREMENT

The Project is to be located in Washington County, Pennsylvania, which attains all of the National Ambient Air Quality Standards (the “NAAQS”). Accordingly, as a new major stationary source located in an attainment area, the Project’s emissions of criteria pollutants are subject to the “Best Available Control Technology,” or “BACT,” requirement imposed by section 165 of the Clean Air Act.¹¹ The Clean Air Act defines “BACT” to mean:

an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this chapter emitted from or which results from any major emitting facility which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant.¹²

In 2017, the Department acknowledged that the Project’s emissions of NOx, CO, PM, PM₁₀, PM_{2.5}, H₂SO₄, and CO_{2e} were subject to the BACT requirement, and determined that those emissions satisfied that requirement at these rates:

AIR CONTAMINANT	EMISSION RATE (TPY)
NOx	190.44
CO	142.24
PM	112.98

¹¹ 42 U.S.C. § 7475(a)(3).

¹² 42 U.S.C. § 7479(3).

PM ₁₀	112.87
PM _{2.5}	112.85
Sox	15.42
H ₂ SO ₄	7.67
CO _{2e}	2,931,104.00

In 2017, as now, the Department described the Project as a 1000 MW natural gas-fired combined cycle power plant. In 2020, despite its earlier BACT determinations, the Department would allow the Project to increase its emissions as follows:

AIR CONTAMINANT	EMISSION RATE 2017 (TPY)	EMISSION RATE 2020 (TPY)	INCREASE FROM 2017 TO 2020 (TPY)
NO _x	190.44	231.70	41.26
CO	142.24	164.90	22.66
PM	112.98	144.50	31.52
PM ₁₀	112.87	144.50	31.63
PM _{2.5}	112.85	144.50	31.65
SO _x	15.42	36.00	20.58
H ₂ SO ₄	7.67	53.14	45.47
CO _{2e}	2,931,104.00	3,842,430.00	911,326.11

The “maximum degree of reduction of each pollutant” determined to be “achievable” by the Project should not be less in 2020 than it was in 2017. Robinson Power must be required to construct the Project as proposed in 2017 so that it achieves the lower emission rates that the Department authorized in 2017.

III. THE PROJECT'S EMISSIONS DO NOT COMPLY WITH PENNSYLVANIA'S "BEST AVAILABLE TECHNOLOGY" REQUIREMENT

All new stationary sources of air pollution in Pennsylvania are subject to a requirement that their emissions "be the minimum attainable through the use of the best available technology," or "BAT."¹³ As detailed above, the technology that the 2017 version of the Project proposed emission rates for NO_x, CO, PM, PM₁₀, PM_{2.5}, SO_x, H₂SO₄, HCHO, NH₂, and CO_{2e} that were substantially lower than the emissions proposed for the 2020 version of the Project. The higher 2020 emission rates do not comply with section 127.12's BAT requirement. Accordingly, the Department must require that the Project be constructed as proposed in 2017 so that it achieves those lower emission rates.

¹³ See 25 Pa. Code § 127.12(a)(5).