Testimony of Ashley C. Schannauer in Support of Appeals of the Planning Commission's March 20, 2025 Order **Approving a Conditional Use Permit** for the Rancho Viejo Solar Project Case Nos. 24-5201, 24-5202, 24-5203, 24-5204

August 11, 2025

Outline of Presentation

- 1. Planning Commission Order fails requirements of SLDC
- 2. The Hearing Officer's Findings
- 3. Application and Order fail SLDC criteria for CUP
 - a. Detrimental to the health, safety and general welfare and potential hazard for fire, panic, or other danger
 - (i) AES-Related Fires, Explosion and Toxic Gases
 - (ii) Warnings
 - b. Water and traffic issues
 - c. Inconsistent with Santa Fe County Sustainable Growth Management Plan
- 4. Application and Order violate SLDC permitting requirements
- 5. Due process violations
- 6. Project not needed to transition to carbon-free generation resources

My Background

Practiced public utility and environmental law since 1980

2005 - 2022 New Mexico Public Regulation Commission:

- -- Chief Hearing Examiner (2019 2022)
- -- Hearing Examiner (2010 2019)
- -- Staff Attorney (2005 2010)

Utility procurements and siting of power plants:

- -- Renewable energy resources since 2007 requirements of NM Renewable Energy Act
- -- PNM's first procurement of BESS resources in 2020

1. Planning Commission's March 25 Order fails requirements of SLDC

- -- Makes no Findings of Fact in violation of SLDC Section 4.3.2 and fails to counter the Hearing Officer's detailed Findings of Fact.
- -- Violates the SLDC Criteria for a CUP.
- -- Violates permitting requirements in County Ordinance and SLDC requirements.
- -- Approves CUP with 19 permit conditions to be satisfied later, some of which <u>must be addressed by the BCC</u> and <u>before a CUP is approved</u>, as required by SLDC Section 6.3.10.2.

2. The Hearing Officer's Findings of Fact Recommended Order, December 23, 2024

"45. The consequences of a fire from the Project could be catastrophic because of its proximity to the surrounding communities of Eldorado, Rancho San Marcos, and Rancho Viejo - an area with an estimated 10,000 homes and approximately 25,000 residents."

Finding No. 45.

The Hearing Officer's Findings of Fact (cont.) Recommended Order, December 23, 2024

The most hazardous commercial or industrial facility in Santa Fe County

"48. At the hearing when asked if there was any commercial or industrial facility in the County that posed a comparable degree of hazard as the proposed Project, Staff responded that it was not aware of any past, present, or future projects that posed such hazard as the proposed Project."

Finding No. 48.

Other Hearing Officer Findings of Fact Recommended Order, December 23, 2024

- -- The scale of the Project, over 200,000 panels and 570,000 lithium-ion batteries, together with the proximity to residential communities with homes as close as 500 feet from the Site boundary creates an unreasonable risk to the safety and welfare of the communities. (Finding No. 49.)
- -- Proposed battery system less safe than safer forms to which the industry is evolving. (Finding No. 41.)
- -- Remote monitoring increases potential for a catastrophic fire. (Finding No. 42.)
- -- The County does not have a hazardous material team/unit. The City of Santa Fe's unit is 16 miles away. A fire could travel a mile in 26 minutes at a wind speed of 8 miles an hour and 13 minutes at 16 miles an hour. (Finding No. 44.)

Other Hearing Officer Findings of Fact (cont.) Recommended Order, December 23, 2024

- -- AES First Responder Mitigation Guidelines warn of thermal runaway, fires, explosive gases, and ejection of shrapnel and particulates. (Finding No. 43.)
- -- PFAS-laden fire suppressant together with massive amounts of water used to extinguish a fire could contaminate the groundwater in areas with a shallow aquifer and residents reliant on domestic wells. (Finding No. 46.)
- -- The project could have a negative impact on home values and access to home insurance. (Finding No. 47.)

The Hearing Officer's Recommended Order Recommended Order, December 23, 2024

AES application fails the criteria for a Conditional Use Permit:

"50. The evidence indicates the Project would be detrimental to the health, safety and general welfare of the area; the Project would create a potential hazard for fire, panic, or other danger; and the Project is inconsistent with the purposes of the property's zoning classification and inconsistent with the spirit and intent of the SLDC and SGMP."

