Dear Jose Larrañaga,

La Candelas writes in response to AES Conditional Use Permit filing.

Most citizens are positive about solar energy, but careful consideration should always be given to large industrial projects. In the present case, the proposed use of 800 acres of open grassland adjacent to Highway 14, a designated Scenic Byway, is inappropriate in both scale and location.

We do not support projects like this one that mar the open landscape near the Turquoise Trail. We support a moratorium on industrial-scale solar projects in our area until public hearings can be held and appropriate regulations are established to satisfy both our need for electricity and our need to protect our open spaces.

In addition, the County must require solar panels on all new structures (including parking lot shade structures), and minimize the destruction of open spaces as is being proposed by AES.

Solar energy has its place on rooftops and appropriate commercial installations, but not on hundreds of acres of beautiful open prairie as AES proposes. We firmly oppose this project, based on its size and location.

Thank you for careful consideration regarding this important issue.

Respectfully,

Las Candelas De Los Cerrillos Board Cerrillos - CO COMMISSIONERS RÖBERT "BOB" BURNS, Chairman BOYD DUNN SANDRA D. KENNEDY JUSTIN OLSON LEA MÁRQUEZ PETERSON

ORIGINAL



SANDRA D. KENNEDY

1200 W. Washington Phoenix, AZ 85007

> (602) 542-3933 www.azcc.gov

ARIZONA CORPORATION COMMISSION

August 2, 2019

RE: IN THE MATTER OF THE COMMISSION'S INQUIRY OF ARIZONA PUBLIC SERVICE BATTERY INCIDENT AT THE MCMICKEN ENERGY STORAGE FACILITY PURSUANT TO ARIZONA ADMINISTRATIVE CODE R14-2-101. (DOCKET NO. E-01345A-19-0076)

Dear Commissioners, Staff, and Interested Parties:

After reviewing the reports and pertinent Material Safety Data Sheets (MSDS) about the 2019 battery fire at the APS McMicken Energy Storage Facility in Surprise and the 2012 battery fire at the APS Elden Substation facility in Flagstaff, what has become apparent is that utility scale lithium ion batteries using the chemistries in those types of lithium ion batteries are not prudent and create unacceptable risks, particularly those with chemistries that include compounds that can release hydrogen fluoride in the event of a fire and/or explosion. Other utility scale battery technologies or those with chemistries that do not have an associated risk of a release of hydrogen fluoride should be utilized.

In the matter of the November 26, 2012 APS Elden Substation (Flagstaff) facility fire, the Root Cause Analysis also identifies a near miss in May 2012 when a battery cell was severely discharged and the cell was continuously charged against the intended design of the Lithium Ion Battery Energy Storage System. There were no changes to the facility's control logic to address the issues nor was an evaluation performed by Electrovaya, the designer and installer of the system. The event was not communicated to APS staff.

Also, the investigation determined inadequate electrical circuit protection and issues with the design of the temperature sensors within the modules.

There was also a June 2012 event that started when the HVAC cooling system tripped and caused multiple cells to overheat.

Two severely discharged cells in less than a year is considered a high rate of failure. But according to the Material Safety Data Sheet (MSDS) for that lithium ion battery at the Elden Substation, failed cells are "anticipated," and there were supposed to be safeguards built in to prevent an incident such as the fire.

The report highlights a serious concern with these types of lithium ion battery systems:

"Charging a severely discharged cell (to a voltage below 2.7V) can result in internal cell breakdown and damage to the neighboring cell (thermally)."

"The testing of a healthy cell to a lowered voltage well below its recommended range resulted in irreversible damage to the cell internals. The separator film (20 micrometer thick) was compromised at many locations, and in a couple locations it had undergone through-wall penetration. In addition, the thermal degradation resulted in out gassing and created internal pressure that resulted in hair line separation of the molding case at its edges. This will allow the release of hot gases to the outside atmosphere this in turn potentially affecting the neighboring cell."

These gases can include hydrogen fluoride/hydrofluoric acid, which the lithium hexafluorophosphate can decompose into during a fire. Hydrogen fluoride is extremely poisonous.

The November 26, 2012 APS Elden Substation (Flagstaff) facility fire Root Cause Analysis report also warns of the dangers of a thermal runaway aided by electrical faults.

The MSDS for the battery involved in the November 26, 2012 APS Elden Substation facility fire notes that water should not be used to suppress a fire at such a battery facility, yet that was the original fire suppression used in the November 26, 2012 event. Instead of using water, there are fire suppression systems that use chemicals to suffocate the fire. This strategy would not seem at all viable for a very large facility incident, however. The Flagstaff Fire Department Report for the 2012 APS Elden Substation facility fire incident underscores the special hazards involved with the type lithium ion batteries used at that facility. It references fires with 10-15' flame lengths that grew into "flame lengths of 50-75'," with the fire "appearing to be fed by flammable liquids coming from the cabinets." The Flagstaff Fire Department Report for the 2012 incident also states concerns about "a serious risk of a large-scale explosion" and "the cabinets involved are full of lithium batteries that are extremely volatile if they come into contact with water."

Knowing now how easily a fire and/or explosion can evidently occur at these types of relatively small (2 MW) lithium ion battery facilities, it appears that a similar fire event at a very large lithium ion battery facility (250 MW+) would have very severe and potentially catastrophic consequences, and that responders would have a very difficult time trying to handle such an incident.

To appropriately plan for such a catastrophic event, the large-scale lithium ion battery facility using the same chemistries as the APS Elden Substation (Flagstaff) facility fire and the McMicken facility would need to be built in isolation far from everything else, because an explosion could potentially level buildings at some distance from the battery facility site. The energy stored at a 2 MW battery facility is equivalent to 1.72 tons of TNT. The energy stored at a 250 MW battery facility is equivalent to 215 tons of TNT. Also, large amounts of hydrogen fluoride could be released and dispersed that would affect and harm the public at a substantial distance downwind. There would be concerns also about lingering hydrogen fluoride contamination in the affected areas.

Those responding to such an incident would have to wear fire-retardant and non-conducted impermeable full body coveralls with hood, nitrile gloves, impermeable boots, and full-face tight-fitting air purifying respirators equipped with combination cartridges for acid gas and particulates.

Arizona Public Service Company Docket No. E-01345A-19-0076 Page 3

If such an incident were to occur during the months of extremely hot and humid weather in Arizona, there would be additional challenges and burdens put upon responders.

All of this points to unacceptable hazards and risks presented by the current utility scale lithium ion battery systems using chemistries that could release hydrogen fluoride in the event of a fire or explosion. The July 8/15, 2019 edition of Engineering News-Record, in an article titled, "Fire at Arizona Energy Storage Battery Bank Draws Scrutiny," George W. Crabtree, director of Argonne National Laboratory's Joint Center for Energy Storage Research states, "If you get the temperature of the Li-ion battery above 150 degrees Centrigrade, a reaction takes place between the cathode and the electrolyte that doesn't require any oxygen from the air to proceed, and that reaction releases heat. The heat that's released heats up the battery further, and that makes the reaction go faster, and it's what they call a 'thermal runaway'. That has been the major problem with Li-ion batteries. It's very well known."

The article goes on to mention safer technologies such as a liquid flow battery that are easy to scale up linearly in terms of capacity.

There are other utility scale battery technologies that are available that are far more sustainable and do not have these risks. There are also other lithium ion batteries that utilize chemistries that do not carry the same risks as those involved in the Eldon Substation and McMicken incidents.

For example, MIT Professor Sadoway has published results of his new battery technology, using liquid metal. The battery, based on electrodes made of sodium and nickel chloride and using a new type of metal mesh membrane, could be used for grid-scale installations to make intermittent power sources such as wind and solar capable of delivering reliable baseload electricity. This type of battery has advantages that include cheap, abundant raw materials, very safe operational characteristics, and an ability to go through many charge-discharge cycles without degradation.

Zinc Air Batteries are a low-cost solution. Regenerative zinc air flow batteries efficiently store energy in the form of zinc particles and contain none of the traditional high-cost battery commodities found in lithium, vanadium, or cobalt. Conventional batteries have a fixed energy/power ratio, but zinc air batteries use a fuel tank system with flexible energy/power ratios and scalability. The storage capacity is directly tied to the size of the fuel tank and the quantity of recharged zinc fuel, making scalability a major advantage of the flow battery system. Additionally, the ability to charge and discharge simultaneously, and at different maximum charge or discharge rates, are advantages of zinc air flow batteries. Other types of standard and flow batteries like lithium-ion are limited to a maximum charge and discharge by the total number of cells, as there is no separation of the charge and discharge components.

The Nickel-Iron battery is another option and it resembles a lead-acid wet cell battery. They have three attractive properties:

Arizona Public Service Company Docket No. E-01345A-19-0076 Page 4

- They are almost immortal they can last hundreds of years if they are maintained properly. Batteries that Edison built and installed in his early electric cars still work fine after refurbishing.
- 2- They are as environmentally benign as any battery ever created the principle liquid electrolyte is not an acid, it is an alkaline, potassium hydroxide.
- 3- Ni-Fe batteries can be completely discharged, or, highly overcharged and not be damaged.

Magnesium batteries are also another option. Compared to conventional lithium-ion batteries, a magnesium battery has many advantages: When using magnesium as an anode material, energy density is increased and safety is enhanced. Magnesium is not toxic and is a very abundant mineral that is readily available. Compared to lithium, magnesium availability on earth is higher by a factor of 3000.

There are also energy storage technologies that do not utilize batteries at all.

There is a rapid technological change underway in how electric power is generated and provided to customers, especially as energy storage comes into its own. As large-scale investments are made, it would be prudent and advisable to invest in utility scale energy storage systems that are sustainable, less risky, and do not utilize chemistries that have a potential to release hydrogen fluoride in the event of a fire or explosion. Fortunately, there are many options that would work.

Please respond with your future plans regarding the use of Lithium Ion Batteries.

Sincerely,

Sandra D. Kennedy Commissioner

Arizona Public Service Company Docket No. E-01345A-19-0076 Page 5

On this 2nd day of August, 2019, the foregoing document was filed with Docket Control as a Correspondence from Commissioner, and copies of the foregoing were mailed on behalf of Sandra D. Kennedy, Commissioner – A.C.C. to the following who have not consented to email service. On this date or as soon as possible thereafter, the Commission's eDocket program will automatically email a link to the foregoing to the following who have consented to email service.

Barbara Lockwood Arizona Public Service Company PO Box 52025, Station 9905 Phoenix, AZ 85072

Robin Mitchell Arizona Corporation Commission Director - Legal Division 1200 W. Washington St. Phoenix, AZ 85007 legaldiv@azcc.gov utildivservicebyemail@azcc.gov Consented to Service by Email

By:

Nanisha Ross Executive Assistant The Applied Energy Services (AES) Corporation has filed for a CUP permit regarding an industrial solar power plants in an open space between Rancho-Viejo, Rancho San Marcos and Eldorado. https://www.aes.com/rancho-viejo-solar

This plant will consist of 800 acres, 239,247 solar panels and 39 large containers, stored with 242 lithium-ion batteries (LIB) modules per container, with 44 individual battery cells per module, for a total of 415,272 individual battery cells. It will be a 96 MW PV installation with a 48 MW battery energy storage system (BESS).

We like to state we are not against solar energy, many of us, including ourselves, have panels on our roofs and/or drive electric vehicles. However, we have some serious concerns we would like to share with you.

- 1. Lithium-ion batteries are prone to a mal function known as thermal runaway. This is a real risk, which can lead to fire and explosion. In the first 10 months of last year worldwide once per month a BESS suffered a thermal runaway or caught fire. The Moss Landing Energy Storage Plant, CA, became operational on December 11, 2020. The first fire was on September 4, 2021, the second fire was on February 13, 2022, and the third fire was on September 21, 2022. In Morris, Illinois, there was a fire on July 17, 2021, which led to days long evacuations due to toxic smoke. AES had two fires in Arizona, one on April 19, 2019, which injured 8 first responders, 4 seriously, and the last fire as recently as April 18, 2022. It only takes 1 battery cell to malfunction to create a potential disaster.
- 2. Per the scientific literature, one cell has a risk of thermal runaway of about 0.0001%. As a rule of thumb assessment that means 10,000 cells have a risk of about 1%, 100,000 cells have a risk of about 10% and 400,000 cells have a risk of 40%. This explains why lithium-ion batteries tend to overheat and go up in smoke or worse.
- 3. The solar panels themselves can catch fire as well, as is proven by the fires in the solar panels on top of the buildings of Amazon and Walmart. In case of such fires, given the composition of our environment, which is dry, open prairie, and the distances to our residencies (1000 feet), flames can reach our homes, vehicles (tractors, etc.) and large animals, within minutes.
- 4. The Volunteer Fire Department will not be able to deal with a brush fire and keep the 39 containers cool at the same time. When a thermal runaway occurs, it cannot be extinguished, but it must run its course, which could take weeks. In a worst-case scenario, it is a choice between houses getting burnt or a BESS fire with a continued risk of explosion.
- 5. These risks are consequences of the sheer size of this complex. A community solar project on 5 acres with 1 BESS container can be manageable in case of a fire. A project of the proposed magnitude needs considerable more safety measures.
- 6. AES did not provide an emergency plan consistent with the Federal Emergency Planning & Community Right-to know-Act that prepares and protect communities from chemical accidents. Toxic smoke from solar panels or a BESS on fire have led to days long evacuation. There need to be clear procedures how to evacuate schoolchildren from the Turquoise Trail Charter School, residents and their animals large and small, the inmates in the correction facilities, and the Santa Fe Film Studio's. Where are they all supposed to go?
- 7. We have video's of antelope running past the fence on our property right where they are planning this industrial solar power plant. That space is an important corridor for wildlife into the Galisteo Basin. They will be driven away. We have prairie dogs which is a key species for

numerous other species. Burrowing owls live there too and nest in the tunnels of the prairie dogs' towns, they attract falcons, hawks. We have the great horned owl; there are badgers, coyotes. Prairie dogs increase the growth of wildflowers, and consequently the populations of bees and butterflies. They help to control weeds, noxious to life stock. This fragile ecosystem will be destroyed.

