HEARING OFFICER MEETING
DECEMBER 4, 2024
CASE NO. 24-5200
RANCHO VIEJO LIMITED PARTNERSHIP
RANCHO VIEJO SOLAR, LLC
AES CLEAN ENERGY DEVELOPMENT, LLC
Jointly the APPLICANT
CONDITIONAL USE PERMIT

RECOMMENDED ORDER

THIS MATTER came before the Sustainable Land Development Code ("SLDC") Hearing Officer for hearing on December 4, 2024, on the request of the above-referenced Applicant for a conditional use permit ("CUP") to allow a 96-megawatt solar facility ("Project") on approximately 684 acres ("Site") in Sections 2-9, Township 15 North, Range 9 East that is zoned Rural Fringe (RUR-F) and is accessed from NM State Highway 14 in Commission District 5.

The requirements of the SLDC used to process the Application:

- Chapter 4.9.6 Conditional Use Permits
- Appendix B – Use Matrix

Two organizations that registered pursuant to Chapter 2.2.3 of the SLDC intervened this case: Clean Energy Coalition for Santa Fe County and the San Marcos Association.

The Hearing Officer, having reviewed the Application, the testimony and exhibits from the hearing including the County's Staff report, as defined below, recommends the Application be denied and makes the following Findings of Fact and Conclusions of Law.

I. THE APPLICATION

1. The Applicant states that it seeks a CUP to build and operate the Project, which would be located on privately-owned property approximately three miles south of Santa Fe city limits, to include the following: a 680-acre solar facility; a one-acre collector substation; a three-acre battery energy storage system ("BESS"); a 2.3 mile tie-in line; a 2.1-mile access road; a 26.3-foot diameter

by 7.2-foot above ground water storage tank; and a 1,400 square foot operations building . (Ex. B 1-1)

2. The Applicant states the Project would generate 96 megawatts (MW) and would include 48 MW of four-hour duration BESS for storage and delivery of solar energy intended to replace part of the fossil fuel portfolio of the Public Service Company of New Mexico ("PNM"). (*id.*)

3. The Applicant submitted studies, reports, and assessments as specified in the Technical Advisory Committee ("TAC") letter dated March 23, 2022, and the Applicant lists these in the CUP application. (Ex. B 2-5; Ex. E)

4. The Applicant addresses the specific criteria of Chapter 4.9.6.5 of the SLDC for a CUP as follows:

i. *will not be detrimental to the health, safety and general welfare of the area*

The Applicant states that the Project is a static, non-obtrusive land use that will be compatible with surrounding land uses, because solar projects do not create significant noise, light, traffic, or other operational impacts. (Ex. B 2-6)

ii. *tend to create congestion in roads*

The Applicant states that the Project will have higher traffic volume during the 12-month construction period but will have very low traffic once it is operational. The Applicant explains that access to the Site is from an existing gated access point on NM 14. (*id.*)

iii. *will not create a potential hazard for fire, panic, or other danger*

The Applicant states that it will comply with the most current applicable codes of the state, county and other entities and lists the rules and ordinances. *See* Ex. B 2-7 The Applicant states that is has been working with Santa Fe County Fire Department to " … design and construct the [P]roject's access, circulation and emergency measures." (Ex. B 2-7)

iv. *tend to overcrowd land and cause undue concentration of population*

The Applicant states that the Project will not be detrimental to the use or development of adjacent land, because the Project is static, non-obtrusive, and will not overcrowd the land or cause undue concentration of population, nor will it change any existing population patterns. (*id.*)

v. *interfere with adequate provisions for schools, parks, water, sewerage, transportation or other public requirements, conveniences or improvements*

The Applicant states that compared to permitted uses in the RUR-F zoning district, the Project will provide a net positive impact to the County's services. The Applicant maintains that the Project will not require a significant long-term water supply although during the construction period, approximately 100 to 150 acre-feet will be delivered to the Site by water trucks from the County's bulk water station commercial pipe water, Ranchland Utility Company Class A reclaimed water, County reclaimed water, or any other legally permitted commercial water sources. The Applicant estimates the Project's long-term water use will be two to three acre-feet per year for solar panel washing and potable water for the operations building. The Applicant states that portable toilets will be used during construction, and a septic tank will be constructed for the operations building. (Ex. B 2-7, 2-8)

vi. *interfere with adequate light and air*

The Applicant states that any required lighting will comply with the SLDC and the County's night sky ordinance. The Applicant anticipates that the only air impact would be short-term emissions from equipment use and the dust from road travel during the construction period and maintenance phase. (Ex. B 2-8)

vii. *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* [Sustainable Growth Management Plan]