"51. The evidence supports denial of the Application."

Recommended Order, Findings Nos. 50 and 51.

3. Planning Commission Order Violates SLDC criteria for Conditional Use Permit

"4.9.6.5 Approval Criteria. CUPs may only be approved if it is determined that the use for which the permit is requested will not:

- 1. Be detrimental to the health, safety and general welfare of the area;
- 2. Tend to create congestion in roads;
- 3. Create a potential hazard for fire, panic, or other danger;

. . .

5. Interfere with adequate provisions for schools, parks, water, sewerage, transportation or other public requirements, conveniences or improvements;

. . .

7. be inconsistent with the purposes of the property's zoning classification or in any other way inconsistent with the spirit and intent of the SLDC or SGMP."

SLDC Section 4.9.6.5

3. a. Detrimental to the health, safety and general welfare and potential hazard for fire, panic, or other danger

- 4.9.6.5 Approval Criteria. CUPs may only be approved if it is determined that the use for which the permit is requested will not:
 - 1. Be detrimental to the health, safety and general welfare of the area;

. . .

3. Create a potential hazard for fire, panic, or other danger;

3.a.(i) AES-Related Fires, Explosions and Toxic Gases

Explosion and Fire 2 MW AES Battery Facility, Surprise, Arizona April 19, 2019

Fire Captain	Fire Engineer	Fire Fighter #1	Fire Fighter #2
traumatic brain injury eye injury spine damage broken ribs broken scapula thermal burns chemical burns internal bleeding two broken ankles broken foot	traumatic brain injury collapsed lung broken ribs broken leg separated shoulder laceration of the liver thermal burns chemical burns missing tooth facial lacerations	fractured patella broken leg spine damage nerve damage in leg injured Achilles tendon thermal burns tooth damage facial lacerations	facial lacerations

Four other firefighters were transported to the hospital and observed overnight for exposure to hydrogen cyanide (HCN).

^{*}Report: Four Firefighters Injured In Lithium-Ion Battery Energy Storage System Explosion – Arizona, UL Firefighter Safety Research Institute Columbia, MD 21045, July 28, 2020.

Fire, 10 MW AES Battery Facility Chandler, Arizona April 18-May 1, 2022

- -- Started on April 18 and considered extinguished on May 1.*
- -- Sprinkler system sprayed water to keep the temperature down and was turned off on April 29.*
- -- No reported injuries, but the nearest freeway was closed, and the city of Chandler notified nearby businesses to evacuate.*
- -- AES and Fluence Energy, LLC (AES subsidiary) collaborated to build and operate the facility to supply energy to the Salt River Project.

^{*}AES investigating cause of "thermal runaway" at Arizona site, Energy Storage News, May 4, 2022.

Fire, 30 MW AES Battery Facility Escondido, California September 5-6, 2024

- -- Evacuations ordered for 500 businesses, school closures and shelter-inplace recommendations for residents.*
- -- AES built project for San Diego Gas & Electric.
- -- Fluence Energy, LLC (AES subsidiary) provided long-term maintenance and service.

^{*} Escondido lithium battery fire out, evacuation orders lifted as county mulls over moratorium, CNS News Service, Sept. 6, 2024, updated Sept. 10, 2024.

Fire, 300 MW Battery Facility Moss Landing, California January 16-17, 2025

"Huge fire at Moss Landing battery plant spurs evacuations, road closures sends out plumes of toxic smoke" San Jose Mercury News, January 17, 2025





Photos: San Jose Mercury News, January 17&18, 2025

Fire, 300 MW Battery Facility Moss Landing, California January 16-17, 2025

- -- Closed US Highway 1; 1,500 evacuations
- -- Smoke plume: Residents not evacuating advised to stay indoors, keep windows and doors closed, turn off ventilation systems and limit outdoor exposure
- -- Heavy metals discovered in nearby soil samples
- -- Fire re-ignited February 18
- -- Fluence Energy, LLC (AES subsidiary) was engineering contractor for original project
- -- U.S. EPA, CA EPA, CA Dept of Toxic Substances Control, CA Water Resources Control Board and Monterey County Environmental Health Bureau evaluating remediation measures and human health risk assessment.

^{*} Huge fire at Moss Landing battery plant spurs evacuations, road closures, sends out plumes of toxic smoke, San Jose Mercury News, January 17, 2025.