- 8. AES is a power utility. It generates, transmits and distributes electricity. The company produces energy burning hydro, pet coke, diesel, biomass, oil, solar, heavy fuel oil, landfill gas, wind, coal, and gas. The power generated will be sold to PNM, which sells electricity to, for instance, Arizona. There will be no benefit to the communities whose environment is invaded by this industrial complex. We are assuming all the risk for zero benefit as AES have admitted at a public meeting.
- 9. Although AES has finished all the reports necessary for a CUP submission, the company has refused to share them. This will put us in a disadvantage since we will have limited time to study them. The cause of the fire in the AES facility in Chandler last year has still not been made public.
- 10. AES has shown in the past to be a less than trustworthy when it comes to promises regarding safety. "The local fire and emergency management organizations will be thoroughly informed about the project..." Yet, when the fires in the AES facilities in Surprise (2019) and Chandler (2022) in Arizona broke out, the professional Fire Departments were not informed by AES of the presences of these BESS's.

"...The injection of liquefied C6F120 directly into modules experiencing a thermal runaway.... will both cool the exothermic reaction and suppress any flames". AES fails to mention that this will not stop the thermal runaway. As long as there is a thermal runaway going on, there will be the danger of explosion, even without flames. Neither did AES mention that if the C6F120 escapes out of the containers it is extremely toxic for humans and the environment.

AES refers to appliable (sic) guidelines, but does not mention those guidelines do not demand that a thermal runaway cannot occur. Per the experts investigating the Surprise fire the industry keeps these standards limited on purpose not impose restrictions or extra investments on the manufacturers.

- 11. AES has a dubious track record with regards to pollution. They are 7th on the list of the biggest polluters of water, 23 in the top 100 of the emission of greenhouse gas and 196 in the top 200 of overall air polluters. AES has paid millions in fines for violation of environmental and work place safety laws. They have received almost two billion in subsidies and loan/bailouts. https://grconnect.com/tox100wt/ry2017/index.php?search=yes&company2=165 https://grconnect.com/tox100/ry2017/index.php?search=yes&company2=26 https://www.grconnect.com/tox100/ry2017/index.php?search=comb100 https://violationtracker.goodjobsfirst.org/parent/aes-corp https://subsidytracker.goodjobsfirst.org/parent/aes-corp
- 12. Solar panel theft and crime are on the rise. In efforts to disconnect panels, short circuits can occur, leading to fire. This facility will be unmanned. How will the residents be protected from this form of vandalism and the increased risks? It took hours before the attack on the solar plant in Las Vegas, NV, was discovered. What happens in case of a failure of the Battery Management System and a thermal runaway occurs without being detected?
- 13. There will be significant loss of property values, due to loss of view, loss of open space, possible contamination of the aquifer, fire dangers, and looming possibility of uninsurable and unsalable houses.

- 14. The industry currently lacks a robust framework for evaluating potential health risks to workers, the community, and first responders associated with LIB failure, neither is there a legal framework or regulations by which industrial solar power plants must abide.
- 15. There are no guarantees who will be responsible in case of loss of live or property. Residents should be spared endless legal battles, especially since a potential disaster is not far-fetched, and both AES and the County will be informed up front of the evidenced-based risks associated with solar panels and battery energy storage systems.
- 16. If this is really about saving the environment and not just about the money, why destroy the fragile ecosystem the solar plant is planned on? Why not relocate to an already destructed area? The County has the Transferrable Development Rights Program for Conservation. Why not try to find a way to convince the landowner (Warren Thompson) to use that program and provide him with extra credit points for development elsewhere?

In our opinion this project is inconsistent with the Land Use Plan and vision for our rural area. We are working together with the San Marcos Association to convince the County of Santa Fe to put a moratorium in place until our concerns can be addressed in a proper fashion. Thank you for your attention to this critical matter.

Santa Fe, February 2, 2023

Regards,

maluerole

Dr. Selma Eikelenboom-Schieveld, MD, PhD 227 San Marcos Loop Santa Fe 87508 303 548 5225 <u>selma@ifscolorado.com</u>

Theresa Mendo

Theresa Mendoza, MA, CFRM 137 San Marcos Loop Santa Fe 87508 619 820 3770 mendoza.theresa1234@gmail.com



March 20, 2023

To: Santa Fe County SLDC Hearing Officer

In care of Jose Larrañaga, Building and Development Supervisor - Santa Fe County Growth Management Department

Re: AES – Rancho Viejo Solar Facility Conditional Use Permit (CUP) Application Hearing

The San Marcos Association (SMA) (<u>https://thesanmarcosassociation.org/</u>) is a non-profit community service organization (IRS Code 501(c)(4)), and a Registered Organization under Chapter 2 of the Sustainable Land Development Code (SLDC) of Santa Fe County. Our goals are to protect the rural, residential character of the area for which we advocate; to monitor development to see that it is consistent with that character and with applicable plans and ordinances of Santa Fe County (specifically the SLDC in this case); and to advocate on behalf of property owners/residents of the area in matters of public service, utilities, and the general welfare of people. SMA's area of advocacy includes the parcel where the proposed Rancho Viejo Solar Facility would be located.

THE SAN MARCOS ASSOCIATION

P.O. Box 722

Cerrillos, NM 87010 https://thesanmarcosassociation.org/

AES has submitted a Conditional Use Permit (CUP) Application to construct the Rancho Viejo Solar Facility, a solar power plant that would generate some 96MW of electricity and transmit it over 2 miles using 115KV high voltage power lines to a PNM substation where it would enter the power grid. This facility would be located on approximately 800 acres of land zoned Rural Fringe. By any engineering, planning, or governmental definition, the Rancho Viejo Solar Facility is a 'utility-scale solar' facility. See for example the Solar@Scale Government Guidebook (p. 14) [https://mail.google.com/mail/u/0/?tab=rm&ogbl&zx=9x4f32kome8i#sent?projector=1].

The SMA Board of Directors, while supporting responsible development and sustainable energy production, including Community Solar, believes this development is not eligible for a CUP under the SLDC for the reasons elaborated below. We respectfully request that the Hearing Officer <u>Deny</u> this application.

First, this facility is a "Gas or electric power generation facility" as listed on 150A Attachment 3.11 (Appendix B: Use Matrix) [https://ecode360.com/attachment/SA6524/SA6524-150Ac%20Appendix%20B.pdf] of the SLDC (Structure Code 6400) and is **prohibited** (**X**) in districts zoned Rural Fringe. The Rancho Viejo Solar Facility will produce electricity to be sold to PNM and no other customer. Structure Code 6400, from the Land-Based Classification Standards (LBCS) of the American Planning Association (APA), the basis for the SLDC Use Matrix (Appendix B 150A Attachment 3.1), is the code for "Gas or electric power generation facility" and contains within it Code 6460 - "Solar and other forms of energy facility." Such facilities include "*windmills, solar panel farms, etc.*" The proposed solar facility is clearly an electric power generation facility according to the LBCS; being a solar facility in no way excludes it from consideration as such. [https://www.planning.org/lbcs/standards/structure/] Should the applicant assert for any reason that this proposed

facility is <u>Not</u> a "Gas or electric power generation facility" as listed on 150A Attachment 3.11, SMA respectfully requests that such a characterization be factually substantiated before the Hearing Officer.

Second, should the applicant assert that the Rancho Viejo Solar Facility is a "Commercial solar energy production facility" (150A Attachment 3.11) (a characterization found nowhere in the CUP application or on the applicant's website [https://www.aes.com/rancho-viejo-solar]), and is therefore eligible for a CUP, SMA respectfully requests that such a characterization be factually substantiated before the Hearing Officer.

The SLDC definition of "Commercial solar energy production facility" is "*a renewable energy production facility that uses sunlight to generate, and may store, energy for sale or profit.*" (Appendix B 150A Attachment 2.14) [https://ecode360.com/attachment/SA6524/SA6524-150Ab%20Appendix%20A.pdf] This definition is redundant (defining "Commercial" as "for sale or profit"), and so broad that it includes virtually any solar facility that generates electricity, except a <u>residential</u> installation. That the SLDC distinguishes between the aforementioned "Gas or electric power generation facility" (prohibited in Rural Fringe) and the broadly defined "Commercial solar energy production facility" (eligible for a CUP) indicates a considered distinction. In this context, the word 'commercial' is used in contrast to a 'residential' installation where electricity generated is <u>not</u> for sale or profit; it is not intended to include any for sale or profit solar energy facility.

An additional distinction is scale. Utility-scale facilities are prohibited in the Rural Fringe zoning district while smaller solar facilities may be permitted. In further support of this assertion, Santa Fe County seems to regard the CUP-eligible "Commercial solar energy production" facilities noted in Appendix B 150A Attachment 3.11 to be of "Neighborhood-Scale." The proposed 800+ acre AES Rancho Viejo Solar Facility would not be a neighborhood-scale development. SMA understands this from the following information. Figure 1 shows an image of portions of a worksheet used in discussions led by County staff in revising the San Marcos Planning District Use Matrix, commonly call the "overlay." Community members used this worksheet (some 9 pages long), under the guidance of County staff, to determine if and/or how to modify the overlay – to create the legal restrictions on development in that Planning District. This process, paused in 2020, involved a three-way comparison of existing San Marcos Planning District uses for each zoning district (labelled "2016 SMD" in the header), existing SLDC uses ("SLDC"), and uses proposed by County staff for the revised Planning District overlay ("2020 SMD"). We realize that the proposed Rancho Viejo Solar Facility does not lie within the San Marcos Planning District; but that is not the purpose of this argument. On Figure 1, the row pertaining to "Commercial solar energy production facility" contains, on the far right, the following note provided by County staff: "Create development standards for the siting and installation of Neighborhood-Scale renewable energy production facilities." That note, intended to guide discussion regarding legal restrictions of commercial solar energy facilities in Rural-Fringe districts, clearly indicates that the County believes that "Commercial solar energy" production" facilities should be of "Neighborhood-Scale" - something the Rancho Viejo facility would not be. If the applicant asserts that the Rancho Viejo facility should be considered as a "Commercial solar energy" production facility" for the purposes of the SLDC, SMA respectfully requests that the applicant factually substantiate this assertion before the Hearing Officer.

In summary, The San Marcos Association respectfully requests that the AES Rancho Viejo Solar Facility CUP application be <u>**Denied**</u>, on the grounds that it is not eligible for a CUP. It is not eligible because, pursuant to definitions contained within the SLDC and its supporting documents:

- 1) It **would** be a <u>Gas or electric power generation facility</u> and thus <u>prohibited</u> according to the SLDC in Rural-Fringe zoning districts; and
- 2) It would <u>not</u> be a "<u>Commercial solar energy production facility</u>" and so would not be eligible for a CUP on that basis.

Thank you for your consideration. SMA awaits your reasoning and decision concerning the points we have raised in this case.

Sincerely,

John

Dennis D. Kurtz, President

Cc: Jose Larrañaga via email - <u>joselarra@santafecountynm.gov</u> Penny Ellis-Green via email - <u>pengreen@santafecountynm.gov</u> Robert Griego via email - <u>rgriego@santafecountynm.gov</u>

Use	2016 SMD RUR	SLDC RUR	2020 SMD RUR	2016 SMD RUR-F	SLDC RUR-F	2020 SMD RUR-F	2016 SMD RUR-F	SLDC RUR-R	2020 SMD RUR-F	2016 SMD CN	SLDC CN	2020 SMD CN	SM 2019 Plan Language Notes
Residential Commercial solar energy production facility	x	С	Р	x	С	P	x	x	Р	x	С	с	Action 4.2.1 Create development standards for the siting and installation of Neighborhood- Scale renewable energy production facilities
Geothermal production facility	x	С	с	x	С	C	x	x	с	x	x	x	Action 4.2.1 Create development standards for the siting and installation of Neighborhood- Scale renewable energy production facilities
Large scale wind facility	x	С	С	x	С	С	x	С	С	x	С	с	Action 4.2.1 Create development standards for the siting and installation of Neighborhood- Scale renewable energy production facilities
Small scale wind facility		A	Р		A	P		A	P		A	A	Action 4.2.1 Create development standards for the siting and installation of Neighborhood- Scale renewable energy production facilities

Figure 1: Sections of Worksheet provided by County staff to guide discussion when revising the San Marcos Planning District Use Matrix in 2020

Portions of page 1 (to show header) and page 8 (containing the Commercial solar energy production facility line) are combined.

Dear Mr. Larra,

We are residents of Eldorado and own our home on Tetilla Road, the front line of the lands where this solar array and lithium-ion battery storage are planned. The plan to place this kind of installation on this tract of land, firmly situated so close among established residential areas, is mind-boggling. A thermal runaway fire in this battery storage installation would decimate this entire area and do great damage to the city of Santa Fe and, in particular, our lives.

The known issues of how lithium-ion batteries can spontaneously combust cannot be ignored. AES Corp, being a global corporation, has no true interest in the community except how to sidestep our local concerns and build their for-profit installation. I'm sure they are a powerful entity to deal with, but if we don't tell them "NO" now, we and the city are the ones dealing with any bad fallout from their money-centered decisions.

I am not anti-capitalist in any way. But their company decisions don't have our best interests at heart. Hopefully Santa Fe city and county officials do.

New Mexico is filled with large land areas where this installation could more safely be placed. Please fight the Rancho Viejo installation on our behalf.

Cheers, Nadine Huva 2 Tetilla Road Santa Fe NM 87508 (713) 542-3230 Dear Jose,

I am writing to you concerning the AES Corporation Conditional Use Permit. I feel that this corporation should be granted "Developments of Countywide Impact" status. I feel that this status will allow this project to be considered on it's merits and avoid hyperbolic angst about fantasy issues. This recognized "Not In My Back Yard" tendency to resist change is understandable but misguided.

I personally have installed a photovoltaic array at my home and I feet that it is one of the best investments that I have made for myself and my daughter's generation.

Many people in our extended Eldorado community have environmental values. But when NIMBYism raises it's head it is small minded.

Please feel free to contact me if you like,

Frank Kilmer Eldorado resident for six years 505 780-1203 Hi Jose,

I am writing to lodge a concern about the proposed large scale solar project that is being proposed in Santa Fe County.

I want to say that I am in favor of solar power, I have it installed on my home.

I understand that the large-scale lithium-ion batteries that are being proposed to be used with this project present a high potential of wildfire. This proposed solar installation is so close to several residential areas including ECIA – Eldorado, where I live. As you may be aware, Eldorado and the surrounding communities really has only one way out – 3 roads all heading towards Highway 285. If all 2770 homes and the many others that are not ECIA homes in the area tried to evacuate at the same time, it would result in a disaster.

Although I am on the board of the HOA here, I am not writing this as a statement for ECIA, rather as a concerned citizen.

Please do not approve this project until a less highly concerning storage containment system can be found and used instead. Or have this project moved to a location that is much further away from residential areas.