The Applicant responds by quoting the SLDC's definition for the RUR-F and stating that " … commercial solar energy production facilities are permitted within the RUR-F zoning district only after review and approval of a Conditional Use Permit." (*id.*)

5. The Applicant addresses the relevant Sustainable Design Standards set forth in Chapter 7 of the SLDC that are applicable to all development. (Ex. B 3-1 through 3-7)

Sections 7.2 and 7.5 - The Applicant states that the Project will have higher traffic volume during the construction period but will have very low traffic once it is operational. (Ex. B 2-6) The Applicant states that the Project has been designed to comply and conform with state and county fire codes. The Applicant states that it is working with third parties to provide safety and fire management training for fire departments located within the vicinity of the Project, and that this training will occur prior to the completion and energization of the Project. The Applicant states that Hazard Mitigation Analysis ("HMA") has been prepared to include site and product

specific fire risk assessment and a first responder plan and that local responders will have access to these reports. The Applicant maintains that no special materials are required to respond to a fire event for the containerized BESS units as only standard water application to the adjacent BESS containers is required, and this is necessary only in the case where all internal fire suppression systems have failed. The Applicant continues to explain that if a battery fire occurs, the enclosures would release fire suppressant in large concentration directly into the cell which would remove heat and prevent thermal runaway throughout the enclosure. The Applicant claims that the UL 9540a tests of this system indicate adequate prevention of thermal runaway, and the AES Energy Storage solution will achieve UL 9540 certification prior to the Project's commercial operation. (Ex.B 3-2)

Sections 7.6; 7.7; 7.8; 7.9; 7.10 – The Site will have a minimum 1,000-foot setback from any adjacent property line. The solar project perimeter will be enclosed by an 'agricultural style' fence with posts between 8 and 12 feet tall. The collector substation and BESS may be enclosed by a chain-link fence. The Applicant anticipates a motion sensor and downcast shaded security lighting at the access gate, battery storage and substation location operations building, and solar pads – all of which will comply with county lighting ordinances. A small identification sign may be posted at the entry gate to the Project. The Applicant describes the parking at the Site and explains that work on the 2.3 mile generation tie-in line ("gen-tie") may occur at night to minimize outages. (*id.*)

Sections 7.11; 7.12; 7.13; 7.14; 7.15 - The Applicant describes the internal roads at the Site and states that the operational electrical needs will be provided from the Project substation. The Applicant states that the long term water use following construction will be two to three acre-feet a year of water stored in the 5,000-gallon potable water tank; portable toilets will be used during construction, and a septic tank will be constructed for the operations building. The Applicant states that once the Project is operational, it will produce energy seven days a week. As the Project is to be located on property that is zoned RUR-F, it is outside the designated open space areas. (Ex. B 3-3)

Section 7.16 - The Applicant reviewed the steps it has taken to comply with the Historic Preservation Division of the Department of Cultural Affairs Department's regulations. (Ex. B 3-4; Ex P)

Sections 7.17; 7.18; 7.20 - The Applicant describes the measures it proposes to control runoff and reduce erosion at the Site. The Applicant references the Hydrologic and Hydraulic Study it had performed for the Project and notes that other than 0.5 acre of the proposed gen-tie corridor, the Project avoids the Zone A floodplain. The Applicant states that the solid waste generated during construction will be hauled away by a private contractor to a licensed waste management facility. (Ex. B 3-4, 3-5)

Section 7.21 - The Applicant describes the efforts it will make to suppress emission and air pollutants during construction and notes that an air quality permit is not required. The Applicant notes that similar emissions would occur during the decommissioning of the Project. The Applicant acknowledges that there will be a temporary increase in ambient noise levels during construction, but this increase will dissipate within approximately 0.15 to 1.2 miles of the Project area. The Applicant maintains that once the Project is operational, it will have a negligible effect on ambient noise levels beyond the immediate vicinity and refers to the Noise Technical Report

for a detailed analysis prepared by SWCA Environmental Consultants ("SWCA") submitted with the CUP. (Ex. B 3-5, 3-6)