County officials speaking about the Jan. 16-17 Moss Landing facility fire*

"There's no way to sugarcoat it. This is a disaster is what it is."
-- Monterey County Supervisor Glenn Church

"It's a major incident. . . . All the resources in the County and our neighboring jurisdictions have been deployed to assist with this incident."

-- Monterey County spokesperson, Nicholas Pasculli

*Reports from San Jose Mercury News, January 17 and January 22, 2025

"Trust Us"

"I myself was personally assured and I know other county officials too that this was not going to happen, that there were safety protocols in place. Well, obviously that failed. And I think that just shows the nature that no one knows what we're really dealing with in this technology."

-- Monterey County Supervisor Glenn Church

County of Monterey Officials Provide Updates on Moss Landing Fire, KSBW Action News, January 17, 2025.

Moss Landing Lawsuits

- -- Residents and business sue for damages at Moss Landing
- -- At least 4 lawsuits with more than 300 residents and businesses as plaintiffs

199 MW Solar, 100 MW BESS Zoning Change and CUP Denied AES Clean Energy/Yampa Valley Solar, LLC February 25, 2025

County Commissioners of Moffat County, Colorado denied:

- -- Zoning change from Agricultural to Heavy Industrial
- -- Application for Conditional Use Permit

AES rep.: Eight equipment failures at AES facilities resulted in fires in last two years

Residents' concerns included BESS fires, emergency response times, equipment failure, water, construction/traffic noise and reclamation

https://moffatcounty.colorado.gov/sites/moffatcounty/files/022525.pdf

https://www.youtube.com/watch?v=Jxzr9so6f5Y

https://www.aes.com/yampa-solar

Planning Commission Order does not require sufficient financial protections

- -- Planning Commission Order does not require insurance.
- -- Planning Commission Order requires a decommissioning bond, but does not specify an amount:
 - AES says it will provide \$7.6 million decommissioning bond.
 - Bond amount assumes end of normal operational life cycle.
 - Estimated costs for battery decommissioning:
 - \$500,000 for battery and container removals
 - \$850,000 for site restoration

Who is Rancho Viejo Solar, LLC?

- -- Application states Rancho Viejo Solar, LLC will own and operate the facility .
- -- Who are the members/investors?
- -- Does it have the financial resources to compensate victims of any accidents?
- -- Is its role to isolate the upstream entities, such as AES and Rancho Viejo Limited Partnership, LLC, from liabilities resulting from any accidents?

3.a.(ii) Warnings

Technological improvements and new regulatory standards are not sufficient to address risks.

- -- AES
- -- San Diego County
- -- U.S. Environmental Protection Agency
- -- Electric Power Research Institute

AES warns investors of "inherent risks" of BESS

"In addition, our battery storage operations also involve risks associated with lithium-ion batteries. On rare occasions, lithium-ion batteries can rapidly release the energy they contain by venting smoke and flames in a manner that can ignite nearby materials as well as other lithium-ion batteries. While more recent design developments for our storage projects seek to minimize the impact of such events, these events are inherent risks of our battery storage operations."

AES Corporation Annual Reports 2022-2024 (emphasis added).

AES warns investors of liabilities for personal injuries and property damages from BESS accidents

"The hazards described above, along with other safety hazards associated with our operations, can cause significant personal injury or loss of life, severe damage to and destruction of property, plant and equipment, contamination of, or damage to, the environment and suspension of operations. The occurrence of any one of these events may result in our being named as a defendant in lawsuits asserting claims for substantial damages, environmental cleanup costs, personal injury and fines and/or penalties."

AES Corporation Annual Reports 2022-2024 (emphasis added).

AES's First Responder Guidelines for the Rancho Viejo Solar Project

"5.1 Fire Hazards

Normal Conditions

Fire hazards are present from potential electrical equipment failure and thermal runaway

Abnormal Conditions

. . .

Thermal runaway . . . is a phenomenon in which the lithium-ion cell enters an uncontrollable, self heating state. Thermal runaway can result in: Ejection of gas, shrapnel, and/or particulates (violent cell venting) and extremely high temperatures.

Under abnormal conditions batteries may be subjective to the production of off gases to include, but not limited to Hydrogen, Hydrogen Fluoride, Hydrogen Chloride, Carbon Monoxide, Methane, Ethane & Ethylene gases which may result in smoke, fire, and/or explosion."