Thank you for your consideration,

Carol Sanguinetti 928-300-6013 Mr. Larranaga,

I would like to express my opposition to the AES Plan. My guess is they are paying some of our state reps who are sponsoring the bill to have local communities take over the power supply for their residents. Are they lining up for some of Biden's EPA dollars? It usually pays to just follow the money when these sort of projects come about. Solar power as well as wind are so unreliable and expensive that I do not wish to have my energy needs dictated by a group determined to be 100% sustainable. These solar fields are huge and ugly and inefficient. Let PNC and New Mexico Gas do what they know how to do without making life more expensive and unreliable for us all.

Thank you for taking the time to hear me out.

Kathleen McLean 30 Herrada Road Santa Fe, NM87508 Here are my thoughts as a resident of Eldorado, living only about one and a half miles from the proposed solar project. I did see a presentation earlier this week that did put all the bits of information about the project together, so myself and others living here could get a better handle on the proposed project. I had many questions after I left.

The first is: with New Mexico being the 5th largest state with so much open land, why did they decide to put a very large "solar power plant" so close to where thousands of people live between San Marcos, Rancho Viejo and Eldorado when there are so many open locations around the state that have no humans living within miles of the facility? This facility is not being built to supply energy to these neighbors.

I have two thoughts that were ignored in this plan: first ... every action does have a reaction (and the proposed project does not seem to have thought through the reactions) and second ...there is the law of unintended consequences.

• As they would prepare the 1000 acres to build the "solar power project", where is all the wildlife that has lived there for centuries to move? Or don't they care about burrowing owls, coyotes, jackrabbits, hawks et al? Eldorado homeowners are not permitted to have fenced in properties, yet the "solar project" will be fenced in so the wildlife will not have access to their traditional homeland.

• Are there going to be toxic chemicals used as AES prepares the land for the set-up of the solar panels? How long will these chemicals remain in the soil and make the possibility of wildlife returning to this land impossible? As they prepare the land, there will be a great deal of dust that is churned up. And with our frequent 20+ mph winds here in Eldorado blowing west to east, what will that impact be if the dust is contaminated with these toxic chemicals? Will we have to stay indoors so we do not have exposure to the chemicals? Who will be liable for these health hazards?

• Are the roads that AES intends to use to bring in all the construction materials (with the number of trucks and their weights) prepared to handle that amount of traffic and weight in addition to the normal traffic load or will new roads have to be built or existing roads reinforced (and who is responsible and pays for that)?

• As this Utility Scale Solar Power Plant gets up and running, there will be the need for fire protection, especially with the lithium-ion batteries (and so many of them that 69 storage units of 20' each will be required.) And where does this fire protection come from? A survey of all the local fire departments (paid or volunteer) report that they are neither trained for this type of fire nor have the equipment. Who pays so that they will be prepared?

• If there is a fire and living so very close to what might be the source of the fire, who pays for any damage to homes and property? Or, will residents be required to get expensive upgrades to their home owner and business insurances? With the Calf Canyon/ Hermit's Peak fire, which was started by the Forest Service, the federal government has taken responsibility,

though slow to get people "whole" again. Would AES take responsibility, or declare bankruptcy to avoid paying and leave one or more of these communities in ruin forever?

• At the end of the normal life of this Utility-Scale Solar Power Plant's life, I was told that AES indicated that the 239,000 solar panels would become landfill and not recycled. Doesn't that make this entire Project less attractive since it starts out "green", but at the end of its life, it will be very un-environmentally correct? Who knows what will be "correct" in 35 years, but I can guess that a landfill will not be correct. Much cheaper for AES but a bad environmentally focused strategy.

• Finally, will the land be returned to open space, although potentially the land itself may remain toxic for generations to come?

These are just a few of my thoughts. It seems that AES has a short term view of the Project and hasn't bothered to think through all the implications that will impact the residents for the next 35 years. I have already been here for 20 years so the thought of another 35 is questionable since I would be 108.

Thanks for "listening."

Nancy E. Johnson

9 Avenida Casa del Oro

Santa Fe, NM 87508

505-466-1982 home

505-603-3588 cell

> Dear Friends,

>

> Although I am not highly informed, I have read just enough about this oversized project to recognize the VERY REAL dangers involved with so many thousands of lithium batteries stored in one place. The last thing New Mexico needs is anything that is such a huge FIRE RISK to our State. It is obvious that any fires that could start would be nigh impossible to contain or control, and thus could ENDANGER MILES of Santa Fe County.

>

> In fact, although I live in Eldorado, that feels too close for safety, and hundreds of homes and thousands of people stand in potential danger. The dangers of such a huge and unprecedented project in N.M. have NOT been transparently disclosed, but glossed over by the company that stands to profit from building this facility. It is difficult to trust profit-driven companies with our welfare and future.

> I do support small solar projects with proven safety data. The fact is, as I understand it, a project of this size is not sufficiently vetted by science and data to guarantee its safety for the residents of our County.

> Therefore, I distrust and oppose further development on this scale.

>

>

> Sincerely,

> A Concerned Citizen of Santa Fe County, Naima Shea

> 87508

>

>

> Sent from my iPad

I am definitely opposed to this project. Why? It will be a fire hazard. It will be a blight on the landscape. It will be an environmental disaster. It will destroy property values in the area. It is not in keeping with Santa Fe's image as an historic tourist area. It will only line the pockets of a few. It will be disgusting. It will be terrible. Sincerely, Brian Cassidy 24 Quedo Road Santa Fe NM 87508 Jose Larra,

As a land owner in Rancho San Marcos, I am opposed to any massive development of a solar farm next to residential communities. Many factors have not been thoroughly addressed or answered by AES.

1) mitigating the potential of fire hazards from runaway lithium batteries- this is unacceptable to homeowners as well as our animals in my case my horses.

2) destruction of a known wildlife corridor- I have photos of burrowing owls within our development, evidence of prairie dog communities as evidenced by their dens, 250 animals have a symbiotic relationship to the Parker dogs based on utilizing the dens they make, peregrine falcons, redtail hawks also hunt in this area. Believe it would be useful for the county to utilize cameras and take the time to monitor the wildlife within this area, our HOA has documentation of mountain lions hunting in our development as well. Wildlife needs to be protected as part of a viable natural environment.

3) based on what AES provided very few jobs are created once the facility is up, in addition no answers have been provided as to the disposal of the used panels and batteries which needs to addressed. In California they have built some of these farms on BLM land away from population centers which to me might be a better option as long as they address wildlife and the disposal of these panels and batteries in future.

The reason people live and come to Santa Fe County is for the natural beauty, culture and to appreciate a healthy environment and wildlife. I do not believe enough research and answers have been provided to give AES a green light for their project. Thank you,

Kay Marshall 221 San Marcos Loop Santa Fe, NM 87508 <u>ekaym13@hotmail.com</u> Greetings. I hope this note finds all of you well.

I'm a newer resident of Eldorado at Santa Fe and learned about AES' plan for a large solar array with lithium-ion storage. Though I'm a supporter of the project, what prompts me to write is a significant concern.

My undergraduate degree is in mechanical engineering (Colorado State University, 1982), and my area of concentration was energy conversion and power systems. When I began college, the US was on the heels of the Arab Oil Embargo, and I chose to attend CSU because of their solar engineering courses and concentration. Because the market for solar heating and power had dried up with the expiration of federal tax credits in 1980, my first job after graduation was with Public Service Company of Colorado working on *conventional* power generation control.

With today's materials and technology, solar is very affordable, and here in New Mexico, it makes a great deal of sense to use the sun to generate power. That's why **I remain a fan of solar-powered electricity sources.**

My *concern* about this project is the lithium-ion **battery energy storage system (BESS)** and the possibility of **thermal runaway**. What many other residents and I want to know is whether AES is investing in the construction and maintenance of the proper safety systems. Please allow me to offer a few specifics here:

- Lithium-ion batteries are designed to operate safely in a relatively narrow range of temperatures. Typically, their ideal storage temperature is between 59 and 95° F. Obviously, our ambient temperatures often fall well outside that range. (https://www.researchgate.net/figure/Optimal-operating-temperature-of-Li-ion-battery-26_fig3_327966044)
- AES has not offered details about *which* Samsung SDI E5G battery modules it intends to use and the optimal operating temperature range of those. Samsung manufactures a wide variety of SDI E5G batteries. If AES were forthcoming about the specific battery model, citizens like me could determine from Samsung the operating parameters of those batteries. (*See*, for example, https://www.samsungsdi.com/upload/ess_brochure/Samsung%20SDI%20brochure_EN.p.

https://www.samsungsdi.com/upload/ess_brochure/Samsung%20SDI%20brochure_EN.p df).

- Without ventilation and temperature control, large-capacity batteries are subject to overheating, which can cause thermal runaway. We've seen examples of this in laptop batteries, hoverboards, and electric vehicles. For a large power-storage facility, therefore, it's imperative to have a Battery Management System (BMS) that includes...
 - Ventilation and temperature control
 - Internal short-circuit detection
 - Sensors and control systems for detecting and managing cell temperature, current, and voltage, as well as charge balancing. (https://www.sciencedirect.com/topics/engineering/battery-management-system)
- AES has not offered members of the public details about their planned storage facility. Instead, their Rancho Viejo project website provides a link to a generic fact sheet from the American Clean Power Association (ACPA). (https://cleanpower.org/facts/clean-

<u>energy-storage/battery-storage/</u>, accessed from the link <u>https://cleanpower.org/facts/clean-energy-storage/battery-storage/</u> found from the "Learn more about BESS technology and management here" button at <u>https://www.aes.com/rancho-viejo-solar</u>)

• The ACPA received nearly 99% of its 2022 funds from political action committees. Almost 75% of ACPA's lobbyists have previously held government jobs. This gives the appearance of potential conflicts of interest. These lobbyists have connections to political donors and to legislators at the federal level. They are not accountable to the real people affected by projects like Ranch Viejo. (https://www.opensecrets.org/orgs/american-clean-power-assn/summary?id=D000024034)

In short, I have a difficult time supporting this project wholeheartedly at this time. **I ask that as Santa Fe County officials who represent and** *are* **accountable to us citizens, you require that AES release a detailed plan for its BESS, including its BMS**, and that they make it available to all of us in Santa Fe County. While clean energy, development, and the jobs and money they bring are sorely needed in our County and State, I implore you not to rush this project through without offering the public the technical details to make an informed decision about whether AES will in fact operate Rancho Viejo safely.

Thank you for your consideration. Please feel free to reply to this email or to call me at the number below.

With appreciation and best regards,



----Stace

Stace (Stacey L) Williams (she/her) InterActive Dynamics, LLC +1 303-915-9434 Good morning,

We appreciate the opportunity to offer our thoughts and comments on the proposed AES Rancho Viejo Solar Project. On the surface, this project seems to be the right thing to do, as solar energy is responsible energy, and New Mexico has abundant sunshine.

However, we have concerns regarding this specific project for the following reasons:

- The scope of the project appears to be large. As such, the consequences of a malfunction could be significant.
- Since the proposed project would be located in a rural area, there would be less access to timely and sufficient emergency services should there be some type of malfunction resulting in a fire, explosion, or gas leak.
- The continued drought and climate change in our area further increases the risk of significant consequences should a malfunction occur. The devastating consequences of wildfires are all too familiar given last year's wildfires that resulted from prescribed burns.
- In addition to these potential threats to our personal safety and property, we are concerned that the cost of our homeowner's insurance policy will increase significantly due to our insurance company's perception that the risk of loss associated with our property has increased significantly.

We thank you for your time and consideration of our concerns.

Respectfully,

Claire and Stephan Dobyns 2 Lobo Lane Santa Fe, NM 87508 Hello Mr. Larranaga:

I am a lifelong resident of Santa Fe and have lived in Rancho San Marcos for over 27 years. I chose this area because it is quiet peaceful part of Santa Fe County. This rural area is also home to an abundance of natural wildlife native plants all of which have been here for hundreds of years. My ancestors have been in this part of New Mexico for 15 generations. The idea of putting a huge Solar Industrial Power plant in this area is completely foreign to the entire natural habitat. A power plant of this size should not be near heavily populated residential areas such as Rancho San Marcos, Rancho Viejo, Eldorado and the area around the Santa Fe movie studios. This plant not only poses a threat to the community populations but also the native flora and fauna of the area.

I am not opposed to solar energy or other alternative energy sources however, the location of this industrial sizes plant is terrible planning on the part of Santa Fe County government, the AES company, and the property owners.

Thank you for your time and attention to this matter.

Paul V. Romero 19 Calle Maria N. Santa Fe, New Mexico 87508 Dear Mr. Larranaga, Ms. Green and Ms. Romo:

We are writing to express our deep concerns about the plans to build the large solar power facility near Rancho Viejo on the Turquoise Trail Scenic Byway in

Santa Fe County. It is our understanding that there will be a large lithium-ION battery storage facility at the site.

We live in the western most area of Eldorado very near the proposed AES

project. From our information we understand that lithium-ION battery fires are very difficult to suppress, producing toxic gasses and groundwater pollutants. We believe that alternatives to lithium-ION storage batteries should be pursued to mitigate the impact that lithium batteries present relating to fire danger in the dry southwest. Our fire departments in Eldorado are volunteer staffed. The nature of a lithium battery fire would require new equipment and training in an area that has limited resources.

We believe that the plan to locate this array so near the Turquoise Trail Elementary and the growing population of the Turquoise Trail area as well as Eldorado and Rancho Viejo is a terrible and unwise idea. It is well known that lithium-**iON** battery storage can be volatile. Considering the chance of explosion, fire and groundwater contamination this plan seems to be completely out of touch with the safety and needs of our county and our state as a whole.

In addition to the huge fire danger we are also concerned about the impact on native wildlife and the natural beauty of this area.

We want you to seriously consider our concerns and we would invite you to contact us for further conversation.

Alice and Charlie Springer 36 Camerada Road Santa Fe 87508 505-670-4731 Dear Jose,

Please find below my comment on the proposed Rancho Viejo Solar Project, for which AES Corporation has recently submitted a Conditional Use Permit to Santa Fe County.

STATEMENT BY CAROL BEIDLEMAN, ELDORADO OF SANTA FE RESIDENT, TO JOSE LARRANAGA, SANTA FE COUNTY, 2/20/23, REGARDING PROPOSED RANCHO VIEJO SOLAR PROJECT:

I would like to thank you for this procedural opportunity to share with Santa Fe County my serious concerns about the proposed Rancho Viejo Solar Project.