Section - 7.22 The Applicant submitted the Rancho Viejo Solar Project Decommissioning Plan prepared by SWCA that indicates a lifespan of the Project of 25 to 35 years if properly maintained. This Plan estimates approximately $8.9 million in decommissioning expenses, and Applicant will provide such a commitment prior to final plat recording and permit approval and issuance. (Ex. B 3-6)

Section 7.26 - The Applicant explains that any easements required will be surveyed, executed, and recorded by separate instrument. (*id.*)

II. THE STAFF REPORT

6. At the hearing, Staff summarized the Staff report, which was submitted as part of the record. The written Staff report, including exhibits, attachments, and the oral summary is collectively referred to as the Staff Report ("SR").

7. Staff explain that the Applicant's request for a CUP is necessary pursuant to Chapter 4.9.6.1 and the Use Matrix of the SLDC as certain land uses are not permitted in zoning districts as a matter of right, but with appropriate standards and factors, may be permitted by the issuance of a CUP. Staff confirms that the Site is zoned RUR-F in which a commercial solar energy production facility is a conditional use. (SR 2)

8. Staff explain that any development must also comply with the following: the submittal of the required studies, reports and assessments of Table 6-1 of Chapter 6 of the SLDC, and the applicable design standards of Chapter 7. Staff comment as follows on the Application:

Section 6.6 (Traffic Impact); Sections 7.4 and 7.11 (Access and Road Design)

Staff state that the existing access point for the Project off of Highway 14, approximately 350 feet north of the Turquoise Trail Charter School, does not require additional public road construction, but the Applicant must comply with the specific requirements of the New Mexico Department of Transportation's access permit issued on May 31, 2023. (SR 2-3)

Sections 6.5 and 7.13 (Water Supply and Water Conservation

Staff restate the Applicant's projected water use and water sources and notes that the Application does not address a passive water harvesting system, which is required by Section 7.13.11.7.3.b.iv and will be required of the Applicant. (SR 3-4)

Sections 6.3 (EIR); 6.4 (APFA); and 6.7 FIA

Staff state that the Environmental Impact Report was submitted and reviewed by Glorieta Geoscience, Inc. (Ex. J). The Applicant submitted the Adequate Pubic Facilities and Services Assessment, but a Fiscal Impact Assessment was not required. (SR 5)

Section 7.5 (Fire Protection)

Staff state that the Site will include 20-foot-wide internal roads with fire lanes, minimum inside turning radii of 28-feet, gates equipped with emergency opening systems, and a 30,000 gallon above ground water storage tank for fire protection. Staff state that a Preliminary Hazard Mitigation Analysis has been prepared for the Project, and a final analysis will be done as part of he detailed engineering process, which will include site and product specific fire risk assessment and first responder plan. Local first responders will have access to these reports, and the Applicant will provide on-site, in-person training to local responders prior to commercial operation of the Project. Staff state that no special materials are required to respond to a fire event for the containerized BESS units, and only standard water application to the adjacent BESS containers is required and only after internal fire suppression systems fail. Staff repeat the Applicant's assertion that in the event of a battery fire, the enclosures would release fire suppressant in large concentrations directly into the initiating cell thereby removing heat and preventing thermal runaway throughout the enclosure. Staff state that the Applicant will provide UL 9540 certification for this specific system indicating adequate prevention of thermal runaway prior to the Project's commercial operation. Staff state that the Application was sent to the Santa Fe County Fire Department in addition to third party reviewer Atar Fire, and both entities have concluded that a sufficient level of information has been provided to validate the issuance of a CUP. (SR 5-6)

Section 7.6 (Landscaping)

Staff state that no new landscaping is proposed for the Project. (SR 6)

Section 7.7 (Fences)

Staff state the Applicant proposes to enclose the perimeter of the solar project with a maximum 8-foot-tall fence, and the on-site collector substation and BESS will 'more likely be' enclosed by a maximum 8-foot-tall chain-link fence. (*id.*)

Section 7.8 (Lighting); Section 7.9 (Signs)

Staff state that there will be motion sensor, downcast shaded security lighting at the access gate, battery storage and substation location, operations building, and solar pads.