CUP Application, revised 10-10-2024 (emphasis added).

San Diego County BESS Guidelines December 10, 2024

After three BESS fires in 13 months (Sept. 2023-Sept 2024), San Diego County Fire Protection District adopted new guidelines for BESS facilities:

"While NFPA standards and Underwriters Laboratory (UL) guidelines provide some safety measures, they do not fully account for the specific hazards of lithium-ion batteries. As a result, local authorities must consider additional safety protocols, including plume modeling for toxic gas dispersion and expanded setbacks from property lines to ensure safe firefighting operations and minimize exposure to toxic fumes."

Interim Fire Protection Guidelines for BESS Facilities, San Diego County Fire Protection District, p. 5. (Emphasis added.)

US Environmental Protection Agency July 7, 2025

EPA's Pacific Southwest Regional Administrator:

"Calling a technology 'green energy' does not mean there are no environmental impacts. This is an issue of growing concern" "I am alarmed by the incidents and impacts of utility grade battery fires on first responders, specifically the professional firefighters who are exposed to horrible toxic conditions when batteries catch fire. This settlement action is a step in the right direction, but the broader battery storage fire issue requires additional attention and EPA enforcement."

EPA news release: EPA Orders Cleanup Following Battery Fire at Gateway Energy Storage Facility in San Diego, July 7, 2025.

Safer Designs Don't Eliminate Most "Root Causes" of BESS Accidents

2024 EPRI report examined the root causes of 26 of the 81 BESS incidents in the EPRI database for which sufficient information was available to assign a root cause:

Root Causes	Number	Percent
Integration, Assembly and Construction	10	36%
Operational issues	8	29%
Design	6	21%
Manufacturing defects	4	14%

Insights from Electric Power Research Institute's Battery Energy Storage Systems (BESS) Failure Incident Database, Analysis of Failure Root Cause, EPRI, May 2024.

AES design acknowledges continuing risks

June 14, 2024 test to verify operation of Applicants' deflagration panels:

CSA report:

- -- Test simulated potential ignitable volumes of gases produced by thermal runaway.
- -- Test resulted in "release of all three deflagration panels on the top of the container and ejection of a visible flame."



Figure 9: Flames ejected from deflagration panels as viewed from the rear of the container – Test 2



Figure 10: Deflagration panels post-test 2

3.b. Water and traffic issues

"4.9.6.5 Approval Criteria. CUPs may only be approved if it is determined that the use for which the permit is requested will not:

. . .

2. Tend to create congestion in roads;

. . .

5. Interfere with adequate provisions for schools, parks, water, sewerage, transportation or other public requirements, conveniences or improvements;"

New Water Supply to Reduce Truck Traffic Creates Water Issues

August 30, 2024 Application:

"Water use during construction will be approximately 100 to 150 acre-feet over a 12-month construction period and will be delivered to the Project site by water trucks."

Dec. 4, 2024 Glorieta Geoscience Third-Party Review:

"This magnitude of water hauling requires a much more in-depth analysis of traffic and air quality impacts resulting from the water truck traffic."

AES Proposes Water Supply Through Fire Hydrant, January 2025

AES proposes to Staff a combination of water hauling and "piped" water from a County fire hydrant on Route 14 for the 12-month construction period:

- -- April through September: Majority of water to be piped from County fire hydrant.
- -- October through March: Majority of water to be trucked to the site. Deliveries to be limited to two water trucks per hour. Remaining water from County fire hydrant.

But no public notice and no formal amendment proposed to CUP application

Santa Fe County Ordinance No. 2018-4, Section 10.B

"10. WATER SERVICE RATE SCHEDULE – PRIVATE FIRE HYDRANT AND FIRE SERVICE LINE

• • •

B. In order to assure proper operation of fire hydrants, no water shall be drawn through any fire hydrant for any other purpose than fire protection, except as provided by a special permit issued by SFCU [Santa Fe County Utility]."

Glorieta Geoscience Recommends Permit Conditions Jan. 29, 2025 report

To satisfy SLDC Chapter 6.3, Glorieta Geoscience recommended permit conditions requiring the Applicants to file the following:

- -- Executed lease agreement with Univest-Rancho Viejo, LLC for the water rights.
- -- State Engineer permit approving the lease.
- -- County Utilities Department letter stating that the water system has the capacity and capability to provide 150 acre-ft of water.
- -- NMED Ground Water Discharge Permit if reclaimed water is piped directly to the project.