As a wildlife biologist who has dedicated my career to conservation and land stewardship, I am concerned about the world not taking the devastating effects of climate change seriously and urgently enough. I try to do my part to limit my impacts on climate change through the actions I take and choices I make, from the vehicle I drive to my rooftop solar panels. However, like all proposed solutions to environmental challenges, whether related to "forest restoration" or "renewable energy," close scrutiny and careful evaluation is required before jumping on board.

When it comes to renewables, the devil is in the details. Of course we want to see more renewables in our energy portfolio, but proposed projects may have aspects that are more detrimental to the environment and/or neighboring communities than they are beneficial. Usually, it's about the scale of the project and its location, but it can also be about the state or choice of technology. Utility-scale solar and other renewable energy projects can have high environmental and community costs, including destruction of wildlife habitat and scenic vistas and potential issues with fires and hazardous materials. Where utility-scale projects are proposed in proximity to residential neighborhoods, the public and our elected leaders must carefully vet these plans, first and foremost for safety reasons.

This is the case with this proposed 800-acre Rancho Viejo Solar project, whose partner company, AES, has just filed a Conditional Use Permit application with Santa Fe County. I am most concerned that this 96MW solar project is an industrial complex close to Eldorado where I live, which will include a large 48MW lithium-ion Battery Energy Storage System (BESS). This BESS will have 39 45' semi-trailer size containers (AES has been changing this information) of lithium-ion batteries located just over a mile from the northwest edge of Eldorado, and will necessitate construction of a 40 to 50-foot-high power line half a mile from the northwest edge of Eldorado.

This solar project is massive; it would be the second largest in New Mexico. The number of solar panels for this project have now increased from 206,000 to 239,000. But, I am focused on this Battery Energy Storage System because BESS battery technology is vulnerable to runaway fires, explosions, and gas leaks, as has happened at two AES facilities in Arizona recently, and such an incident could cause a wildfire affecting our community and the surrounding neighborhoods. The suppression of fires at BESS facilities is technically very difficult, and neither the Turquoise Trail Volunteer Fire Department nor El

Dorado Fire & Rescue have the capability to deal with a fire involving these hazardous materials. Please see this recent NBC report on the risks of these BESS systems and about the firefighters seriously injured in one of these AES BESS facility fires (Surprise, Arizona): <u>https://www.nbcnews.com/news/exploding-problem-fires-sparked-lithium-batteries-are-confounding-fire-rcna65739</u>.

The December 2021 Marshall grassland fire in Boulder County, Colorado, burned just over 1,000 homes, at a cost estimated by the Boulder County Assessor's Office of \$2 billion. Eldorado has about 2,200 homes, mostly in juniper-savanna (grassland), plus the residences in the Rancho San Marcos and Rancho Viejo neighborhoods. All these Eldorado homes are situated just to the east of this proposed project, with the prevailing and strong winds coming out of the west from the proposed project area towards Eldorado. Should any fire start in this facility, all of Eldorado (and the other neighbors) will be at risk.

Here are the actions I am requesting Santa Fe County take. First, Santa Fe County can NOT allow this project in this inappropriate location; it belongs in an industrial area, not near residential neighborhoods. Second, Santa Fe County needs to put a moratorium on such utility scale renewable projects in order to first develop and implement regulations for these utility-scale projects. This especially applies to those with Battery Energy Storage Systems, and those between private landowners and private companies who stand to benefit greatly financially with no say by neighbors. The public MUST have direct input into these projects. Third, Santa Fe County should develop a strategic plan for where such projects might be appropriately located, with minimal impacts on residential communities and the environment. Lastly, I encourage Santa Fe County to focus instead on supporting and incentivizing plans for distributed rooftop solar on homes and businesses in our area, to help New Mexicans benefit directly from the sun that shines on us and reduce the need for utility-scale solar projects that can have negative consequences for our local communities and the environment.

Thank you.

Carol Beidleman

35 Tetilla Rd.

Santa Fe, NM 87508

Citizens for Resp Unifying and Raising the

Name

Carol Beidleman

Email beidlemanc@aol.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

When it comes to renewables, the devil is in the details. Of course we want to see more renewables in our energy portfolio, but proposed projects may have aspects that are more detrimental to the environment and/or neighboring communities than they are beneficial. Usually, it's about the scale of the project and its location, but it can also be about the state or choice of technology. Certainly anyone can do what they want to on their private land, within the law, but where utility-scale projects are proposed in proximity to residential neighborhoods then the public and our elected leaders must become engaged to vet these plans and ensure that the benefits outweigh the risks. This is the case with this proposed 800-acre Rancho Viejo Solar project, whose partner company, AES, will be filing a Conditional Use Permit application with Santa Fe County. I am most concerned that this project is an industrial complex close to Eldorado where I live, which will include a large lithium-ion Battery Energy Storage System (BESS). BESS battery technology is vulnerable to runaway fires, explosions, and gas leaks, as has happened at two AES facilities in Arizona recently, and such an incident could cause a wildfire affecting our entire community. Please do not allow this project in this inappropriate location.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name

Richard Martinez

Address (Optional)

58 Via Punto Nuevo Santa Fe, NM 87508 US

Email

richard.martinez@sharpusa.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I feel the fire hazard of this project is to great and I would not want to see a big fire break out that we are not prepared to handle.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Name Deena Joseph

Address (Optional)

Santa Fe, NM 87508 US

Email

deenajo16@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Devalued real estate, unpleasant views, health risks, etc.

There is so much land in NM that is not next to prime real estate to located a project like this.

Do not support.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Citizens for Respon Unifying and Raising the Voice

Name

Mary Anne Schadler

Address (Optional)

476 San Marcos Loop Santa Fe, NM 87508 US

Email

supayas@juno.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I built my home in Rancho San Marcos in 1993 on 15 acres of our beautiful and fragile desert with ever changing 360 degree vistas. This community development from its inception was designed to preserve this unique and irreplaceable environment. I've spent 29 years thoughtfully avoiding the "usual" things our society unwittingly but with good intentions has done and continues to do that have resulted in the extinction of animal and plant species, the endangered species list, the devastation of the bee and other populations, the horrific fires and other "natural" disasters we are still struggling to understand and mitigate, and consequences we don't yet realize.

I support "green" energy but these massive industrial solar installations are not "green". This proposed installation will at least damage and very likely destroy not only the reality of this unique area but the reality of my home, a hard won refuge fundamental to my mental and emotional well being, a huge portion of my financial well being, and a cherished slice of as close to natural and balanced an environment remaining in our world.

This area is our home. We must protect it as fiercely and thoughtfully as we protect our children and our families. We must insist on having the time and enough detailed factual information to understand the potential ramifications of this very significant influence on our present and our futures.

We must remember the consequences we are struggling with from prior "progressive" actions taken with too little foresight and understanding.

I respectfully ask that you, our allies in protecting our communities, do what you can to give us an opportunity to be smarter about the consequences of our actions, and decisions.

Sincerely, MaryAnne Schadler, DVM Santa Fe resident since 1984

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name

Marcia Morrow

Address (Optional)

Santa Fe, NM 87508 US

Email

snicks0332@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

This is way too big a commercial project to be located in the middle of 3 major residential areas- Rancho Viejo, Eldorado, and Rancho San Marcos. This is an important piece of open space and one that should be protected as such for all the reasons listed in the petition above.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name

Michael Rogers

Address (Optional)

2 Sombra Ct Santa Fe, NM 87508 US

Email

opermann.mr@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

This project, although necessary for sustainable energy, is slotted to be located in an area near to several thousand residents. This is a very important corridor for wildlife heading to and from the Galisteo Basin and acts as home for resident wildlife. The local fire departments (many volunteer) aren't trained or equipped to fight the type of toxic fires that are caused by the Lithium-ion battery storage units.

This project will negatively impact property values for those residents that neighbor the array and they will not benefit from the project. Please, don't let this go through. Thank you.

Name

Mark Young

Address (Optional)

47 Camerada Road Santa Fe, NM 87508 US

Email

myoungeld@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Because we are very concerned about the potential risk of fire and explosion due to a "thermal runaway". T We feel that this would degrade the quality of life for hundreds of area residents and negatively impact land values, property values, flora and fauna. To top that off,. currently there is no robust framework, nor are there regulatory requirements or standards in the US to evaluate health risks in case of Lithium-ion battery failure.

Additionally there is not the needed and trained Fire Departments to deal with such a potential fire. This will not benefits the Eldorado or other communities in any way!

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Ewan Young

Address (Optional) 1004 Calle La Resolana Santa Fe, NM 87507 US

Email ewan.young70@gmail.com

Phone (Optional)

(505) 660-8097

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

what environments, fire, economical or other impacts /risks does this project pose to surrounding residence like myself?

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Sharon Key

Address (Optional) Santa Fe, NM 87508 US

Email sharonkey42@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I am extremely concerned with the potential for fire and chemical exposure. This proposed solar complex is much too close to homes and will be in a very dry area where a fire would easily, rapidly spread and would need to responded to by local volunteer firefighters most likely lacking the specialized equipment and training needed to deal with lithium ion battery exposure. After learning of the past fires in similar complexes built by this same company in states such as ca and az, it seems that it would only be a matter of time for fires to occur here as well.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list. Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Kay Marshall

Address (Optional) 221 San Marcos Loop Santa Fe, NM 87508 US

Email ekaym13@hotmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I own land Rancho San Marcos and own horses, also Burrowing Owls, Peregrine Falcons and Prairie Dogs live and hunt these very lands they are wanting to use for solar.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Name Richard Martinez

Address (Optional) 58 Via Punto Nuevo Santa Fe, NM 87508 US

Email richard.martinez@sharpusa.com

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Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Deena Joseph

Address (Optional) Santa Fe, NM 87508 US

Email deenajo16@gmail.com

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Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name

Mary Anne Schadler

Address (Optional) 476 San Marcos Loop Santa Fe, NM 87508 US

Email supayas@juno.com

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MaryAnne Schadler, DVM Santa Fe resident since 1984

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Name Marcia Morrow Address (Optional) Santa Fe, NM 87508 US

Email snicks0332@gmail.com

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Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Michael Rogers

Address (Optional) 2 Sombra Ct Santa Fe, NM 87508 US

Email opermann.mr@gmail.com

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This project will negatively impact property values for those residents that neighbor the array and they will not benefit from the project. Please, don't let this go through. Thank you.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Charles Wright

Address (Optional) 96 San Marcos Loop Santa Fe, NM 87508 US

Email ctw4155@gmail.com

Phone (Optional) (505) 490-3259

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

This is an industrial scale power plant 1000 feet from a residential area. The battery energy storage system will have an experimental fire prevention system not tested at this scale and no fire suppression system. This is a dangerous proposition for several nearby communities.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name S Thompson

Address (Optional) 57 Camino Los Abuelos Santa Fe, NM 87508

Email thompson.online@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

The solar panels will cover a huge area within visible distance of our residential areas. It will be one big black hole, destroying any enjoyment of the environment.

The advantage is all for the developer without consideration for the surrounding enviornment nor the residents who live here and value our surroundings. (Why we chose to live here in the first place)

Its cheaper for energy companies to use our open spaces and agriculturally zoned land to take advantage of lower development costs.

It's cheaper for them and too costly to quality of life in the long run.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Leonard Burrows

Address (Optional) 214 Calle Galisteo Santa Fe, NM 87508 US

Email colesfishin@yahoo.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

US

My family lives in Rancho San Marcos and we enjoy the wildlife and panoramic views. We are also very concerned about fire issues. We are totally opposed to this massive solar farm. There is plenty of other land that doesn't impact so many people and animals.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Kristina Cetrulo

Address (Optional) 214 Calle Galisteo Santa Fe, NM 87508 US

Email cetrulo7@aol.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I live in Rancho San Marcos. I am deeply concerned about the impact this enormous solar farm would have on our land: financially, environmentally and physically.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Allison Peacock

Address (Optional) 117 SAN MARCOS LOOP SANTA FE, NM 87508 US

Email peacock.allison@gmail.com

Phone (Optional) (505) 501-1285

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

The fire danger exhibited by previous AES facilities is very concerning, especially due to the planned location. The two communities it will be built between have very little ability to fight fires, lacking in fire hydrants and insufficient fire fighting staff/resources. I am not against solar, I truly believe we need to use it as an energy source but this is not the right location for this facility. Please consider the lives, human and animal, that could be harmed by choosing this location.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Cindy Fuqua

Address (Optional) Santa Fe, NM US

Email cinfuq@msn.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. Preserving wildlife and open views

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Kim Nitschke

Address (Optional) Santa Fe, NM US

Email kim.nitschke@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I would like residents to be better informed of the consideration to install a utility scale solar farm in the scenic byway corridor. Is this a good fit for our community. Is there any benefit to the local community given power generation could be located anywhere on the PNM grid. This needs to be transparent. Replacing fossil fuel power generation with renewables sources is an important issue but this must be measured against site location and potential hazards that adversely impact the local community.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Nate Gallo Address (Optional) Santa Fe, NM US

Email mulga.nc@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. Climate resilience is imperative.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Thomas Trezona

Address (Optional) 138 San Marcos Loop, Santa Fe,NM 87508 Santa Fe, NM 87508 US

Email gerintrez@aol.com

Phone (Optional) (505) 204-8336

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

This solar power plant is huge and, as it is proposed, is to be located only 1000 feet from the RSM property line. This solar/power storage facility is just close to any community because it contains any number of little understood hazards to the community and the environment. It will

be bordered on three sides including Ranco Viejo, Eldorado and Rancho San Marcos not to mention the proposed housing development just west of the AIAI.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Gregg Hoffman

Address (Optional) P. O. Box 28100 Santa Fe, NM 87592 US

Email gahoffman2004@yahoo.com

Phone (Optional) (505) 780-5223

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

This proposed mammoth Industrial, 800 square acre, Solar Complex is to be located between the three large residential communities of Rancho Viejo, Rancho San Marcos and Eldorado. This Industrial Solar Plant does not fit the character or zoning requirements for the surrounding residential areas.

This Industrial Solar installation will negatively impact the irreplaceable character and vistas provided within our Open space National Scenic Byway.

