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In February 2026, more than 4500 public comments opposing air permits for the massive fossil fueled "microgrids" planned to power Project Jupiter were collected from New Mexico residents. In response to that overwhelming public opposition, Project Jupiter backers pivoted to a new fossil fuel solution. They now plan to power their hyperscale data center with Bloom Energy's Solid Oxide Fuel Cells and have applied for a new air permit under the name Yucca Growth Infrastructure (YGI). The greenwashing is strong with this one and very misleading with false information.

How do these Solid Oxide Fuel Cells work?

Like the original proposal, the plant depends on methane gas, using an electrochemical process rather than combustion to convert the gas into energy, waste heat, and yes, a projected 10 million metric tons of climate polluting carbon dioxide. That's more than 20 billion pounds. More than the EPE and PNM electric grid combined. Still more than the total emissions of Albuquerque, Las Cruces and Santa Fe put together, making a mockery of New Mexico's emissions reduction goals and erasing all the progress that has been made over two decades.

I join the thousands who are also calling on the New Mexico Air Quality Bureau to reject this monstrosity because of the following:

Bloom Solid Oxide Fuel Cells have never been deployed at the scale proposed and the company's track record and inadequate pollution testing protocol make all estimates provided in the application suspect. To grant a permit based on, essentially, wishful thinking, is grossly irresponsible. Though several large projects have been announced with much fanfare, the largest existing Bloom Energy Solid Oxide Fuel Cell (SOFC) installation actually in operation is a 40-megawatt (MW) deployment in South Korea. That is sixty times smaller than what is being proposed for Project Jupiter.

The proposed design - 2275 individual fuel cells, each with its own stack and no integrated controls for regulated pollutants - does not provide a realistic mechanism to verify compliance or facilitate enforcement of pollution standards. Without continuous, long-term monitoring protocols capable of measuring localized particulate matter, volatile organic compounds (VOCs), and shifting CO2 intensity per unit of energy under peak loads, any pollution mitigation claims represent theoretical best-case scenarios rather than dependable empirical projections. It is unclear how NMED could monitor compliance and enforce standards on 2275 individual units that do not include any control mechanisms.

Air pollutant testing provided as part of the application was inadequate and cannot be relied upon for factual results. The air pollutant estimates provided in Bloom Energy's applications are highly suspect due to a systemic lack of rigorous, real-world testing protocols for large-scale deployments. The estimated pollution from each Bloom Energy Server reported in the application are based on testing conducted on a single 65kw cell completed in four tests of four hours each under ideal conditions. That unit generates 37,876 times less energy than the total generator capacity they are proposing at Project Jupiter. With 2275 individual stacks, even small variations in performance could mean wildly variable actual emissions. This variability will be exacerbated when units are operated under real-world conditions, with variable feed-gas inputs, widely fluctuating temperatures

that could exceed the maximum 113° F operating temperature, and rapid degradation as a result of continuous operation.

Solid Oxide Fuel Cells emit hazardous air pollutants, extreme heat and hazardous waste streams that applicants fail to account for. Applicants admit that pollutants of concern, including Carbon Monoxide (CO) at 161.2 tons per year and Volatile Organic Compounds (VOCs) at 124 tons per year will be emitted, exceeding Title V minor source limits and therefore significantly impacting air quality and public health in a community that already experiences the cumulative impacts of nearby EPA non-attainment zones and significant deterioration of air quality related to oil and gas infrastructure. In addition to these regulated health hazards, the project will generate extreme heat, particularly for adjacent neighborhoods that could feel the "heat island" effect, increasing temperatures by up to 3.6° Fahrenheit downwind of the plant.

Data centers already generate significant waste heat as a result of their cooling mechanisms. The Bloom Solid Oxide Fuel Cell plant will exacerbate that heat island effect. Their Solid Oxide Fuel Cells operate at extremely high temperatures - up to 800°F - and emit waste heat at greater than 350°F. Extreme heat is one of the most deadly health hazards for infants, outdoor workers and vulnerable aging adults who cannot regulate their body temperatures. And we know that the people in Santa Teresa are already suffering under extreme heat.

Carbon dioxide overload is a significant and growing public health hazard. The addition of 10 million tons of CO₂ emissions annually will have significant health impacts for local communities and for all living things. The YGI Microgrid application estimates that 2275 methane fueled Solid Oxide Fuel Cells will emit 10,144,115 metric tons of CO₂ annually, an amount that exceeds the annual emissions of the Four Corners coal plant. This extremely concentrated, continuous stream of CO₂ will inevitably add to the already steadily rising ambient CO₂ in the earth's atmosphere (currently 431ppm), affecting neighboring communities in particular, a prospect with direct health implications that cannot be ignored.

A study published in 2026 in Air Quality, Atmosphere & Health reports that "As the atmospheric CO₂ levels rise, already at 420ppm, the increasing levels of bicarbonate, and decreasing levels of calcium and phosphorus in our blood represent permanent and growing changes in human blood chemistry." They report that elevated CO₂ can lead to significant health complications, including changes in heart rate, kidney calcification, neural damage, inflammation, and oxidative stress, which plays a major role in various clinical conditions including malignant diseases, diabetes, atherosclerosis, chronic inflammation and neurological disorders such as Parkinson's and Alzheimer's diseases. In particular, oxidative damage to cellular DNA can lead to the initiation and progression of cancer. Researchers have also found that increased exposure to CO₂ negatively impacts cognitive performance and has the potential to increase panic attacks and anxiety.

The proposed "microgrid," with CO₂ emissions equivalent to the three largest cities in New Mexico compressed into about 275 acres, will have public health impacts in vulnerable local communities that cannot be ignored.

The New Mexico Environmental Department's mission is to protect and restore the environment and to foster a healthy and prosperous New Mexico for present and future generations. The mission of NMED's Air Quality Bureau is to protect the inhabitants and natural beauty of New Mexico by preventing the deterioration of air quality. The proposed YGI "microgrid" flies in the face of those

mission critical objectives with no public input. This egregious disregard of the Public's safety and best interests must be recognized as lawlessness.

The newly greenwashed Project Jupiter air permit application must be rejected, or at the very least, be subjected to a public hearing to investigate community impacts.