Staff's report to the Planning Commission Did Not Address AES Change or Glorieta Geoscience Recommendations January 29, 2025

"Santa Fe County Utility Water is not available as there is no nearby connection. No well use is being proposed as there is no existing onsite well.

- . . . Water will be delivered to the Project site by water trucks."*
- -- Staff does not inform Planning Commission of AES's proposed change
- -- Staff does not include permit conditions recommended by Glorieta Geoscience

^{*}January 29, 2025 Staff Report to Planning Commission, p. 3

Violations

- -- AES can't amend CUP application without public notice or filing. (SLDC Sections 4.6.10, 4.6.11.)
- -- CUP approved by Planning Commission does not allow use of County fire hydrant.
- -- Deferred approval of fire hydrant water supply will violate SLDC Section 6.3.10.2.
- -- Will the use of fire hydrant water continue into the project's operational phase without public notice or BCC approval?

All information (except Dec. 4 Glorieta report) obtained only by Inspection of Public Records Act requests.

3.c. The application is inconsistent with the Santa Fe County Sustainable Growth Management Plan

Santa Fe County Sustainable Growth Management Plan (SGMP)

Chapter 9 – Public Safety Element:

"The current emergency response system is not sufficient to service our population today. In the case of a large-scale emergency, where large numbers of County residents would have to be evacuated or hospitalized, the County and provider infrastructure and resources would be insufficient."*

^{*}Santa Fe County Sustainable Growth Management Plan (2020), Section 9.1.1.4 (p. 138); 2015 Santa Fe County Sustainable Growth Management Plan, Section 9.1.1.4 (p. 146).

Santa Fe County also lacks:

- -- All-Hazard Emergency Response Plan required by state law
- -- Hazardous Material response team

4. Violations of Permitting Requirements: SLDC, Ordinances and NFPA 855

Violation #1 No discussion of prior AES accidents in the application violates SLDC Section 6.3.1

-- SLDC Section 6.3.1: Requires Environmental Impact Reports (EIRs) to identify and discuss significant environmental impacts that may result from the project

-- AES's EIR omits <u>any discussion</u> of the fires, explosions and toxic gas releases that have occurred at BESS systems of AES and other BESS contractors and suppliers.

Violation #1 (cont.) No Staff analyses of AES accidents

 No analysis in Staff reports to Hearing Officer and Planning Commission

-- No analysis in County's third-party battery consultant (Atar Fire) report of October 11, 2024

Violation #2 AES violates Pre-Application Review requirement of SLDC Section 4.4.2

- -- SLDC Section 4.4.2: Requires pre-application review by County Technical Advisory Committee (TAC) for CUP applications.
- -- AES did not seek TAC review for August 2024 CUP application.
- -- AES relied on November 2021 TAC review for previous CUP application.
- -- County adopted updated permitting requirements in December 2023.
- -- AES's reliance on November 2021 TAC review avoided incorporation of updated permitting requirements, such as consideration of project- and site-specific issues.

Violation #3 2023 Edition of NFPA 855 (Ordinance 2023-09)

- -- 2023 edition addresses prevalence of BESS fires since 2020 edition
- -- Annex G: "Guide for Suppression and Safety of Lithium-Ion Battery (LIB) Energy Storage Systems (ESS)."
 - "G.1.2 Purpose.
 - G.1.2.1 The purpose of this annex is to help stakeholders, designers, and authorities having jurisdiction (AHJs) understand and <u>implement minimum</u> <u>safety requirements</u> through a permitting and inspection process to ensure efficiency, transparency, and safety in their local communities."