I am concerned with the fire hazard potential posed by the 39 BESS battery storage containment units housing highly combustible Lithium-Ion batteries to be located in this Industrial Project. It is my understanding that some new untested technologies will be used in this project. This in essence makes our communities Guinea Pigs, while the contractor, AES Corp., discovers how the new technology will work. This Industrial project consisting of 84,000 lineal feet of 205,000 solar panels MUST NOT be approved. We hope that you will be able to help us with this very important matter. Respectfully Yours, Gregg A. Hoffman

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Theresa Mendoza

Address (Optional) 137 San Marcos Loop Santa Fe, NM 87508 US

Email mendoza.theresa1234@gmail.com

Phone (Optional) (619) 820-3770

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

We support responsibly sited alternative energy. Utility scale solar plants should be appropriately sited where the many dangerous incidents that can and have occured can be properly addressed without endangering residents, our neighborhood middle school or our open spaces which are part of the County's land use plans. Current regulations only address 'smaller community solar farms' or large major public utilities. Utility scale solar plants which fall in the middle range of power production but are hundred of acres in size, and are sited within 500-1000' of residential homes do not have the kinds of regulations that would offer protection to adjacent neighbors in case of thermal runaway, pollution of the aquifer, devaluation of property, wildlife endangerment and a loss of quality of life.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Lauren Nitschke

Address (Optional) Santa Fe, NM US

Email lauren.e.nitschke@gmail.com

Phone (Optional) (505) 310-2896

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. The safety of residents and the environment always takes priority.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Catherine Babbitt

Address (Optional) Santa Fe, NM US Email catherinedbabbitt@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I live in Eldorado and am concerned about disruption to wildlife, the very real danger of fire associated with the battery storage units, and the size of this proposed project.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Kim Kaufman

Address (Optional) Santa Fe, NM 87508 US

Email khk123@hotmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Please consider the safety of the area residents first and foremost over that of an outside entity (AES and it's partners). A potential explosion and wild fire in an area known for high winds is a high risk factor that could lead to an under prepared evacuation causing a hardship to so many. This project also impacts the surface water and adjacent aquifers that we rely on. New Mexico is known for scenic byways and wildlife corridors, this needs to be preserved for those who live here and those who come to visit Santa Fe. Santa Fe County does not need to have such a high liability on their hands with an industry that remains unregulated.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list. Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Judy Perkins

Address (Optional) 10 Silver Rock Rd Santa Fe, NM 87508-1362 US

Email judithperkins@comcast.net

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Moving ahead without guidelines and rules that regulate large solar installations is fool-hardy and will have unintended consequences. Locating such a large industrial solar commercial plant between three large residential areas is unwise and will also negatively affect wildlife. Locating this huge solar power plant will have negative ramifications for many generations to come.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Name Katherine Bilton

Address (Optional) 131 E Chili Line Rd Santa Fe, NM 87508 US

Email kmbilton@gmail.com

Phone (Optional)

(505) 471-3227

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Concerns for safety and security of desert area and communities surrounding the proposed site. Building an industrial solar farm on the high desert struggling under continuing severe drought conditions is irresponsible. When car manufacturers, airlines and others routinely recall and must mitigate damages from lithium battery fires and risks, it is unconscionable to put profit of over community well being. The technology is not yet safe.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Patricia Phyfe

Address (Optional) 201 San Marcos Loop Santa Fe, NM 87508 US

Email tinktwins@aol.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I've studied this issue and I'm concerned about the safety of the batteries, the upkeep of the area, wildlife, and the fact it is being built so close to homes, mine included.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Sandra Nitschke

Address (Optional) 17 Serena Road Santa Fe, NM 87508 US

Email thenits5@gmail.com

Phone (Optional) (505) 577-0260

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

This looks like it is to be a utility sized solar farm. My concerns lay in the large scale battery storage facility In a residential zone, not industrial... and the potential fall out of fire danger to the surrounding areas as the the battery storage containers are largely untested at this scale. Lithium batteries pose a threat to the environment and local people, livestock and fauna and flora of this New Mexico county area as they will require extraordinary measures and copious amount of water should a fire spontaneously start. This area in Santa Fe county is I'll equipped to deal with this situation. A fire could be catastrophic for the populous of this area and Santa Fe residents and county.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Michael Knarr

Address (Optional) 47 ENCANTADO LOOP SANTE FE, NM 87508 US

Email michaelknarr@comcast.net

Phone (Optional) (130) 392-9483

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Lithium Ion batteries of the numbers this project requires close to two residential developments with mostly dry grass as ground cover is at best unwise. Surely something could be done to mitigate the risk of fire reaching homes nearby is in order, either a fire-retardant berm or relocation of the project should be required.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Edwenna Earnheart

Address (Optional) 4350 San Benito St., Unit A Santa Fe, NM 87507 US

Email edwenna@comcast.net

Phone (Optional) (505) 557-5853

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I am a landowner in the Rancho San Marcos subdivision. I am concerned about the Industrial solar plant being situated right next to this residential area and the Turquoise Trail school. Although I certainly support alternative energy projects, I believe that the size of this project should require that it be installed in an area that is not adjacent to large residential areas. The risk of fire & explosion is a legitimate risk that I am concerned about. This is a private partnership with Rancho Viejo and is inappropriate for this location. This facility should be relocated, and I request that the Commission adopt regulations for these type of installations before approving them.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Scott Seldin Seldin

Address (Optional) 4 Mariposa Road Santa Fe, NM 87508 US

Email scottseldin@comcast.net

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

We who cherish the open lands we see for miles and miles would have our reason for living here destroyed by "a massive 800 acre, 96 megawatt Industrial Utility Scale Solar Power Plant + 48 megawatt Lithium-ion Battery Energy Storage System (BESS) placed in 39 large containers."

This would "increase the risk of fire and explosion due to a "thermal runaway ... degrade the quality of life for hundreds of area residents and negatively impact land values, property values, flora and fauna. Currently there is no robust framework, nor are there regulatory requirements or standards in the US to evaluate health risks in case of Lithium-ion battery failure."

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Sandra Seldin Seldin

Address (Optional) 4 Mariposa Road Santa Fe, NM 87508 US

Email sandraseldin@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

The size of this project ...numbers of lithium ion batteries and risk of explosions and/or fires to the surrounding areas.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Joyce Bustos Address (Optional) 330 SAN MARCOS LOOP Santa Fe, NM 87508 US

Email joyce.bustos@outlook.com

Phone (Optional) (505) 690-8423

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

AES is the same company that built the facilities in Arizona that exploded, and one burned for 10 days before firefighters could get near enough to fight it. If this happens here in Santa Fe, at the proposed location, will we have to evacuate from Rancho San Marcos, Rancho Viejo, Eldorado, the movie studio, the jail, and the Penitentiary of NM? Will our property value decrease while our homeowners insurance increase? Will be able to sell our house in the future as we down size or family? These are my concerns as I live in the Rancho San Marcos sub-division. Also, remember that Highway 14 is a designated Scenic Byway and I don't believe that this project is conducive to this designation.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Name Claudia Daigle

Address (Optional) 4 Conchas Place Santa Fe, NM 87508 US

Email cdaigle2003@comcast.net

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

This issue is very important to me as I cannot understand why Santa Fe County would agree to such an installation in such a location that will affect my life and so many of its constituents'

lives and properties, and not even provide solar energy for New Mexico, as it is all going elsewhere. New Mexico is a huge state with lots of open land, why this particular space? I can see the pictures now in real estate magazines of beautiful homes next to such an installation. Not quite what people think about when considering the purchase of a home in New Mexico. Who will want to buy and what kind of a state would create such an abomination near large residential areas? Of course, it will mean lower property taxes. And god forbid if there is a fire or health disaster, what will be the costs? Such obvious questions that the County doesn't seem to have bothered to consider. AES has a long history of environmental infractions to air, fire, and ground water, which would be right next to aquifers we get our drinking water from that Santa Fe County doesn't appear to have taken into consideration, as it appears to be about money and not much about the environment or quality of life for people or the animals that live in the area whose lives will be forever changed. Santa Fe County can do better, but will it?

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Yarrott Benz

Address (Optional) 13 Ladera Road Santa Fe, NM 87508 US

Email ymbenz@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I am concerned as a resident of Eldorado, whose house looks straight out to the area in question. I worry about the safety of the battery containers and the potential for causing disastrous fires. I worry about the new power lines' invasion of the landscape and their potential to cause fires during winds. I worry about the scarring of the land that we have cherished since moving here.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Marilynn Weaver

Address (Optional) 56 Herrada Rd Santa Fe, NM 87508 US

Email mommemuse@gmail.com

Phone (Optional) (720) 266-3223

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. Too close to neighborhoods pose danger,

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Michael Hemperley Address (Optional) 18 Calle Maria N Santa Fe, NM 87508 US

Email sfhemperley@yahoo.com

Phone (Optional) (505) 695-5595

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. Resident of Rancho San Marcos and project in my backyard

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Stacey Williams

Address (Optional) 36 Cerrado Loop Santa Fe, NM 87508 US

Email slwilliams@iadllc.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Though I'm in favor of buying electricity produced from zero-emission, renewable sources, I OPPOSE this project for the following reasons:

1) Safety concerns about the BESS. No detailed information is publicly available about the specific battery model or the Battery Management System (BMS).

2) Though it is to be developed on private land, this utility-scale renewable energy project should be designated a development of county-wide impact. The scale and scope, including elimination of open-space and impacts on wildlife, as well as the temporary construction and visual impact to all citizens who live near or even pass by the side, make this project significant enough to warrant considerable public input and oversight.

3) The power produced by the project will be sold, at a profit, by the developer (AES) to a forprofit, public utility (PNM) with no requirement that it specifically supply PNM's customers in the vicinity (i.e., the power produced will be added to PNM's transmission grid and can be sold to ANY customer, including those who do not face the permanent negative impacts and ongoing risk.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Janet Persons

Address (Optional) Cerrillos, NM 87010 US

Email janet.persons@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

If the issue is to get PNM to comply with a green-energy mandate, why not follow France in legislating that all parking lots be covered 80% with solar panels? Of what benefit is this commercial, industrial solar farm to the community in which it is proposed to be located? The area is definitely a wildlife corridor, what effect will it have? Has that been studied? Wouldn't it be more efficient to put the power generated back into the grid than to store it in batteries? We need to look at electrical infrastructure, and I don't mean by private companies like AES and Avangrid. Please think about long-term environmental effects on flora and fauna in rural areas, when locating panels in urban paved areas is more sensible financially and environmentally.

https://www.cnbc.com/2022/12/03/parking-lots-becoming-as-important-as-cars-in-climate-change-efforts.html

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Rebecca Walding

Address (Optional) Santa Fe, NM US

Email studio50@swcp.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I do not think that this is a viable place to put an industrial solar power plant. This is not an industrial area. There are homes and a school in the area. There are wonderful wildlife corridors here. We are still in drought and our future is already fire-ridden as it was last summer. A fire here (which is noted in a number of other places that AES has plants, is a strong possibility) would be devastating very quickly. To make matters worse that energy is not even locked into our state or specifically for the residents taking the risk. I love solar. I am a huge believer in it. But I am not in favor at all of putting solar plants in residential areas... no matter how it is zoned. JUST SAY "NO!"

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Name Victoria Warner

Address (Optional) Santa Fe, NM 87540 US Email filmandvideoart@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

The current situation is working and implementing the risk of what may happen or not happen to the battery and power containers in 20 years is the main concern. The property value of the surrounding homes will diminish, the desire to live in the Rancho Viejo and far ElDorado will decrease along with the desire to enjoy the views... While I am not exceedingly well versed on the entire operation and proposal, my fear of long-term effects is prevalent. Keep in mind that part of what makes Santa Fe and it's surrounding areas desirable is the beautiful scenery, healthy landscape and clean air. Comparing this to the abandoned mines and other projects that appeared attributable at first, we are still dealing with the spoil and refuse today... Are we well prepared for another company to close out on us and leave us with the harmful remnants?

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Raymond Singer

Address (Optional) 36 Alondra Road Santa Fe, NM US

Email ray.singer@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. Concerned about safety and wildlife

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Paul Romero

Address (Optional) 19 Called Maria N. Santa Fe, NM 87508 US

Email promero661@gmail.com

Phone (Optional) (505) 490-2877

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. Industrial size solar plant should not be placed near residential areas.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Margaret Loose

Address (Optional) 3 Dulce Rd. Santa Fe, NM 87508 US

Email mloose4@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

While I believe it is urgent to convert our energy sources away from fossil fuels, we should be as careful as possible to protect homes and wildlife from the blight and major fire risks associated with utility-scale solar farms. Despite AES's assurances of safety, many large, recent, devastating wildfires in Arizona and NM have directly resulted from such large-scale solar plants. People like me bought their homes in rural areas not because we love the inconvenience of being out of town, but because we treasure the undeveloped state of nearby lands more than convenience. Please, please require developers to site such giant, demonstrably dangerous utilities far from where they pose immediate peril of fire to homes, lives, and delicate ecosystems.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Gijs Van oort

Address (Optional) Santa Fe, NM US

Email gvanoortboerne@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Concerns about fire danger due to battery storage malfunction. Fires can reach residences in matter of minutes. Local fire departments are not prepared to handle these chemical fires. AES has indicated that proper protective measures are coat prohibitive. So the dangers outweigh the benefits to local residents as the yields energy is dumped into the grid and will be resold at market rates or higher.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Edward Velie

Address (Optional) 60 Verano Loop Santa Fe, NM 87508 US

Email evelie@aol.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. This project could be detrimental to both animal and human welfare.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name ELIZABETH Horigan

Address (Optional) 72 CAMINO DIMITRIO SANTA FE, NM 87508-9123 US

Email alvie101@hotmail.com

Phone (Optional) (505) 466-1240

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Fear of fire and other hazards. Disruption of wildlife. Why with so much open land do they want to put it in such close proximity to a populated area.

I am a senior and my home is my insurance for the future. I don't want this installation because it could effect property value.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Mary McGivern

Address (Optional) 40 Vista Estrella S. Santa Fe, NM 87540 US

Email marymcgivern@me.com

Phone (Optional) (303) 912-8250 Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I live close to this project. I am concerned not only about battery fire, but also concerned for the wildlife in our area.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Marlene Barnes

Address (Optional) 45 Camino Costadino Santa Fe, NM 87508 US

Email mrlnbrns43@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

This facility CANNOT be allowed so close to residential communities! The very real possibility of cascading thermal runaway involving the tremendous number and size of the lithium ion batteries proposed not only puts nearby residents at grave risk of wildfires, but it also endangers all of Santa Fe. Any such installation should be place FAR from communities that stand to loose everything if unanticipated fires or explosions, such as those that occurred in 2 locations in Arizona and several other locations worldwide. Here is an account of one such accident in Australia: "The 10MW Dorman grid storage facility smoldered from 18 April until 21 April and HAZARDOUS gas leaks forced the firefighters to EVACUATE nearby residents, and use a robot to open the building's door before it could be safely brought under control." Another extremely hazardous incidents occurred in an Australian hospital which involved fires and toxic smoke. What can our legislators be THINKING to even consider this?

