



**Support for Air Quality Construction Permit Application No. 10883 Yucca Growth Infrastructure Microgrid**

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

Re: Support for Air Quality Construction Permit Application No. 10883 – Yucca Growth Infrastructure Microgrid

Dear Air Quality Bureau:

New Mexico IDEA is the statewide association representing economic development professionals, organizations, and communities committed to fostering responsible economic growth throughout New Mexico. Our members work every day to attract investment, support business expansion, and create quality jobs while recognizing the importance of protecting the state's natural resources and ensuring compliance with environmental laws. We believe economic development and environmental stewardship are complementary goals, and that major projects should be evaluated through a transparent, science-based regulatory process grounded in applicable law. It is in that spirit that we respectfully submit the following comments regarding Air Quality Construction Permit Application No. 10883.

This application should be evaluated under a straightforward legal standard: whether the project causes or contributes to harmful air quality levels. The record shows that it does not. The project's modeled ozone impact, the most important indicator of regional air quality, is 0.0915 parts per billion compared to a federal standard of 70 parts per billion – a level that is effectively negligible. While the facility triggers additional regulatory oversight due to its size, those thresholds are not measures of public health risk and do not reflect what people actually breathe. The application demonstrates that emissions will not result in harmful concentrations in the air, and where the Department seeks additional assurance, it has authority to impose enforceable monitoring and operational conditions. For these reasons, the project meets the applicable legal requirements and should be approved.

I respectfully submit this comment in support of Air Quality Construction Permit Application No. 10883 for the Yucca Growth Infrastructure ("YGI") Microgrid in Doña Ana County, New Mexico. This comment is submitted to assist the Department in evaluating

the application under the governing legal standard and to address issues raised in public comments.

The Department's decision should be governed by the legal standard set forth in the Air Quality Control Act and 20.2.72 NMAC. New Mexico's construction permitting rules require denial only if, considering emissions after controls, the proposed project will not meet applicable regulations, will cause or contribute to concentrations above applicable National or New Mexico Ambient Air Quality Standards, would cause or contribute to a PSD increment exceedance, or otherwise violates the Act.

The application describes the YGI Microgrid as a solid oxide fuel cell ("SOFC") system that converts natural gas into electricity through an electrochemical reaction without combustion. The application materials also state that the project will be a Title V major source, while indicating in the modeling section that the facility is not a PSD major source and that ozone precursor analysis was provided voluntarily using EPA MERPs guidance. The application further states that the SOFC system is proposed to operate at maximum rated load for 8,760 hours per year.

## I. GOVERNING LEGAL STANDARD

Under 20.2.72.208 NMAC, the Department must deny a permit only if the proposed project will fail to meet applicable regulations, cause or contribute to concentrations above National or New Mexico Ambient Air Quality Standards (NAAQS/NMAAQs), cause or contribute to a PSD increment exceedance, or otherwise violate the Air Quality Control Act. The applicable standard is therefore compliance – not policy preference, project scale, or public controversy.

## II. NAAQS AND NMAAQs COMPLIANCE

### A. Ozone Analysis

The application demonstrates an ozone impact of 0.0915 ppb compared to the federal 8-hour 70 ppb ozone standard. This represents an impact that is orders of magnitude below the applicable standard and well below commonly used significance thresholds. This demonstrates that the project does not cause or contribute to a violation of the ozone standard and therefore does not meet the criteria for permit denial under 20.2.72.208 NMAC.

### B. Other Criteria Pollutants

For NO<sub>2</sub>, CO, SO<sub>2</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>, the application relies on emissions levels and regulatory thresholds instead of detailed modeling, which is appropriate for a project of this type. This is consistent with PSD minor-source treatment and does not indicate

noncompliance. The non-combustion SOFC process inherently limits emissions of these pollutants.

While certain pollutants exceed the 100 tons-per-year threshold used to determine applicability of programs such as Title V, those thresholds are not health-based limits and do not provide a basis for permit denial, because they do not reflect the concentration of pollutants in ambient air. The controlling issue under 20.2.72.208 NMAC is whether emissions result in ambient concentrations that cause or contribute to an exceedance of applicable standards, and the application demonstrates that they do not result in harmful concentrations.

