

Archie Fallon

July 1, 2026

New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez, Suite 1
Santa Fe, New Mexico 87505

**Re: Comment in Support of Air Quality Permit Application No. [____] — Project Jupiter
Fuel Cell Microgrid, Doña Ana County, New Mexico**

Dear Members of the Air Quality Bureau:

This comment is submitted on behalf of Yucca Growth Infrastructure (“Yucca”), a developer of behind-the-meter power infrastructure serving large-load customers in the Southwest. Yucca writes in support of the pending air quality permit application for the revised power design of Project Jupiter, under which the campus will be served by solid oxide fuel cells manufactured by Bloom Energy, replacing the natural gas turbines and diesel generators originally proposed. The revised design represents a substantial environmental improvement, is consistent with the microgrid framework the Legislature adopted in 2025, and serves the public interest of New Mexico ratepayers and the communities of Doña Ana County.

I. The Technology: Microgrids and Solid Oxide Fuel Cells

A microgrid is a self-contained electrical system that generates, stores, and distributes power to a defined load, capable of operating independently of the regional transmission grid. Because generation is located at the point of consumption, a microgrid avoids transmission line losses, does not draw on constrained utility capacity, and does not require the utility to construct new generation, transmission, or distribution assets to serve the load. For a facility of Project Jupiter's scale, self-supply through a microgrid is not merely efficient — it is the only configuration that allows the project to proceed without imposing years of interconnection delay and billions of dollars of infrastructure cost on the incumbent utility and its customers.

The revised design will meet the campus's requirements with up to 2.45 gigawatts of installed solid oxide fuel cell capacity, consolidated into a single microgrid. A solid oxide fuel cell converts the chemical energy in natural gas directly into electricity through an electrochemical reaction across a ceramic electrolyte, without combustion. Because there is no flame, the formation of nitrogen oxides — the principal combustion pollutant of concern for regional ozone — is largely avoided. The applicant projects that the fuel cell design will reduce NOx emissions by approximately 92

percent relative to the previously proposed gas turbines, while consuming a negligible amount of water in a region where water scarcity is a defining constraint. The design also eliminates the diesel backup generators contemplated in the original application, removing an additional source of localized particulate and NO_x emissions. Fuel cells operate at higher electrical efficiency than simple-cycle turbines, meaning less fuel consumed — and less carbon dioxide emitted — per megawatt-hour delivered.

II. House Bill 93 and New Mexico's Microgrid Framework

In 2025, the Legislature enacted House Bill 93, the Advanced Grid Technology Act (Chapter 93, Laws of 2025, codified at NMSA 1978, Section 62-17-12), signed by Governor Lujan Grisham on April 8, 2025. The Act directed utilities to incorporate advanced grid technologies into transmission planning and, through amendment adopted during the session, established the framework under which large loads may be served by dedicated microgrids. The Legislature's purpose was pragmatic: New Mexico competes nationally for large-scale investment, and traditional utility interconnection for loads of this magnitude can take a decade or longer. The microgrid provisions allow qualifying projects to self-generate — bearing their own energy costs rather than shifting them to utility ratepayers — while remaining bound to the Energy Transition Act's requirement of one hundred percent zero-carbon energy by 2045. HB 93 further contemplates that utilities may purchase power or assets from microgrids, subject to regulatory oversight, giving the state a mechanism to convert private investment into public grid capacity over time.

Project Jupiter is precisely the use case the Legislature had in view: a transformative private investment that self-supplies its load, funds its own generation, and commits to the state's clean energy trajectory.

III. The Public Interest

First, the revised design reduces total environmental emissions relative to gas-fired combustion generation. The approximately 92 percent reduction in projected NO_x emissions is particularly significant for Doña Ana County, which faces ozone challenges, and the near-elimination of operational water use responds directly to the community concerns raised in prior proceedings. Approving this permit rewards a developer that responded to public input by adopting materially cleaner technology.

Second, the project relieves — rather than burdens — local utilities and their ratepayers. The project sponsor will bear all energy costs, and no utility customer will fund generation or transmission buildout to serve the campus. In an environment where data center interconnection requests are consuming a growing share of utility planning capacity, self-supply protects residential and small business rates and preserves utility capital for the customers who depend on it.

Third, the project adds to local reliability and the scale of the regional grid. A 2.45-gigawatt microgrid — among the largest fuel cell installations in the world — brings dispatchable,

transmission-independent capacity into the region. Under HB 93, that capacity can, over time and with Commission oversight, be made available to support the broader system, strengthening resilience in southern New Mexico without ratepayer-funded construction.

Conclusion

The revised Project Jupiter design reflects the outcome New Mexico's microgrid framework was intended to produce: cleaner technology, private capital bearing private costs, and infrastructure that strengthens rather than strains the grid. Yucca respectfully urges the Bureau to approve the application.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Archie Fallon". The signature is fluid and cursive, with the first name "Archie" and last name "Fallon" clearly distinguishable.

Archie Fallon

Partner

Counsel for Yucca Growth Infrastructure