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Holly Barton-Lopez

Address (Optional) Balsa Rd Santa Fe, NM 87508 US

Email bartonlopez@hotmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

This is a habitat for so much life that you can't possibly choose to destroy as we search for all the ways we need to preserve life on this planet. And think about how that glass would reflect, fire danger, the winds. Put solar panels over large parking lots that already exist.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Ruben Mendoza Address (Optional) 137 San Marcos Loop Santa Fe, NM 87508 US

Email rhmendoza40@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

We support alternative energy, including solar. However, a 96MGW solar plant with 39 Lithiumion battery containers has no place so close to residential areas and schools.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Cindy Hoffman

Address (Optional) 64 San Marcos Loop Santa Fe, NM 87508 US

Email cindyphoffman@yahoo.com

Phone (Optional) (505) 670-6708

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I live in a wonderful rural area of Santa Fe County. From my house I can see all of the mountains to the north, west, east and south. We moved here in 1997 because of the views and the wildlife. There are fewer and fewer areas in the Santa Fe Area like Rancho San Marcos where we live. After hearing both sides of this topic, I feel that having this large solar farm will destroy much of the character of Hwy 14. I know the state and the county are pushing for solar, and I understand. I am not against solar but feel strongly this is being forced upon us. This solar farm and others closely located near Santa Fe will destroy what Santa Fe and the county is all about. The electricity from this project will not be used in

NM but in other states. Why? PNM wants to sell power to other areas and I am sure nothing will change with our PNM bill. Please consider all options regarding our neighborhood. We love NM and do not wish for things change because of money and greed.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Adam Sklar

Address (Optional) 117 San Marcos Loop Santa Fe, NM 87508 US

Email adamjsklar@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. I am very concerned about the risk of fire and the impact of the panels on the delicate grasslands

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Charles Norman

Address (Optional) 213 San Marcos Loop Santa Fe, NM 87508 US

Email cenorman@ptiassociates.net

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

It is a fire hazard, it degrades the beauty of nature, and it degrades home values. Solar is fine, but we have lots of wide open space in the state...there is no need to build a power plant adjacent to people's homes.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Chris Waring

Address (Optional) 213 San Marcos Loop Santa Fe, NM 87508 US

Email chris@vetris.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. We are concerned about the possibility of catastrophic battery fires resulting from this project

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name DEBORA WILLFORD

Address (Optional) 171 SAN MARCOS LOOP Santa Fe, NM 87508 US

Email debora@wiresolnm.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

This solar utility is not viable in the San Marcos corridor the threat of lithium fires is great and not easily defendable. This project would be better placed in another location to keep our residents safe.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Elmer Bustos

Address (Optional) 330 San Marcos Loop Santa Fe, NM 87508 US

Email jelmer.bustos@outlook.com

Phone (Optional) (595) 795-3150

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

This project is proposed to be built within close proximity to our subdivision which may have an adverse impact on the residents.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Joyce Bustos

Address (Optional) 330 San Marcos Loop Santa Fe, NM 87508 US

Email joyce.bustos@outlook.com

Phone (Optional) (505) 690-8423

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. We live in the sub-division that is right next to the proposed location for this project.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Name Rita Cisneros

Address (Optional) 161 San Marcos Loop Santa Fe, NM 87508 US

Email ritacis825@yahoo.com

Phone (Optional) (805) 208-1783

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. Safety concerns to comunity.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Joseph Tiano

Address (Optional) 229 Calle Galisteo Santa Fe, NM 87508 Email jct@cnsp.net

Phone (Optional) (505) 660-4100

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Very concerned about the Bess units and implications of ground water conamination, fires, the ecosystem.... Not to mention it spoils our views. We are not against solar. We already have it. However, this farm needs to be located in a less residential area.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Paul Fink

Address (Optional) 10 Redondo Ct Santa Fe, NM 87508 US

Email paulfink01@sbcglobal.net

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. See text above

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

US

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Karen Karen Herrera

Address (Optional) 21 Brilliant Sky Dr Santa Fe, NM 87508 US

Email kherrera9045@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

The decommissioning aspect is critical. Power companies need to incorporate this into their overall plans. Regulations requiring this make sense.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Kay Marshall

Address (Optional) 221 San Marcos Loop Santa Fe, NM 87508 US Email ekaym13@hotmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I own property that is right next to the proposed solar farm, concerned about fire, lithium leeching into ground, long term what happens to panels and batteries how to dispose of. Impact on our wildlife, hunting grounds for raptors, wildlife corridor.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Name TODD Brown

Address (Optional) PO Box 131 / 17 Waldo St Cerrillos, NM 87010 US

Email brownp52@yahoo.com

Phone (Optional) (505) 438-3008

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. This site of 800 acres is just too large for the area with many residents living around it.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Phyllis Turner

Address (Optional) 214 San Marcos Loop Santa Fe, NM 87508 US

Email zoeyclue@aol.com

Phone (Optional) (505) 660-5040

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

This industrial scale solar facility with proposed 415,272 lithium ion batteries, which are at risk of fires and thermal runaway, is way too close to the residential areas of Ranch San Marcos, El Dorado and Ranchi Viejo, as well as the Turquoise Trail Charter School, and Santa Fe Count Adult Dention Facility.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Naomi Harrison

Address (Optional) 15 Ladera Rd Santa Fe, NM 87508 US

Email

ngharrison1@gmail.com

Phone (Optional) (505) 204-3565

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. I'm concerned a fires spreading to nearby residential areas and very quickly getting out of

control.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Janine Lehmann Lehmann

Address (Optional) 17 Ladera Road Santa Fe, NM 87508 US

Email jdlgraphix@comcast.net

Phone (Optional) (505) 660-1457

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Given the proximity of this facility to residential neighborhoods and the poor track record of AES facilities in Arizona, I am very concerned about the danger of fire.

I am a homeowner in Eldorado. In the event of an explosion and subsequent fire, our volunteer community fire departments would in no way be equipped to handle such an event. The County must hold public hearings regarding this matter.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Lynn Archer

Address (Optional) 79 Encantado Loop Santa Fe, NM 87508 US

Email four.lynnarcher@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I believe the location of both the sub station and power lines are dangerously close to a residential area that only has a volunteer fire department and is very susceptible to wind-driven wild fires. I also think it will impact the animal life in the area proposed. It will be very close to my home, and will interrupt the wonderful view of the landscape that I deliberately wanted to enjoy when I built my home in 1994. More importantly I know there are other means of employing solar energy that don't interfere with the environment or tear up the earth to get at precious metals and ores.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name John W Bing Bing

Address (Optional) 24 GAVILAN RD Santa Fe, NM 87508 US

Email johnbing@gmail.com

Phone (Optional) (505) 428-0960

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

The greatest danger from this very large industrial solar installation will be fire. A back-of-theenvelope calculation of arrays of this size suggests that there may be two-to-three fires per year in the solar installations alone, not including the BESS installations. With the prevailing western winds, fires will be driven toward Eldorado.

If the installation is to be built, there must be contractual guarantees (not promises) that the following be secured:

--A bond of sufficient size from the builder sufficient to mitigate damage to lives and property from an out-of-control fire. A million-dollar bond would likely be insufficient. The bond (if not used to pay damages) would be repaid to the builder when the facility is closed and inspected by state and local authorities to assure that the land will has been returned to its original state.

--A grant from the builder to local fire departments to purchase additional equipment and train and employ additional personnel. This grant should be renewed every five years for training and equipment, where needed.

--A contractual guarantee that any subsequent owners of this facility be required to meet these and any other safety requirements that Santa Fe County and other regulatory authorities deem necessary.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Richard Eikelenboom

Address (Optional) 227 San Marcos Loop Santa Fe, NM 87508 US

Email richard@ifscolorado.com

Phone (Optional) (303) 548-0191

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. Who ever thought this was a proper location???

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Selma Eikelenboom-Schieveld MD PhD

Address (Optional) 227 San Marcos Loop Santa Fe, NM 87508 US

Email selma@ifscolorado.com

Phone (Optional) (303) 548-5225 Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

If the County approves this project, they are putting the lives of residents in Rancho Viejo, Eldorado, Rancho San Marcos, the first responders, the children and staff at de Turquoise Trail Charter School in danger, which is unacceptable.

Relocate to some landfill or abandoned coal power plant, but not near three residential areas.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Name CARRIE QUADE

Address (Optional) 466 San Marcos Loop Santa Fe NM 87508 Santa Fe, NM 87508 US

Email carriequade@me.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. While I support solar farming, I believe this particular farm is not of appropriate scale to the area.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Ross Lockridge

Address (Optional) POB 22, Cerrillos, NM 87010 Cerrillos, NM 87010 US Email murlock@raintreecounty.com

Phone (Optional) (505) 471-9182

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Although solar is the direction we need to be heading for, but regulation is needed: --large private commercial facilities must be located with great care because of the potential negative impacts upon NM view sheds, plus the inherent potential of toxic fire & explosions that components of such facilities often have. Documentary evidence displays support of this problem.

--Land along the Turquoise Trail NSB is being targeted.

--The County (& perhaps the State) should enact a MORATORIUM giving time to develop regulations that include location and safety.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Name Valerie Alarid-Martinez

Address (Optional) 116 Rancho Viejo Blvd Santa Fe, NM 87508 US

Email valarid007@hotmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

There is a fire hazard concern. The land is dry and arid and the risk of potential fire is great.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Valerie Alarid

Address (Optional) 58 VIA PUNTO NUEVO SANTA FE, NM 87508 US

Email valarid007@hotmail.com

Phone (Optional) (505) 757-6209

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. Fire in our area is a huge concern.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Carol Sanguinetti

Address (Optional) 1 Domingo PL Santa Fe, NM 87508 US Email csang@mail.com

Phone (Optional) (928) 300-6013

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I live in Eldorado and what I understand is that Eldorado in particular is most subject to fires if they were to occur with this installation. I have solar on my home, I am not against Solar, it needs to be responsible solar.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name David Tiemeyer

Address (Optional) 35 Tetilla Rd. Santa Fe, NM 87508 US

Email dtiemeyer@aol.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

While I am pro-renewable energy and walk my talk by having roof mounted solar panels on my home, the scale of this 800 acre array is way beyond what is appropriate for mixing with three adjacent residential communities.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list. Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Debra Meyer

Address (Optional) 7 Balsa Rd Santa Fe, NM 87508 US

Email dmeyerdesign123@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I've lived in New Mexico since 1978 and I currently live in the community of Eldorado at Santa Fe. Our community has been affected by the long drought and we are always concerned about a grass fire or an accident of WIPP shipments on HWY 285. There are many communities along Hwy 285 heading towards Lamy and this highway is our only escape route in an emergency. I'm extremely concerned about this proposed project and how it could have a negative impact on communities close to the proposed site and those that might be in the path of an out of control wildfire.

How will this project impact our wildlife, resources and beautiful sunsets? Santa Fe is very dependent on tourist dollars so how will this impact tourism? How will this project impact our property values? I'm all for solar energy development but there needs to be more research done to understand what the safety issues would be for communities near the proposed project and what would be the result of a possible human error or a wildfire. New Mexico is still suffering from the worst wildfires imaginable so why would we want to allow this project to be placed so close to communities? What is the real reason that these developers have decided on this location?

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Marijane Mercer

Address (Optional) 1867 Camino Lumbre Santa Fe, NM 87505 US

Email ashisha1@icloud.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

To summarize, reality is that this proposed large scale Industrial solar project could easily be relocated 20 miles east, where it is hundreds of miles downwind from any major population area. Where the local county would also benefit much more from the taxes the facility would provide. As far as the Industrial scale battery storage facility, let us not contribute to the continued worldwide environmental issues. Let that lithium go into batteries deployed in source that are truly fighting climate change, not merely lining the pockets of individuals and corporations that are already hoarding wealth.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Cynthia DaCosta

Address (Optional) 50 Leaping Powder Road Santa Fe, NM 87508 US Email cynthiasd@nets.com

Phone (Optional) (505) 501-1859

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. Health risks. Fires, degradation of landscape. Destruction of flora and flora.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Matthew Higginbotham

Address (Optional) 5 Carlito Rd Santa Fe, NM 87508 US

Email higgiart@hotmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

reflective issues especially at sun up and sun down would be an issue. Fire potential also a concern. I propose moving the facility 20 mi to the east to not impact residents. . i believe in alternative energy just not such a huge facility in my backyard.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list. Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Susannah Jackson

Address (Optional) 42 Alondra Road Santa Fe, NM 87508 US

Email susannaja@gmail.com

Phone (Optional) (650) 494-6595

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Far too close to residential area and nature preserves. Danger of fire destroying neighborhoods. Pollution. Light pollution. Endangernment of people and animals. Impact on attractiveness of Santa Fe as a tourist destination.

This is short sighted and irresponsible.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Stewart Breslin

Address (Optional) Santa Fe, NM 87508

Email spbreslin@comcast.net

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Given the vast amount of open space in this state it seems to me this project would be better if it were located away from residential areas. An industrial scale solar power plant will be an eyesore and a scar on our magnificent landscape. Clean solar power is necessary to combat climate change but this is not the right location!

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Barbara Dossey

Address (Optional) 878 Paseo Del Sur Santa Fe, NM US

Email barbara@dosseydossey.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. The proposed AES Rancho Viejo Solar Project would be high risk for SF residents and also destructive to the environment and quality of the city. Move it somewhere else in the state, not in this sacred area.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

US

Name Gordon Dveirin

Address (Optional) Santa Fe, NM 87574 US

Email potentialgoog@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. Policy should balance concern for nature's ecology with care for the social ecology of our communities. Strive for harmony!

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Danette David-Richardson

Address (Optional) 38 Calle Alexia Santa Fe, NM 87508 US

Email danette.neela@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I am opposed to this size of a solar project so close to Santa Fe. I am deeply concerned with the potential for fire potential with such powerful lithium storage batteries.

As a 45 year resident of Santa Fe County and the Eldorado area, I am also concerned by the visual impact and reflection from the panels.