Staff state that the Applicant proposes a small facility identification sign to be posted at the Project entry gate. (SR 7-10)

Section 7.10 (Parking and Loading)

Staff state that during operations, employee and visitor parking will be at the operations building and any loading activities would generally occur between 7:00 a.m. and 7:00 p.m. (SR 10-12)

Section 7.15 (Open Space)

Staff explain that as the project is located on property that is zoned RUR-F, it is outside the designated open space areas; but of the 828-tract, approximately 340 acres will remain as natural open space although some of that acreage will be within the 680-acre solar facility. (SR 12)

Section 7.16 (Protection of Historic Resources)

Staff state that with the avoidance of two undetermined resources, there will be no effect to any historic resources, *see* Exhibit P. (SR 12-13)

Section 7.17 (Terrain Management); Section 7.18 (Flood Control)

Staff state that during construction a Storm Water Pollution Prevention (SWPPP) will be developed and implemented to meet NMED's discharge permit requirements. Staff explain that a Hydrologic and Hydraulic Study indicates three arroyos flow from east to west through the Site, and the Project design has been refined to avoid placement of solar arrays within the arroyos. (SR 13)

Section 7.20 (Solid Waste)

Staff state that the Applicant will have solid waste generated during construction removed by a private contractor and transported to a licensed waste management facility; solid waste generated during the Project operation, projected to be minimal, will be disposed of at a licensed waste management facility. Staff state that the Applicant estimates a 30-year life for the Project at which time the Project will be decommissioned and the materials removed. (*id.*)

Section 7.21 (Air Quality and Noise)

Staff describe the actions the Applicant proposes to take during the 12-month construction period to reduce dust emissions. Staff state the Applicant anticipates only minimal, short-term emissions during the operations and maintenance phase, and decommissioning emission are expected to be similar to those emitted during construction.

As to noise, Staff explain that the Project is in a semi-rural area with low existing noise levels. Staff state that there will be a temporary increase in ambient noise levels during the construction period, which level will dissipate within 0.15 to 1.2 miles of the Project area. Staff state that during the operational years, the Project will have a negligible effect on the ambient noise levels beyond the immediate vicinity of the Project. (SR 14-15)

9. Staff set forth the seven CUP approval criteria and conclude that the Applicant has satisfied the criteria.

i. *will not be detrimental to the health, safety and general welfare of the area*

Staff respond to the Applicant's statements regarding this criterion by stating that the Applicant will be required to comply with all applicable SLDC requirements as well as state and federal laws and all codes and standards as adopted in Santa Fe County. (SR 17)

ii. *tend to create congestion in roads*

Staff state that the Highway 14 gated access will be improved, and the site threshold analysis indicates additional traffic impact studies are not warranted either for the construction or operation period. (*id.*)

iii. *will not create a potential hazard for fire, panic, or other danger*

In response to this criterion, Staff recite the applicable codes relevant to this Project. *see* SR 18. Additionally, Staff refer to the 30,000-gallon on-site water tank, and explain that as the BESS containers will be equipped with internal fire suppression systems, only standard water application to adjacent BESS containers is required, and this would only be in the event that all internal fire suppression systems fail. Staff explain that all information required by first responders will be included in the first responder plan part of the final approved Hazard Mitigation Analysis, and the Applicant will provide one-site and in-person training to the local responders prior to commercial operation of the system. (SR 18-19)

iv. *tend to overcrowd land and cause undue concentration of population*

Staff note that the Site will have acres of natural open space. (SR 19)

v. *interfere with adequate provisions for schools, parks, water, sewerage, transportation or other public requirements, conveniences or improvements*

Staff state: "The proposed solar facility is in a remote area of Santa Fe County and will not interfere with adequate provisions for school, parks, water, sewerage, transportation or other public requirements." (SR 19)

vi. *interfere with adequate light and air*

Staff state that the Project includes minimal lighting mainly for security, battery storage and substation location, the operations building and solar pads; all lighting will be required to comply with the SLDC. The monopoles, which Staff recommend for their minimal visual impact, for the gen-tie line will be required to blend into the natural landscape and be non-reflective. (SR 20)

vii. *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*

Staff explain that a commercial solar energy production facility is allowed in the RUR-F zone with the approval of a CUP, and the SGMP explicitly supports the development and distribution of renewable energies at a regional scale. (SR 20)

10. Staff state that the Applicant made the required notice by publication, mailing, and posting. (SR 15; Ex R)

11. Staff recommend approval of the CUP based on the Application, subject to the following conditions:

i. Compliance with all Reviewing Agencies' comments.

