

Sophia Gentry

"I urge the NMED to deny Air Quality Construction Permit Application 10883 for the Yucca Growth Infrastructure (YGI) Microgrid in southern Doña Ana County. Granting a permit to emit over 10 million metric tons of CO₂ annually violates NMED's mission to protect public health and prevent air quality deterioration, disproportionately harming BIPOC and low-income communities.

The application relies on an unproven, unregulatable, and inadequately tested design:

- * Unprecedented, Unproven Scale: YGI proposes using 2,275 Bloom Energy Solid Oxide Fuel Cells (SOFC). Though several projects have been announced with much fanfare, the largest operating Bloom installation is a 40 MW facility - 60 times smaller than what is proposed here. Scaling this technology to a mega-utility application remains entirely unproven.

- * Suspect Estimates & Inadequate Testing: The emissions data provided is based on testing of a single, 65 kW unit four times for four hours. Extrapolating data from a unit 37,876 times smaller than the proposed plant capacity - and adjusting it with an arbitrary 15% safety margin - fails to provide credible empirical evidence. The emissions data provided by the company cannot be trusted.

- * Enforcement Impossibility: The design routes 2,275 individual cells through separate stacks with no add-on pollution control mechanisms or integrated continuous monitoring for particulate matter, VOCs, or shifting CO₂ intensity. NMED cannot practically enforce compliance under 20.2.72.210 NMAC across thousands of individual, degrading units.

- * Severe Public Health & Environmental Impacts: The microgrid will emit 161.2 tons/year of CO and 124 tons/year of VOCs near existing EPA non-attainment zones. It will generate a thermal plume and a "heat island" effect, raising downwind temperatures by up to 3.6°F in a sweltering desert climate, threatening vulnerable populations.

Furthermore, concentrating 10M metric tons of climate-warming CO₂ into 275 acres - exceeding the combined emi"