We believe in solar, we have Solar on our roof but this project is not good so close to town.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Ron Greenberg

Address (Optional) Santa Fe, NM 87508 US

Email greeny105@gmail.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

In addition to the above mentioned concerns, there is the issue of this massive solar farm creating a heat island. We have enough environmental issue without adding another one,

What is the impact on the wildlife as well. just look up research on the heat that is generated by the panels...multiply what it says about urban panels by 800 acres.

"While the black surfaces of solar panels absorb most of the sunlight that reaches them, only a fraction (around 15 percent) of that incoming energy gets converted to electricity. The rest is returned to the environment as heat."

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Lisa Burns Address (Optional) Santa Fe, NM US

Email mulachulasf@aol.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act. I think more study into the fire dangers of this type of industrial solar should be considered.

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

Name Sue Garfitt

Address (Optional) 4 Abanico Rd Santa Fe, NM 87508 US

Email wesellsantafe@comcast.net

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I am a proponent of solar and renewable green energy, but I am also extremely concerned to maintain the habitat and wildlife migration corridors remaining in the lands surrounding Santa Fe and surrounding villages including my own (Eldorado)

Keep Me Informed I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list. Sent from West Gardner Solar Project - Concerned Citizens for Responsible Solar Energy

I have just become aware of the proposed solar facility proximal to Eldorado. I am concerned that the above ground transmission lines will be directly in the viewshed of our home, looking west.

I do not think it is fair or appropriate that such an industrial installation should foul our views, especially since our community has taken great pains to keep utilities underground and out of sight, where they belong.

Also, the area where the solar facility will be placed has for years been discussed only as an area for residential development with large lot sizes. When did the zoning change?

I received some cryptic information from Eldorado showing only the most primitive outline of what is being proposed, and that is no way adequate to answer questions about spoiling views, producing heat, the fire danger of such an enormous amount of lithium, or any other of a host of questions that should be answered befor this project goes forward.

How can I get more information about how far along this whole process is, what the visual impact will be, what risks are posed for neighboring properties, how maintenance will be achieved without impacting wildlife, whether dust will be produced during maintenance, what is the safety record of the company that will develop the project, and many other questions?

Without more information, I am firmly opposed to a potential eyesore that would adversely affect property values, generate fire risk, and waste solar production using cenntralized production that requires inefficient transmission, rather than deploying much more efficient distributed production.

How can I get more information about this alarming proposal?

Thank you,

David Coulson

David Coulson dcoulson@cybermesa.com

505.466.1624 505.603.4787 Dear Penny,

I am writing to you concerning the AES Corporation Conditional Use Permit. I feel that this corporation should be granted "Developments of Countywide Impact" status. I feel that this status will allow this project to be considered on it's merits and avoid hyperbolic angst about fantasy issues. This recognized "Not In My Back Yard" tendency to resist change is understandable but misguided.

I personally have installed a photovoltaic array at my home and I feet that it is one of the best investments that I have made for myself and my daughter's generation.

Many people in our extended Eldorado community have environmental values. But when NIMBYism raises it's head it is small minded.

Please feel free to contact me if you like,

Frank Kilmer Eldorado resident for six years 505 780-1203 Hello Ms. Green, thanks for taking my comments, a couple of them here.

1) I live on the north Encantado Loop in Eldorado which interfaces directly with Rancho Viejo across the street. The lithium battery storage unit(s), one of which is proposed to be situated very close to Encantado Loop is most concerning. Lithium battery storage should be zoned industrial. 1,000ft. is less than 1/5th of a mile- is way too close to a residential area.

2) The huge scale of this project and its environmental impact, so close to residential property is disconcerting. The scale of this project should be smaller.

Thank you Debra Link 52 Encantado loop

Dear Ms. Hansen

My husband and I are writing this joint letter because we <u>vehemently</u> oppose the placement of a utility-scale solar farm in such close proximity to residential communities. The fire danger is very real and very frightening, especially in this extremely dry, windy climate.

Large corporations have a way of emphasizing only the benefits of their proposals while <u>hiding factual dangers</u> to humans, wildlife and the environment.

We certainly do not oppose solar energy, but this huge industrial installation with thousands of highly volatile ion-lithium batteries and the prospect of thermal runaway could turn Eldorado, Rancho Veijo, Rancho San Marcos and possibly all of Santa Fe into a charred ruin like Paradise, CA which was also in a drought-prone, windy landscape. The proposed location for this solar farm <u>could not be more inappropriate</u>.

We oppose this project and feel that the conditional use permit must be denied.

Thank you, Marlene P. Barnes William F. Barnes 45 Camino Costadino Santa Fe, NM 87508 To Whom It May Concern,

I've lived in New Mexico since 1978 and I currently live in the community of Eldorado at Santa Fe. Our community has been affected by the long drought and we are always concerned about a grass fire or an accident of WIPP shipments on HWY 285. There are many communities along Hwy 285 heading towards Lamy and this highway is our only escape route in an emergency. I'm extremely concerned about this proposed project and how it could have a negative impact on communities close to the proposed site and those that might be in the path of an out of control wildfire.

How will this project impact our wildlife, resources and beautiful sunsets? Santa Fe is very dependent on tourist dollars so how will this impact tourism? How will this project impact our property values? I'm all for solar energy development but there needs to be more research done to understand what the safety issues would be for communities near the proposed project and what would be the result of a possible human error or a wildfire. New Mexico is still suffering from the worst wildfires imaginable so why would we want to allow this project to be placed so close to communities? What is the real reason that these developers have decided on this location?

Thank you for listening, Debra Meyer

Name

Katherine Bilton

Address (Optional)

131 E Chili Line Rd Santa Fe, NM 87508 US

Email

kmbilton@gmail.com

Phone (Optional)

(505) 471-3227

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Concerns for safety and security of desert area and communities surrounding the proposed site. Building an industrial solar farm on the high desert struggling under continuing severe drought conditions is irresponsible. When car manufacturers, airlines and others routinely recall and must mitigate damages from lithium battery fires and risks, it is unconscionable to put profit of over community well being. The technology is not yet safe.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Name

Judy Perkins

Address (Optional)

10 Silver Rock Rd Santa Fe, NM 87508-1362 US

Email

judithperkins@comcast.net

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

Moving ahead without guidelines and rules that regulate large solar installations is foolhardy and will have unintended consequences. Locating such a large industrial solar commercial plant between three large residential areas is unwise and will also negatively affect wildlife. Locating this huge solar power plant will have negative ramifications for many generations to come.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Name

Patricia Phyfe

Address (Optional)

201 San Marcos Loop Santa Fe, NM 87508 US

Email

tinktwins@aol.com

Please tell us why this issue is important to you. This explanation will help our elected officials better understand why it is essential that they act.

I've studied this issue and I'm concerned about the safety of the batteries, the upkeep of the area, wildlife, and the fact it is being built so close to homes, mine included.

Keep Me Informed

I would like to be added to the Santa Fe County, New Mexico Citizens for Responsible Solar email list.

Dear Mr Jose Larrasagna.

I saw in the county's website that you are in charge of Community Solar installations.

As noted above I want to address the proposed AES solar installation.

First, I need you to know that when we moved to Eldorado in 2005 the first thing we did is to install solar panels on our roof.

For years I was convinced that solar electric, with or without batteries, was necessary to mitigate Global Warming.

However, the more I learned about it the more my original belief began to change.

It happens that solar electric, more specifically lithium-ion batteries, also constitute an extraction industry system akin to fossil fuels.

Numerous materials need to be mined to build solar panels and batteries.

The following minerals are needed for the production of solar panels:

- Aluminum
- Cadmium
- Copper
- Gallium
- Indium
- Lead
- Molybdenum

- Nickel
- Silicon
- Silver
- Selenium
- Tellurium
- Tin
- Zinc

The following minerals are needed to make lithium-ion batteries:

Cobalt

Chromium

Cobalt

Vanadium

Manganese

We know very well what happens to ground water, to rivers, to the seas, to the air we all need to exist and to our health, when we extract oil and gas, fossil fuels, from the earth.

But we have not been informed what happens to Life on Earth when we extract the 19 minerals above.

We also do not take into account the fact that fossil fuels are used almost at every phase of extraction, production, transportation, installation and maintenance of solar installations and their batteries. So, it turns out that the green energy produced by solar panels, including the batteries, is not so green.

In fact solar energy is as damaging to Life on Earth as fossil fuel extraction.

Both continue to add CO2 to our atmosphere and both contribute to Global Warming.

In addition, the AES project is not going to provide the so called green energy to county inhabitants but it's energy is going to be sent into the grid and only PNM will know where it will go.

The owner of the land will be making good money and so will the county, on taxes.

And tell me, please, how I and all the inhabitants of the county will benefit from this project?

And, how is this project, taking into account the information above, is helping to reduce, or even mitigate, Global Warming?

I have given above a minimum of information about this extraction industry.

You can do your own research.

You may begin with this video:

https://www.google.com/search?q=videos+of+cobalt+extraction +in+the+democratic+republic+of+congo&client=firefox-b-1d&sxsrf=AJOqlzVUSDy55SayNIvYqjwcbSRxs4SrdQ%3A167 5137984280&ei=wJPYY9jgEPuiqtsPxfaU4Ag&oq=videos+of+ cobalt+extraction+in+the+democratic+republic+of+&gs_lcp=C gxnd3Mtd2l6LXNlcnAQARgAMgUIIRCgATIFCCEQqwI6Cgg AEEcQ1gQQsAM6BAgjECc6EAguELEDEIMBEMcBENEDE EM6CwguEMcBEK8BEJECOggIABCABBCxAzoKCAAQsQ MQgwEQQzoKCC4QxwEQrwEQQzoRCC4QgAQQsQMQgw EOxwEO0OM6CgguEMcBENEDEEM6BAgAEEM6CAguELE DEIMBOgsIABCABBCxAxCDAToHCCMQ6gIQJzoNCAAQi wEQ6gIQtAIYAToNCC4QjwEQ6gIQtAIYAToFCC4QkQI6Dg guEMcBELEDENEDEIAEOgUILhCABDoICC4QgAQQsQM6 CwguEIAEELEDENQCOgsILhCABBDHARDRAzoFCAAQg AQ6CwgAELEDEIMBEJECOhIILhCABBAUEIcCEMcBEK8 BEA06DQgAEIAEELEDEIMBEA06CAgAELEDEIMBOgcIA **BCABBAKOgoIABCABBCxAxAKOgQIABADOgoILhCABB** CxAxAKOg0ILhCABBCxAxCDARAKOgoIABCABBAUEIc COgYIABAWEB46CAgAEBYQHhAKOgUIABCGAzoLCAA QFhAeEPEEEAo6CgghEBYQHhAPEB06CAghEBYQHhAdO gsIIRAWEB4Q8QQQHUoECEEYAEoECEYYAVCMB1iVlw FglK4BaANwAXgBgAGGA4gB2leSAQgwLjUwLjkuNpgBAK ABAbABFMgBAsABAdoBBggBEAEYCg&sclient=gws-wizserp#fpstate=ive&vld=cid:63fe4b41,vid: V3bIzNX4co

and with this article in published in Harvard International Review

https://hir.harvard.edu/lithium-triangle/

Thank you,

Eduardo S. Krasylovsky

17 Lucero Road

Santa Fe, NM

Cell: 505-3105695

OK -

Be sure to mention that distributed generation is an order of magnitude more efficient, that people who live proximal to the proposed industrial blight, like me, have already invested personal resources into residential PV, and that people like me consider it disturbing that there is no feed-in tariff for individual owners like there will be for the carpet-bagger out of state interests who will be providing passive income that could accrue to local people if our elected representatives were not either cowardly, on the take, or just completely lacking in any kind of imagination.

David Coulson dcoulson@cybermesa.com

505.466.1624 505.603.4787

Dear Jose:

My husband and I moved to Eldorado in 2006 to enjoy the beautiful vistas, peace and quiet surroundings and the natural wildlife here. We are big proponents of solar power as evidenced by the fact that we installed a solar system more than 14 years ago.

But we have to write today in opposition to the large solar project planned right near us. The lithium-ion batteries to be used are a serious fire risk for a thermal runaway fire which would be disastrous to our community. If it should move down I-25, our only escape route from this community would be blocked potentially leading to an incredible loss of life and property. There have been serious fires already from this battery method in other states like Arizona and there are safer batteries available— the use of the lithium-ion batteries is a non-starter and totally unacceptable.

Also they intend to use a chemical Novec 1230 to suppress any fire which is a "forever chemical" and given the long term PFAS health risk, 3M will no longer manufacture it by the end of 2025 so this is also a non-starter for the planned project.

I have attached an eye opening article from The Guardian just today detailing the extreme problems with the solar arrays in CA that must be read by all involved with this project.

I am going to highlight only a few of the horrible effects mentioned in this article:

'It has been psychologically grueling," says Teresa Pierce who moved to the area of solar arrays in CA six years ago. "From the constant pounding of metal posts to the endless dust storms. I now have allergies that I'd never had before — my arms burn all day long and my nose is always running. I feel like a prisoner in my own home."

Kevin Emmerich who worked for the National Park Service for over 20 years before setting up Basin and Range Watch in 2008, a non-profit that campaigns to conserve the desert life. He says solar plants create myriad environmental problems, including habitat destruction and "lethal death traps" for birds, which dive at the panels, mistaking them for water."

Read what Robin Kobaly, a botanist who worked at BLM for over 20 years says in this article. She has founded the Summertree Institute, an environmental education non-profit. Desert plants are some of the oldest carbon-capturerers. By digging up these plants, we are removing the most efficient carbon sequestration units on the planet and releasing millennia of stored carbon back into the atmosphere. Meanwhile the solar panels we are replacing them with have a lifespan of around 25 years.

What environmental studies have been done for this project and who did them? This project will come at an enormous and potentially deathly risk, destruction of our pristine wilderness, loss of wildlife and the wildlife corridors, and in the end, most amazingly, may not be at all environmentally logical given the potential release of carbon into the atmosphere.

What amount of water do these plants use? In this article people said they use excessive water that has contributed to the drying up of two local wells which many of us have here in Eldorado. If there is no water and dust filled skies, how is this going to effect our property values?

This project needs to be halted immediately and full disclosure of all potential risks and any environmental studies relayed to all of us in this area. If the environmental studies have not been done or if some have been, they should be reviewed by the experts named in this Guardian article such as Robin Kobaly and Kevin Emmerich to check for accuracy. Lithium-ion batteries and Novec 1230 should not be used under any circumstances.

Please keep me informed of what is happening with this project that most, if not all, oppose in Eldorado.