ii. The drilling or use of individual and/or shared wells for this use on this property is prohibited.

iii. The Applicant shall provide proper buffering and screening by installing a paneled fence to a portion of the proposed 8' tall fence that will be located on the southwest portion of the property.

iv. Construction fencing will be required around all designated archeological sites to preserve the integrity of these areas.

v. Prior to the recordation of the CUP site development plan, the access road and internal roads shall be permitted through Santa Fe County, built out and inspected, or bonded for 125% of the construction cost.

vi. The CUP site development plan showing the site layout and any other conditions that may be imposed through the approval process shall be recorded at the expense of the Applicant in the office of the County Clerk in accordance with Chapter 4, Section 4.9.6.8.

vii. Utilization of the 70-foot-tall steel monopoles will be required, as they have less of a visual impact. The poles will be required to blend into the natural landscape and shall be non-reflective.

viii. A decommissioning bond (may contain salvage value) will be required prior to recordation of the CUP site development plan, and must be in place for the life of the project.

ix. Applicant will be required to apply for all applicable Development Permits after the CUP recordation.

x. Prior to the submittal of any applicable Development Permit the Applicant will be required to renew its access permit from NMDOT.

xi. Applicant shall obtain an approved liquid waste permit from NMED prior to the submittal for a Development Permit.

xii. The Applicant is required to work in consultation with the appropriate flood zone authorities to address the requirements specified in Chapter 7, Section 7.18.9.1 of the SLDC for any steel monopole located within a Zone A flood hazard area and submit the findings to staff for the record.

xiii. Construction activity to be limited to a Monday through Friday, 7 am to 7 pm work schedule. Any deviation from these construction hours will require 48 hours' notice to Santa Fe County and neighboring property owners.

xiv. Prior to operating the Applicant shall obtain a Santa Fe County Business License.

xv. The Applicant shall provide a detailed and accurate water budget for construction, operation and maintenance, and decommissioning. The water budget shall include water source and water trucking, and the water budget shall be reviewed by Glorieta Geoscience and approved by Santa Fe County Utilities.

(SR 21-22; Tr 27-28)

III. INTERVENORS

Clean Energy Coalition ("CEC")

12. CEC stated that it is an organization of 1,300 members, and it opposes the Application to site the Project amid three residential communities with approximately 10,000 homes, 25,000 residents, the Turquoise Trail Charter School and the state prison with 790 inmates. CEC presented three witnesses. (Tr 39-51)

13. CEC stated that the County does not have specific standards regulating utility-scale solar facilities that contain battery storage, and noted that about 300 counties across the country have enacted moratoriums on such facilities. (Tr 39)

14. CEC questioned Staff regarding air quality tests of emissions during operation of lithium battery facilities during operation, explosions and fire, and Staff responded that such air quality tests are not required for the CUP and are not addressed in the EIR. Atar Fire, the County's third-party fire expert, responded that lithium batteries do not give off emissions during normal operations and stated that tests following the fire at the Escondido, California facility developed by the Applicant indicated no detectable toxic gases outside the property line; the Otay Mesa fire, also in California but not at a facility designed or operated by the Applicant, which burned for eleven days, also reported no detectable amount of toxic gas emissions. (Tr. 31-32)

15. CEC questioned Staff on three fires at AES facilities: Surprise Arizona; Chandler, Arizona; and Escondido, California. Staff responded that it was aware of the fires, Atar Fire reviewed them as well, and determined that the battery systems used at those facilities represented an older design of such systems and were not the newer generation that is proposed for the Project. (Tr 36)

16. CEC's witness Kaye Cooper-Mead, an Eldorado resident, addressed the Project *vis a vis* the surrounding area and points out that there are residences as close at 500 feet from the

Project's boundaries, and the area is drought-prone with high winds predominantly blowing from west to east toward Eldorado with some homes reliant solely on well water from a shallow aquifer. (Tr 40)

17. Cooper-Mead stated that there have been three fires from battery energy storage systems in the last five years at the Applicant's facilities, and she believes there is potential for groundwater contamination at the proposed Site from the PFAS-laden fire suppressant. The Applicant responded that the PFAs for the cells proposed for this Project are not liquid, do not dissolve in water, and would not penetrate to groundwater. (Tr 41; 47)

