

DOCKETED	
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Project Title:	Vernon Backup Generating Facility
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Description:	N/A
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ATTACHMENT DR AQ-4

Air Quality Emission Estimates and Modeling

Vendor Documented Emissions

Table DR AQ 4-1 Comparison of Emissions From CalEEMod 2020.4 vs. 2022.1 For GEPVDC

1. Original analysis values per version 2020.4 are in black.
2. Revised analysis values per version 2022.1 are in red.

Onsite Construction Emissions

Scenario/Year	NOx	CO	VOC	SOx	PM10	PM2.5	CO2e
Max Const Year	2026/2026	2026/2026	2026/2026	2026/2026	2026/2026	2026/2026	2026/2026
Const Period Emissions, tons	0.91/0.87	5.28/3.52	2.79/2.59	0.011/0.015	0.25/0.23	0.079/0.065	1080.3/672
Max Const Year, tons	0.65/0.59	3.51/2.22	2.14/2.12	0.0073/0.005	0.18/0.16	0.055/0.04	750.8/424
Avg Daily Emissions, lbs	5.0/3.21	27.0/12.1	16.5/11.6	0.06/0.01	1.4/0.89	0.42/0.23	-
SCAQMD CEQA Threshold, lbs/day	100	550	75	150	150	55	11025
Exceeds Thresholds	No/No	No/No	No/No	No/No	No/No	No/No	No/No

Tons = 2000 lbs.



Paul van Niekerk
Cummins Power Generation

July 23, 2025

Subject: Emission Guarantee for Tier-4F System

Dear Paul:

This letter confirms the Johnson Matthey emission guarantees for the SCRT system proposed for the Vernon Data Center Project - Proposal 400-25-180. The SCRT system emission guarantees on the following page are based on the engine parameters listed below.

Engine / Genset	QSK78-G37 / Cummins C3000D6EB
Rating	3000 kW
Number of Systems	38
Operating Hours per Year	Standby
Fuel	ULSD
Exhaust Gas Flow Rate	22,293 cfm
Exhaust Gas Temperature	863°F (1)
Maximum Allowable Engine Backpressure	27" W.C.

The performance guarantees of the SCRT system are the following: when the SCRT system is operated and maintained per the provisions stated in our Operating and Maintenance Manual. The below guarantees should not be used for permitting.

Exhaust component	Guaranteed Reduction
NOx	≥95%
CO	≥80%
NMHC	≥70%
PM	≥85%

Sincerely,

Nathan Frye
Regional Account Manager
nathan.frye@matthey.com
Johnson Matthey Clean Air Solutions



Paul van Niekerk
Cummins Power Generation

July 23, 2025

Subject: Emission Guarantee for Tier-4F System

Dear Paul:

This letter confirms the Johnson Matthey emission guarantees for the SCRT system proposed for the Vernon Data Center Project - Proposal 400-25-180. The SCRT system emission guarantees on the following page are based on the engine parameters listed below.

Table 1. Full Load Design Parameters for SCRT

Engine	QST30-G5 NR2
Rating	1000 kW
Number of Systems	2
Operating Hours per Year	TBD
Fuel	ULSD
Exhaust Gas Flow Rate	7,540 cfm
Exhaust Gas Temperature	890°F
Maximum Allowable Engine Backpressure	27" W.C.

The performance guarantees of the SCRT system are the following: when the SCRT system is operated and maintained per the provisions stated in our Operating and Maintenance Manual. The below guarantees should not be used for permitting.

Exhaust component	Guaranteed Reduction
NOx	≥87%
CO	≥80%
NMHC	≥70%
PM	≥85%

Sincerely,

Nathan Frye
Regional Account Manager
nathan.frye@matthey.com
Johnson Matthey Clean Air Solutions