Violation #3 (cont.) AES's Hazard Mitigation Analysis does not address project- and site-specific issues (Annex G, Section 3.3.2)

- -- AES's Hazard Mitigation Analysis addresses only risks to facility workers and equipment
- -- No discussion of project- and site-specific impacts to adjacent residential lands:
 - -- AES history of accidents
 - -- Qualifications and limited presence of onsite personnel
 - -- Reliability of remote monitoring
 - -- Dry, windy weather conditions
 - -- Potential exposures to toxic gases
 - -- Potential groundwater contamination
 - -- Risks to natural gas transmission line on western edge of Eldorado
 - -- Capabilities and response times of emergency responders

Violation #4 Mitigation measures <u>after the CUP has been issued</u> (SLDC Section 6.3.10.2)

SLDC Section 6.3.10.2: . . . "Formulation of mitigation measures shall be identified at the first discretionary approval and <u>under no circumstances deferred until the ministerial development process</u>." (Emphasis added)

"A Preliminary Hazard Mitigation Analysis (HMA) has been prepared for the project (Appendix H). **A Final HMA will be performed as part of the detailed engineering process.** This HMA will include site and product specific fire risk assessment and a first responder plan (Appendix G)."*

AES EIR, at ES-5. p. 3-38 (emphasis added).

Violation #4 (cont.) Examples of Section 6.3.10.2 Violations

Mitigation measures to be addressed **after CUP issuance** and **not by BCC**:

- -- Final HMA to be completed and likely to be reviewed by <u>Fire Department</u> and <u>after</u> issuance of CUP.
- -- Smoke and Plume Model to be reviewed by Santa Fe County Fire Prevention after issuance of CUP.
- -- Water supply and truck traffic issues likely to be resolved <u>after</u> the issuance of the CUP <u>by County Water Utilities Division</u>.

Violation #5 AES's failure to address alternative battery types violates Section 6.3.11 of the SLDC

6.3.11.1 Alternatives to the Proposed Project.

"The EIR shall describe a range of reasonable alternatives to the project, . . . which . . . would avoid or substantially lessen the significant and adverse impacts or effects of the project, and evaluate the comparative merits of the alternatives . . ."

AES does not address **any** battery alternatives in the application.

Violation #5 (cont.) Battery alternatives: PNM's safer lithium iron phosphate batteries

"The chemistry that we're proposing is <u>lithium iron phosphate</u> that has less -- it's a more stable chemistry and less prone to fires."

- -- Jason Jones, PNM Director of Generation Engineering (emphasis added)*
- -- Two 6 MW batteries for distribution feeders, Bernalillo County, 2024 service
- -- 100 MW solar/100 MW Quail Ranch hybrid project, Bernalillo County, 2025 service (Purchased Power Agreement)
- -- 60 MW standalone Sandia battery project, Bernalillo County, 2026 service
- -- 100 MW solar / 30 MW battery Sunbelt hybrid project, San Juan County, 2027 service

*Testimony of Jason Jones, PNM Director of Generation Engineering, Case No. 23-00162-UT, October 12, 2023

Violation #5 (cont.) Aypa Power Battery Storage to Power Ontario's Future

"Aypa uses lithium iron phosphate (LiFePO4 or LFP) batteries in its BESS designs. This type of battery chemistry utilizes iron phosphate as the cathode material and has several advantages over other lithium-ion chemistries, including high thermal stability, current handling capability, and long cycle life. LFP batteries are known for their low cost and improved safety compared to other lithium-ion chemistries and are environmentally friendly as they do not contain toxic materials like cobalt and can be recycled upon reaching the system's end of life."

https://elora.aypa.com/#faq

Violation #5 (cont.) "Calm, Cool Aunt Mabel" vs. "Wild Uncle Frank"

MR. LABERGE*: "For the Commissioner, lithium-ion battery chemistry have a family of six chemistry types. Lithium-iron-phosphate is one of the six of the family. It is similar in many respects [inaudible] it's the calm, cool, Aunt Mabel who never gets excited.

Other battery types are the wild Uncle Frank who is always excited. So there's a range of potential to go into thermal runaway and the effects thereof, depending on which type of battery chemistry is in use."

*County's third-party battery consultant, Planning Commission Hearing, Tr. 14 (2/3/2025)

Violation #5 (cont.) Moss Landing Lawsuit

"The Moss Landing BESS used lithium nickel manganese cobalt oxide ("NMC") batteries that are more prone to thermal instability than newer alternatives like lithium-ion phosphate ("LFP") batteries. **Because they are safer, most energy storage projects around the world have been transitioning to LFP batteries**."

(Emphasis added).