For other pollutants, the application demonstrates compliance by providing emissions data and showing that detailed modeling is not required under applicable regulatory thresholds. This approach reflects standard permitting practice and supports the conclusion that these emissions are not expected to result in ambient concentrations approaching applicable air quality standards.

#### C. Nonattainment and Receptor Distance

The project's location near a nonattainment area does not change the analysis. The relevant question remains whether the project contributes to harmful air quality levels.

The application's modeling demonstrates that the project does not cause or contribute to an exceedance.

Additionally, the separation between emission sources and ambient receptors increases dispersion, resulting in reduced concentrations at points of public exposure. This further supports compliance with NAAQS.

#### D. Ozone vs. Title V Clarification

Ozone modeling addresses ambient air quality impacts, while Title V applicability is determined based on emissions thresholds for regulated pollutants such as VOC and CO. These are separate regulatory determinations.

The project appropriately identifies itself as a Title V major source while demonstrating minimal ambient air impacts.

### III. GREENHOUSE GAS ANALYSIS

The application identifies CO<sub>2</sub> emissions of approximately 10.1 million tons per year. While large in magnitude, CO<sub>2</sub> is not regulated under NAAQS and does not provide a basis for denial under 20.2.72.208 NMAC.

The relevant inquiry is whether the project satisfies applicable regulatory requirements, including any BACT obligations.

The project incorporates emissions minimization through high-efficiency SOFC technology, representing a design-level BACT approach.

Public comments assert that renewable energy systems should be considered the preferred control option for greenhouse gas emissions. However, the BACT framework evaluates control technologies applicable to the proposed emissions source and does not require the permitting authority to redefine the fundamental nature of that source. The proposed project is a firm, continuously operating power generation facility designed to provide reliable load-serving capability. Intermittent renewable resources, even when paired with storage, cannot provide the same continuous and reliable power without fundamentally changing how the project is designed and operated. Accordingly, such alternatives are not properly considered “available control technologies” within the meaning of the BACT analysis.

Moreover, BACT determinations must consider energy, environmental, and economic impacts. The project incorporates emissions minimization through high-efficiency, non-combustion solid oxide fuel cell technology, representing a design-based control strategy that achieves substantial emissions reductions. To the extent alternative technologies would impose disproportionate costs, reduce reliability, or require fundamentally different system configurations, they are not considered achievable within the meaning of BACT.

Furthermore, where additional clarification is warranted, enforceable permit conditions provide a mechanism to ensure compliance.

The CO<sub>2</sub> emissions estimate reflects conservative assumptions regarding continuous operation, including redundancy and maintenance capacity, which supports the conclusion that actual operational impacts are expected to be lower.

#### IV. TITLE V APPLICABILITY

Title V is an operating permit program that applies based on emissions thresholds. It does not provide a basis for denying a construction permit.

Any Title V requirements can be addressed through the post-construction operating permit process, ensuring ongoing compliance. Monitoring post-construction will also provide an additional layer of verification to ensure continued compliance with applicable permit conditions.

#### V. SINGLE SOURCE / SEGMENTATION CLAIM

Some public comments have asserted that the microgrid and a nearby data center must be treated as a single source.

Combining facilities into a single source requires common control, physical proximity, and similar operations.

A commercial supply relationship does not establish common control. Power generation and data processing are distinct industrial activities, and physical separation further weighs against aggregation.

Even if aggregation were assumed, the relevant legal test remains whether emissions cause or contribute to a violation of ambient standards. The record demonstrates that they do not.

## VI. ENFORCEABILITY AND PERMIT CONDITIONS

The Department has clear authority under 20.2.72.210 NMAC to impose permit conditions, monitoring, and testing requirements.

These measures ensure compliance and address any uncertainty without requiring permit denial.

## VII. CONCLUSION

The administrative record demonstrates that the project complies with applicable air quality regulations and does not cause or contribute to an exceedance of ambient air quality standards.

No basis exists under 20.2.72.208 NMAC to deny the permit.

Where questions remain, they can be addressed through enforceable permit conditions, which are authorized under New Mexico's permitting framework.

Accordingly, the Department should approve Air Quality Construction Permit Application No. 10883.

Because the record demonstrates compliance with all applicable requirements and no exceedance of ambient air quality standards, approval of the permit is required under 20.2.72.208 NMAC.

Respectfully submitted,

**Jason Espinoza**

Executive Director

New Mexico IDEA