18. Cooper-Mead questioned the effect the Project's proximity to the community on homeowner's insurance and whether such insurance would become unavailable. (*id.*)

19. Cooper-Mead pointed to the limited economic benefit, after the initial construction, to the County of only four to five jobs for the remainder of the facility's life of 35 years. (*id.*)

20. Cooper-Mead cited to Chapter 7 of the SGMP defines "utility-scale" as 300 kilowatts, or about one-third of a megawatt and that utility-scale generation facilities such as this Project with 570,000 lithium-ion battery cells are not allowed in the RUR-F zone in compliance with the goals of the SGMP. (Tr 42-43)

21. Randy Coleman, vice-president of CEC and resident of Eldorado testified that the proposed utility-scale solar and battery Project would be detrimental to the health, safety, and general welfare of the area and described the three fires in the Applicant's battery storage facilities since 2019, He testified that the fire at a facility in Surprise, Arizona is considered the most dangerous fire in the history of battery energy storage systems and resulted in the most serious injuries to first-responders. He stated that this facility had only 10,584 battery cells in one walk-in container as opposed to the 570,000 cells in 38 containers proposed for this Project. He described the 2022 fire in Chandler, Arizona at a 10 MW-facility with 3,200 lithium-ion batteries that created a hazmat situation forcing a quarter-mile evacuation and shelter in place order; reports stated this fire burned for two weeks, and the Applicant has still not released information to the public about the fire and its causes. He stated that the Escondido fire in a facility using BESS designed by the Applicant in September of 2024, forced evacuations in the area. (Tr 44)

22. Coleman stated that the Applicant has selected the least safe of six types of lithium-ion batteries and the ones most likely to result in thermal runaway fire burning the hottest and fastest. (*id.*)

23. Coleman testified that according to wildfirerisk.org, the Eldorado area has a high risk of wildfire, higher than 80 percent of the United States, and he provides the speed at which a wildfire could travel in winds of eight miles per hour as one mile in 26 minutes; if the wind speed were 16 miles an hour, it would cover a mile in 13 minutes. He describes a possible fire as affecting Rancho Viejo, San Marcos, Eldorado and perhaps even into the City of Santa Fe together with the toxic emissions and damage of PFAS groundwater contamination by efforts to suppress the fire. (Tr 45)

24. Lee Zlotoff, president of CEC and a resident of Eldorado, testified that he informed the County of a major natural gas pipeline that runs along the western border of Eldorado as the line emerges from the ground immediately adjacent to his property at a regulator station; he estimated the gas line is a mile from the proposed battery facility. He noted that the line does not appear in the Application. He testified that over 2,000-area homes are connected to that gas line, and in the event of the line rupturing or exploding, these homes could also be subject to explosion and fire. (Tr 48)

25. Zlotoff states that with over 500,000 lithium-ion batteries proposed for the Project there would be at least one if not multiple BESS fires over the course of the Project's 30-year life. (Tr 49)

San Marco Association ("SMA")

26. Dennis Kurtz, president of SMA, described the SMA as a registered organization that advocates for a large area from the Colibri Subdivision on the north to far below Madrid; from I-25 on the west to the borders of, but not including Eldorado or Galisteo, but including Cerrillos, Cerrillos Hills, and the western Galisteo Basin including Madrid. The SMA asks that the Application be denied. (Tr 51, 55)

27. Kurtz testified that the SLDC's CUP process does not apply to the Project as the Project is a huge electric power generating facility, *i.e.* a power plant, and is prohibited in the RUR-F zone. He points out that pursuant to the SGMP, any electric power generating facility greater

than 300,000 watts is considered utility scale, and this Project is 96 million watts. Kurtz continues by distinguishing between 'residential' and 'commercial' solar installation with the latter being something like an installation on a big box store. (Tr 52-54)

IV. PUBLIC COMMENT

28. At the December 4, 2024 hearing 35 attendees testified; six spoke in favor of the Application, and the 27 attendees stated their strong opposition to the Application. The pro-Application comments generally supported the development of more renewable energy generation and the increasing safety of solar production facilities. The comments from those opposed to the Application included the following: the size of the Project in an area surround by residential development, especially with the potential for fire, explosion, thermal runaway resulting in not just fire but wildfire; the increase of noise from such a large installation; the possible toxic gas emissions; the pollution of the shallow aquifer by fire suppressants needed in enormous quantities; the Applicant's history of fires and safety violations at its facilities across the country; the Applicant's choice of the older technology of lithium-ion battery storage rather than newer, safer technology such as iron air or flow batteries; and the possible negative effect on home values and difficulty, if not impossibility, of obtaining home insurance because of the proximity to a utility-scale solar generation and storage facility. (Tr 56-84)