First Amended Complaint for Damages, Mary-Eliza Schmidt, et al v. Moss Landing Power Company, LLC, et al, Case No. 4:25-cv-102475-YGR, U.S. District Court, Northern District of California, April 9, 2025:

Violation #5 (cont.) AES subsidiary, Fluence Energy, manufactures lithium-iron phosphate batteries at its plant in Tennessee

Fluence Energy (Nov. 4, 2024):

"In the near term, we anticipate that lithium-iron phosphate (LFP) batteries will continue to dominate the energy storage landscape. Key advancements are emerging in cell and enclosure density, life cycle, and overall performance, . . . enhancing the robustness and efficiency of LFP."

Driving Innovation: How Fluence Prioritizes and Brings New Battery Technologies to Market, November 4, 2024, https://blog.fluenceenergy.com/driving-innovation-fluence-battery-technologies

Violation #5 (cont.) Why did AES choose Lithium Nickel Cobalt Aluminum (NCA) vs. Lithium Iron Phosphate (LFP)?

Feb. 4, 2025 Planning Commission Hearing

Commissioner Pava asked why AES chose its proposed battery chemistry while PNM has recently chosen LFP chemistry.

AES Michael Simpson:

"So we look at total cost build up, all of the capital costs, all of the operating costs, amortized over those 25 years and then we make that comparison and this is the one that we found most cost-effective for New Mexico."

Planning Commission Hearing, Tr. 12-13 (2/4/2025).

5. Due Process Violations

- a. County Staff cannot be an advocate and a decision-maker in the same case. The commingling of those functions in Staff's public and private roles violated parties' due process rights.
 - -- Kerr McGee Nuclear Corp. v. New Mexico Environmental Improvement Board, 1981-NMCA-044, 97 N.M. 88, 637 P.2d 38
 - -- Similar court decisions in California, Iowa, Nebraska and Pennsylvania
- b. County's restrictions on discovery and cross-examination prevented opposing parties from obtaining relevant evidence.

6. Project Not Needed to Transition New Mexico to Carbon-Free Generation Resources

PNM is ahead of the required pace to meet New Mexico's Renewable Energy Requirements¹

- -- 20% of retail sales by 2020
- -- 40% by 2025 (PRC estimate: 73.3% in 2025)²
- -- 50% by 2030 (already satisfied)
- -- 80% by 2040
- -- 100% zero-carbon resources by 2045

¹NMSA 1978, Section 62-16-4

²2024 PRC Report to the Legislature on the Renewable Portfolio Standard (July 1, 2024), Appendix A, Table 1.

Rancho Viejo Solar Project is not needed to eliminate PNM's carbon emissions

-- Decarbonization is accomplished with PNM's plan to retire fossil fuel plants

-- Retirements are replaced with renewable resources

PNM's Siting Considerations

- -- Energy Transition Act preference for resources sited where coal plants are retired
 - -- San Juan County
- -- Siting where fossil fuel retirements free up capacity of existing transmission lines*
 - -- Retirement of San Juan Generating Station freed up capacity in transmission lines from San Juan County into Albuquerque area
 - -- Near-term retirements (2030-2031) scheduled in Bernalillo and San Juan counties
- -- Siting close to increasing customer demand
 - -- 775 MW added for Facebook data center in Los Lunas since 2018

^{*2023} Integrated Resource Plan, Supplemental Analysis, PNM, October 10, 2024; 20-Year Transmission Planning Study, PNM, April 24, 2024.

PNM Fossil-Fuel Resources Northern and Central New Mexico

Fossil Fuel Generation	MW	Location	Scheduled Closing	Other Options
Reeves Natural Gas	146	Albuquerque	2030	
Four Corners Coal	200	San Juan County	2031	
Rio Bravo Natural Gas	149	Albuquerque	2039	
La Luz Natural Gas	41	Valencia County	2039	Hydrogen
Valencia Natural Gas (Purchased Power Agreement)	155	Valencia County	2039	

Result

PNM has rejected Rancho Viejo Solar Project at least three times

PRC proceedings:

21-00083-UT (filed Apr. 2, 2021)

23-00353-UT (filed Oct. 25, 2023)

24-00271-UT (filed Nov. 22, 2024)

Key Hearing Officer Findings (Dec. 23, 2024)

-- The consequences of a fire from the Project could be catastrophic because of its proximity to the surrounding communities of Eldorado, Rancho San Marcos, and Rancho Viejo.

Finding No. 45.

-- The most hazardous commercial or industrial facility in Santa Fe County.

Finding No. 48.