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I live in Southern Doña Ana County, and I do not want an experimental project of this magnitude built in my community. The gas-powered fuel cell plant proposed by Yucca Growth Infrastructure would be unlike anything that has ever been deployed before. At nearly 2.46 GW, it would be roughly 1,000 times larger than Bloom Energy's largest existing fuel cell installation. Bloom has installed approximately 1.4 GW of fuel cell capacity across more than a thousand different sites worldwide, yet this proposal seeks to concentrate almost twice that amount in a single location. Even the largest fuel cell plant currently operating anywhere in the world is more than 30 times smaller than what is being proposed for Santa Teresa. Because there is no comparable facility operating anywhere, no one can honestly say with certainty what pollution levels would look like at this scale. The enormous gap between existing fuel cell projects and this proposal means there is little real-world data to support the applicant's emissions estimates. Approving this project would mean gambling with the health and quality of life of the people who live here while ignoring the New Mexico Environment Department's stated mission to protect public health, prevent the deterioration of air quality, and preserve the environment for future generations. The emissions estimates presented by the applicant are based on a very limited testing process that does not inspire confidence. The data comes from only three four-hour pollution tests performed on a single 65 kW unit. That is nowhere close to replicating the conditions of thousands of fuel cells running continuously, at full output, in the extreme heat of the Chihuahuan Desert. Even at the small scale that was tested, the amount of available data is limited. Trying to use those results to predict emissions from a facility approximately 37,000 times larger leaves far too much uncertainty. A 15% "safety margin" was added to the numbers provided by the applicant. Safety margins are not usually added if a company is confident in the accuracy of their pollution estimates. Even small variations from this superficial test will result in massively different levels of pollution and given that the plant will be 37,000 bigger than the testing unit, a 15% safety margin is completely insufficient—it could work as a margin for a single unit, but not the entire plant. If a unit has a 0.01% chance of failing (sounds promising right?), the odds of 37,000 of those units working perfectly at the same time is 2.47% (pathetically low feasibility). That means there is a 97.53% chance that the plant will experience at least one failure. What will the exact level of redundancy be? Will more fuel cells be rubberstamped or pollution levels overlooked in five years or less due to age-related inefficiencies?

What about cases of catastrophic failure? Are we approving those deadly incidents of pollution in advance without any real data informing us of the risks at this scale? Highly flammable hydrogen under high pressure only needs a microscopic crack to leak out, ignite, explode, and level entire neighborhoods and schools while sending shockwaves into nearby counties. Assuming this risk, an act of gross negligence, at a scale that has never even remotely been demonstrated in practice would be unbelievably careless. These permits must be denied outright. If further deliberation is desired, a public hearing in Santa Teresa is non-negotiable.