29. Ashley Schannuaer, who resides one mile west from the Site in Eldorado, testified in opposition to the Application, and requested that his written testimony be admitted as an exhibit; there was no objection to its admission, and it is designated Hearing Exhibit AA. (Tr 66-67)

30. Schannuaer asserts his three primary points in opposition: i) the Project poses an unacceptable risk of fire, explosion, and toxic gases adjacent to residential land uses; ii) the Application is inconsistent with the spirit and intent of the SGMP; and iii) the Application violates Santa Fe County Ordinance 2023-09. (Ex. AA 3)

31. Schannuaer details the three fires (Surprise, Chandler, and Escondido) at facilities operated or designed by the Applicant, and notes that the Applicant's initial 2023 application to the County contained a Fire Risk Assessment that describes the physical reactions that may occur during a thermal runaway. (*id.* 6-11) Schannuaer continues by providing details of the 2021 Electric Power Research Institute's report on lithium-ion battery storage, which found that in a

four-year period, lithium-ion battery storage systems were the subject of at least 30 failures and destructive fires. (*id.* at 16)

32. Schannuaer states that the Applicant (AES Corporation) in its 2022 and 2023 Annual Reports filed with the U.S. Securities and Exchange Commission warned its investors of the inherent risks of its battery storage operations. (*id.* at 14)

33. Schannuaer's testimony provides extensive detail of the National Fire Protection Association's NFPA 855 Standard for the Installation of Stationary Energy Storage Systems and its 2022 Annex update titled "Guide for Suppression and Safety of Lithium-Ion Battery Energy Storage Systems." (*id.* 17-21)

34. Schannauer states that the County Commission updated its Fire Code by adopting Ordinance 2023-09 adopting the NFPA 855 including Annex G, but the County has not required the Applicant to comply with Ordinance No. 2023-09 even though another BESS project currently under review by the County, Linea Energy, is being required to do so. (*id.* 29-32)

35. Schannauer cites to Chapter 9 of the SGMP and quotes that "[t]he current emergency response system is not sufficient to service our population today." He also notes that the County has lacked an up-to-date emergency operations plan since 2008, and that an Emergency Management Task Force's 2023 report recommended development of an emergency operation plan for immediate attention. (*id.* 22-26)

36. Schannauer questions the viability of the Applicant's stated goal to sell the Project's output to the PNM, and explains that the Project does " ... not appear to align with PNM's existing physical network and its resource and transmission plans." He states that the Project has been rejected at least twice from selection as part of the PNM power portfolio as its PNM's industrial load growth is occurring near Albuquerque, not Santa Fe. The Applicant responded that PNM's prior selection process is irrelevant to its future procurement. The Applicant stated this Project may or may not be selected by PNM, but the Applicant needs a commercial power purchase contract to finance and build the Project. (Ex. AA 53-55; Tr 66)

WRITTEN COMMENT

37. Prior to the submittal of the initial application in January 2023, and continuing with the subsequent Application, the County has received written comments regarding the Project, both in support and in opposition. These comments are available on the County website.

V. ANALYSIS

38. As several witnesses noted, the SLDC is intended to be consistent with the SGMP. *See* SLDC Chapter 1.4.1 Section 7.2.3.2 of the SGMP defines "utility scale" renewable energy generating facility as a facility generating more than 300 kW of electricity. Matrix B - Use Table of the SLDC lists under the "Utility" category of Uses "Gas or Electric Power Generation Facility" as a prohibited use in the RUR-F zone. The proposed Project is designed to generate 96 megawatts. The Applicant states that the Project could power the City of Santa Fe, which suggests that it would be classified as a utility-scale facility. However, the Application has been processed as a "commercial solar energy production facility," also listed under the "Utility" category but not including any size restriction on the generating capacity. The "commercial solar energy production facility" is a category that is allowed in the RUR-F zone as a conditional use and is an apparent carve out of the prohibition of electric power generating facilities in certain zones.

