## Electric Generating Unit Standard Permit Technical Review

CompanyGalaxy Helios I LLCCityAftonCountyDickensProject TypeStandard Permit ApplicationProject ReviewerCamryn AppertSite NameGalaxy Helios I

Registration Number Project Number Regulated Entity Number Customer Reference Number Project Received Date 179090 392804 RN111537775 CN606350171 May 2, 2025

## **Project Description**

Galaxy Helios I LLC (Galaxy Helios) owns and operates the Helios Datacenter located in Dickens County, Texas. Galaxy Helios submitted a revision project to update the operating hours and add a generator at the water treatment building.

The site will consist of 121 CAT 3516E Diesel Generators that will be used to produce approximately 251.80 MW of electrical power during power outages. Each engine will be equipped with a respective individual belly tank for storage of fuel which will be authorized under claimed PBR 106.472. The emergency generators will be powered by diesel fuel and are certified as meeting the U.S. EPA Tier 2 emission standards. The engines will comply with Section 4(D)(ii), the units will be installed in West Texas, they will operate 300 hours or less per year and the units are certified to comply with applicable Tier 2 emission standards per 40 CFR Part 89. The project therefore meets the criteria for a NOx emission limit of 21 lb/MWh.

The normal operation of the Helios Datacenter emergency generators will be for periodic testing only. Potential to emit is based on 7,865 hours for all engines. If local power is interrupted, the emergency generators will power the Helios Datacenter such that there is no interruption in services to customers; however, this usage of the emergency generators is not considered "normal operation" as it only occurs because of an emergency event (i.e., a power outage). As such, the intended "normal" operation of periodic testing and exercising events are the basis of the operating hours used in the Air Standard Permit. Galaxy Helios will operate under the emergency situations as defined in 30 TAC 117.10(15).

The engines will comply with applicable requirements of New Source Performance Standards (NSPS) as listed in 40 CFR Part 60 Subpart A and IIII.

General Rules Check	Comments
Does the project trigger PSD or NA review?	* No
Is the facility taking an operational limit to meet the Standard Permit? If yes, describe how this project is not circumventing major NSR permitting. (30 TAC §116.110)	* Yes; Helios is certifying that the combined hours of operation for all engines will not exceed 7,865 hours per year. Additionally, GEN- W-01 will be authorized at 100% load, 103 of the engines will not exceed 75% load, 11 engines will not exceed 50% load, 2 engines will not exceed 25% load, 4 engines will not exceed 10% load.

Standard Permit Rules Check	Comments
Type of unit being authorized	*Engine(s)
Fees	* ≥1 MW \$900
Combined Heat and Power (if taking credit)	N/A – Heat is not recovered for other processes.
Fuel	<ul> <li>Liquid fuel/liquid renewable fuel (no waste oils or solvents, &lt;0.05% by weight sulfur)</li> </ul>
NO <sub>x</sub> emission limitation (in lb/MWh)	* ≤10 MW per unit * West Texas *≤300 hrs/yr – 21 lb/MWhr

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Registration No. 179090 Page 2 Regulated Entity No. RN111537775

Maintenance, Startup, and Shutdown	Maintenance activities will be authorized either by PBR or De Minimis. Emissions from planned startup and shutdown will be authorized by this permit. Combustion emission factors used when developing the standard permit included enough conservatism to account for incidental increases that could occur during startup and shutdown.
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May 19, 2025

Michael Patu

May 21, 2025

Project Reviewer Camryn Appert Date

Section Manager Michael Partee

Date