39. Chapter 4.9.6.1 of the SLDC provides that a CUP may be granted if the applicant satisfies each of the criterion set forth in that section. The County's grant of a CUP is discretionary, not mandatory, even though the criteria is met.

40. The Applicant, in this case, fails to satisfy the following criteria to be granted the requested CUP: *i) will not be detrimental to the health, safety and general welfare of the area; iii) will not create a potential hazard for fire, panic, or other danger; and vii) will not 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.*

41. The Applicant's proposed Project contains a 3-acre BESS consisting of 570,000 lithium-ion batteries that as the Applicant itself stated " … the componentry in that system has not been deployed … [although] every component within that exact system has been deployed." Unrebutted testimony was presented that solar battery storage systems are evolving to ever safer forms, but the system proposed for this Project are of an older less safe type. (Tr 21, 23-24, 44)

42. Since 2019, there have been three large fires caused by lithium-ion batteries, some with injuries and involving evacuations, at solar facilities operated or designed by the Applicant; two of these fires occurred at facilities with significantly fewer battery cells, one with 3,200 cells and one with approximately 10,000 cells. The remote monitoring for this Project, which would be the only monitoring outside of the normal work week of onsite personnel, is located in Salt Lake City, Utah and is dependent on telecommunications capabilities. The potential for a catastrophic fire from failure of individual cells is vastly increased at a facility with over one-half million battery cells. (Tr 44)

43. The AES First Responder Mitigation Guidelines report, August 2024, states:

> The fire suppression system(s) at the BESS containers are designed to suppress small fires within the ancillary equipment and there is no expectation that a thermal runaway type fire within the battery banks will be suppressed. Thermal runaway produces explosive gases prior to ignition, and it is anticipated that early warning will be provided by the gas detection system within each container.
>
> Thermal runaway is one of the primary risks related to lithium-ion batteries. It 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.

(Guidelines 9-10)

44. The County does not have a hazardous material team/unit and utilizes the unit of the City of Santa Fe which is approximately 16 miles away from the Site. The closest County fire team is located off Hwy 14. Testimony about wildfire was provided using data from the National Wildfire Coordinating Group for grassy, juniper environment such as around the Project as follows: at a wind speed of eight miles an hour and low moisture conditions, a wildfire could be expected to cover one mile in 26 minutes; under the same conditions with a wind speed of 16 miles an hour, the fire would travel that mile in 13 minutes. (Tr 45)

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. Staff stated that the Site is approximately 550 feet from the Rancho San Marcos subdivision and 4,000 feet from Eldorado. (SR 2)

46. Among other concerns expressed regarding the Project were fears of groundwater contamination from the fire suppressants. In the event of a fire escaping from enclosed cells, there would be potential for PFAS-laden fire suppressant together with massive amounts of water used to extinguish the fire could contaminate the groundwater in areas with a shallow aquifer and residents reliant on domestic wells. (Tr 41)

47. Residents of the surrounding communities, all zoned rural residential, expressed fear that the Project would negatively affect their home values and ability to obtain reasonable home insurance, if such insurance would be available at any cost. The Applicant provided market studies to support its position that the siting of the Project would not negatively affect home values. The comparable properties were located in the vicinity of much smaller solar generation and battery storage facilities, 10 to 20 megawatts. Of the three properties near such facilities of approximately 100 megawatts, one was sited in an industrial area and the other was neighboring an asphalt facility. (Tr 15)

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. (Tr 29)

49. 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 at 500 feet from the Site boundary creates an unreasonable risk to the safety and welfare of the communities. This risk is compounded by the distance of these areas from County fire fighting stations, none of which has a hazardous material team.

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.

WHEREFORE, the Hearing Officer recommends that the Application be denied.

Respectfully Submitted

MARILYN S. HEBERT
Hearing Officer

Date: 23 December 2024

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COUNTY OF SANTA FE)
STATE OF NEW MEXICO) ss

I Hereby Certify That This Instrument Was Filed for Record On The 23RD Day Of December, 2024 at 11:54:52 AM And Was Duly Recorded as Instrument # 2049479 Of The Records Of Santa Fe County

Witness My Hand And Seal Of Office
Katharine E. Clar
Deput[illegible] County Clerk, Santa Fe, NM

SFC CLERK RECORDED12/23/2024