Thank you for your time.

Best regards,

Kaye and Russell Cooper-Mead 2 Mariposa Road Santa Fe, NM 87508

https://www.theguardian.com/us-news/2023/may/21/solar-farms-energy-power-california-mojavedesert To whom it may concern:

I oppose the Rancho Viejo Solar Project proposed by AES Corporation for Santa Fe County.

This project is not as green as it may seem. I oppose the lithium-battery storage proposed because of how prone they are to fires from spontaneous combustion. Other commercial solar facilities using lithium-ion storage have experienced serious fires such as the Arizona Public Service McMicken Energy Storage Facility in 2019. In addition, a fire could be a 'thermal runaway' fire, as it was in Arizona, with extremely hot flames releasing hydrogen flouride, a poisonous gas. Firefighters in Arizona were injured when the battery array exploded.

The proposal to suppress fires by 3M's Novec 1230 involves health risks of the PFAS class of 'forever chemicals'. I understand that 3M has announced that it will stop manufacturing Novec 1230 by the end of 2025.

As proposed, the project would be devastating particularly with residential areas so nearby. AES should revise its plan to use a safer and cleaner energy storage system. Why not use different types of batteries such as solid-state, aluminum-ion, and zinc alkaline, or use other technologies such as supercapacitors and bulk energy storage using mechanical or thermal approaches?

Without a better plan, this project should not move forward.

Thank you, Kathy Priola Eldorado, Santa Fe The Applied Energy Services (AES) Corporation has filed for a CUP permit regarding an industrial solar power plants in an open space between Rancho-Viejo, Rancho San Marcos and Eldorado. https://www.aes.com/rancho-viejo-solar

This plant will consist of 800 acres, 239,247 solar panels and 39 large containers, stored with 242 lithium-ion batteries (LIB) modules per container, with 44 individual battery cells per module, for a total of 415,272 individual battery cells. It will be a 96 MW PV installation with a 48 MW battery energy storage system (BESS).

We like to state we are not against solar energy, many of us, including ourselves, have panels on our roofs and/or drive electric vehicles. However, we have some serious concerns we would like to share with you.

1. Lithium-ion batteries are prone to a mal function known as thermal runaway. This is a real risk, which can lead to fire and explosion. In the first 10 months of last year worldwide once per month a BESS suffered a thermal runaway or caught fire. The Moss Landing Energy Storage Plant, CA, became operational on December 11, 2020. The first fire was on September 4, 2021, the second fire was on February 13, 2022, and the third fire was on September 21, 2022. In Morris, Illinois, there was a fire on July 17, 2021, which led to days long evacuations due to toxic smoke. AES had two fires in Arizona, one on April 19, 2019, which injured 8 first responders, 4 seriously, and the last fire as recently as April 18, 2022. It only takes 1 battery cell to malfunction to create a potential disaster. 2. Per the scientific literature, one cell has a risk of thermal runaway of about 0.0001%. As a rule of thumb assessment that means 10,000 cells have a risk of about 1%, 100,000 cells have a risk of about 10% and 400,000 cells have a risk of 40%. This explains why lithium-ion batteries tend to overheat and go up in smoke or worse.

3. The solar panels themselves can catch fire as well, as is proven by the fires in the solar panels on top of the buildings of Amazon and Walmart. In case of such fires, given the composition of our environment, which is dry, open prairie, and the distances to our residencies (1000 feet), flames can reach our homes, vehicles (tractors, etc.) and large animals, within minutes.

4. The Volunteer Fire Department will not be able to deal with a brush fire and keep the 39 containers cool at the same time. When a thermal runaway occurs, it cannot be extinguished, but it must run its course, which could take weeks. In a worst-case scenario, it is a choice between houses getting burnt or a BESS fire with a continued risk of explosion.

5. These risks are consequences of the sheer size of this complex. A community solar project on 5 acres with 1 BESS container can be manageable in case of a fire. A project of the proposed magnitude needs considerable more safety measures.

6. AES did not provide an emergency plan consistent with the Federal Emergency Planning & Community Right-to know-Act that prepares and protect communities from chemical accidents. Toxic smoke from solar panels or a BESS on fire have led to days long evacuation. There need to be clear procedures how to evacuate schoolchildren from the Turquoise Trail Charter School, residents and their animals large and small, the inmates in the correction facilities, and the Santa Fe Film Studio's. Where are they all supposed to go?

7. We have video's of antelope running past the fence on our property right where they are planning this industrial solar power plant. That space is an important corridor for wildlife into the Galisteo Basin. They will be driven away. We have prairie dogs which is a key species for 2

1

numerous other species. Burrowing owls live there too and nest in the tunnels of the prairie dogs' towns, they attract falcons, hawks. We have the great horned owl; there are badgers, coyotes. Prairie dogs increase the growth of wildflowers, and consequently the populations of bees and butterflies. They help to control weeds, noxious to life stock. This fragile ecosystem will be destroyed. 8. AES is a power utility. It generates, transmits and distributes electricity. The company produces energy burning hydro, pet coke, diesel, biomass, oil, solar, heavy fuel oil, landfill gas, wind, coal, and gas. The power generated will be sold to PNM, which sells electricity to, for instance, Arizona. There will be no benefit to the communities whose environment is invaded by this industrial complex. We are assuming all the risk for zero benefit as AES have admitted at a public meeting. 9. Although AES has finished all the reports necessary for a CUP submission, the company has refused to share them. This will put us in a disadvantage since we will have limited time to study them. The cause of the fire in the AES facility in Chandler last year has still not been made public. 10. AES has shown in the past to be a less than trustworthy when it comes to promises regarding safety. "The local fire and emergency management organizations will be thoroughly informed about the project..." Yet, when the fires in the AES facilities in Surprise (2019) and Chandler (2022) in Arizona broke out, the professional Fire Departments were not informed by AES of the presences of these BESS's.

"...The injection of liquefied C6F120 directly into modules experiencing a thermal runaway.... will both cool the exothermic reaction and suppress any flames". AES fails to mention that this will not stop the thermal runaway. As long as there is a thermal runaway going on, there will be the danger of explosion, even without flames. Neither did AES mention that if the C6F120 escapes out of the containers it is extremely toxic for humans and the environment.

AES refers to appliable (sic) guidelines, but does not mention those guidelines do not demand that a thermal runaway cannot occur. Per the experts investigating the Surprise fire the industry keeps these standards limited on purpose not impose restrictions or extra investments on the manufacturers. 11. AES has a dubious track record with regards to pollution. They are 7th on the list of the biggest polluters of water, 23 in the top 100 of the emission of greenhouse gas and 196 in the top 200 of overall air polluters. AES has paid millions in fines for violation of environmental and work place safety laws. They have received almost two billion in subsidies and loan/bailouts.

https://grconnect.com/tox100wt/ry2017/index.php?search=yes&company2=165 https://grconnect.com/green100/ry2017/index.php?search=yes&company2=26 https://www.grconnect.com/tox100/ry2017/index.php?search=comb100 https://violationtracker.goodjobsfirst.org/parent/aes-corp https://subsidytracker.goodjobsfirst.org/parent/aes-corp

12. Solar panel theft and crime are on the rise. In efforts to disconnect panels, short circuits can occur, leading to fire. This facility will be unmanned. How will the residents be protected from this form of vandalism and the increased risks? It took hours before the attack on the solar plant in Las Vegas, NV, was discovered. What happens in case of a failure of the Battery Management System and a thermal runaway occurs without being detected?

13. There will be significant loss of property values, due to loss of view, loss of open space, possible contamination of the aquifer, fire dangers, and looming possibility of uninsurable and unsalable houses.

3

14. The industry currently lacks a robust framework for evaluating potential health risks to workers, the community, and first responders associated with LIB failure, neither is there a legal framework or regulations by which industrial solar power plants must abide.

15. There are no guarantees who will be responsible in case of loss of live or property. Residents should be spared endless legal battles, especially since a potential disaster is not far-fetched, and both AES and the County will be informed up front of the evidenced-based risks associated with solar panels and battery energy storage systems.

16. If this is really about saving the environment and not just about the money, why destroy the fragile ecosystem the solar plant is planned on? Why not relocate to an already destructed area? The County has the Transferrable Development Rights Program for Conservation. Why not try to find a way to convince the landowner (Warren Thompson) to use that program and provide him with extra credit points for development elsewhere?

In our opinion this project is inconsistent with the Land Use Plan and vision for our rural area. We are working together with the San Marcos Association to convince the County of Santa Fe to put a moratorium in place until our concerns can be addressed in a proper fashion. Thank you for your attention to this critical matter.

Santa Fe, February 2, 2023 Regards, Dr. Selma Eikelenboom-Schieveld, MD, PhD Theresa Mendoza, MA, CFRM 227 San Marcos Loop 137 San Marcos Loop Santa Fe 87508 Santa Fe 87508 303 548 5225 619 820 3770 selma@ifscolorado.com mendoza.theresa1234@gmail.com To Santa Fe County Officials,

We are not against solar power by any means, but we are asking that you please give great consideration to all the adverse impacts that the AES Solar Farm may have on the communities of Rancho San Marcos, Eldorado, Rancho Viejo, Silverado, etc. Based on research, not only might the local wild life be affected, but perhaps our private wells and property values may be affected as well. We have attached an article on how these solar farms have affected the property values of homes in other states, and it is not positive. There is the possibility of runaway fires that can't be extinguished by the local volunteer fire department in this area. These fires, based on research of other facilities, can burn for days while polluting the atmosphere. Highway 14 has been designated a Scenic Byway where one can spot antelope, hawks, coyotes and other beautiful NM wildlife. This industrial solar farm, which would span hundreds of square acres along Highway 14, would spoil the appearance of this scenic byway and is sure to displace the wildlife of the area. If there were a disaster involving this industry it would cause the evacuation of the residents of these communities as well as the State Penitentiary, the Santa Fe County Detention Facility, and the movie studio employees. Please consider all the pros and cons of this project as you make your decision. Many residents in the Rancho San Marcos subdivision have solar panels on their homes, but this monstrosity being proposed by AES will not be out of sight or of benefit to our community in any obvious way.

Sincerely,

Elmer & Joyce Bustos Rancho San Marcos, Lot 52

Dear Elected Representatives and Staff:

I am writing with concerns about the Rancho Viejo/AES solar power plant being considered by our elected Santa Fe county Commissioners. This letter may be considered more direct than most you will receive. I say that because I sought advice from past Commissioners about the best way to approach you with my concerns. I was told to be diplomatic; to make sure my commentary is sympathetic to the decisions that you face and present a tone of cooperation and willingness to help in any way possible. I absolutely am empathetic to that approach, as I once worked on Capital Hill and understand that in general the best path forward is compromise. However, I am retired now and feel more at liberty to speak candidly to decision makers. Please indulge me, as this letter is written in the spirit of transparency.

You are all very aware of this proposed project, and the multitude of concerns that are being raised by residents (and your constituents) of south Santa Fe, in the County. I won't waste your time on **all of the technical details** but the list includes, but is not limited to: environmental and wildlife issues; risk of explosion from lithium-ion batteries and with that, potential air and water contamination, noise and light pollution; the complete destruction of the rural and scenic aspects of this historic corridor due to the 800 acres of panels, the energy storage containers (69 of them, each the size of a railroad car,) and a transfer station; the potential increase in insurance rates and decrease in home values, and finally, the impact on our land that is inevitable when a solar installation outlives its utility. Technology and knowledge about disposal of solar panels is in it's infancy.

What is not being discussed publicly is what residents are saying and feeling behind closed doors. Here are just a few.....

This is the largest installation in the middle of a residential area in the country. With the public documents that exist regarding the vision for growth in the county, **why are public officials even entertaining something so contrary to that vision?** It is inconsistent with our trust in what we have been told by elected officials about how growth should be managed. Solar installations of this scale are primarily developed in brown spots and rural areas far away from residential areas because of known risks. Is the risk/benefit so great that it is worth breaking trust with the people who elected you to represent their interests?

AES, the developer of the solar power plant, has had significant failures pertaining to health and safety. For each of these failures, they argue that they will be using the latest and greatest technology to mitigate past problems which include explosions, harm to first responders and even a death. Why are our public officials allowing all of their constituents to be put at risk by being guineapigs for AES's newest endeavor?

AES has been working all the angles in Santa Fe and the county to portray themselves as good citizens; that they have adjusted their plans to take into consideration the concerns of affected communities. They even have a local green energy "leader" talking about how great this project is and how it will help NM attain our goals for renewable energy. That individual argues in a recent opinion piece that this installation is the equivalent of 11,000 rooftop solar installations. This is a false equivalency. Would 11,000 homeowners be willing to install solar on their roofs if they included a lithium-ion battery system that could explode and endanger not only their cherished home, but parents, grandparents, children and pets? In addition, AES creates an illusion that energy generated will benefit New Mexicans. The truth is that local residents bearing these risks have been told that they will not have access to this energy created; some will be transported to other communities via PNM and some of it will be made available to neighboring states. Would public officials be willing to put their own homes and families at similar risk for this goal?

AES is arguing that a significant number of jobs would be created by approving this project. **Do public officials understand that these are not permanent jobs, that they are limited to construction and installation for a bit over a year?**

A final and unsavory perspective [for any politician] from affected residents and constituents is better put, respectfully, in a statement I have heard over and over: "*It's all about the money. Every palm has been greased, and approval is a forgone conclusion.*" Most citizens believe that is how public policy is made, at the federal and local levels of government. Cynicism about whether government works in the interest of the people, and not just the well-funded big interests, e.g., AES, is real. Those of us that live in the county and have been attempting to educate decision-makers have seen this up close and personal. It's well known that the local private landowner that has provided land for this endeavor has made countless donations of land and money and campaign contributions in the county for years. Residents believe that he is now calling in his chips and that he stands to make tens of millions of dollars through leases over the lifespan of this project **WHEN** it is approved. Statements about the projected, large amounts of tax dollars that will be generated for the county are prolific but are they accurate?

My own personal concern follows. There are no regulations in place that govern solar power plant installations of this type and magnitude. There should be. As the collective "we" look to solar as one method of

reducing our dependence on fossil fuels, the number of "accidents" are increasing at alarming rates nationally and internationally. While the data is not aggregated in one place, it is there.

What is the rush here? Is the State and County willing to push this through "as is" with all the known risks and lack of oversight infrastructure, just to claim our political ambition to be THE LEADER in renewable energy nationwide? Isn't it possible to generate revenue for the county and move forward with renewable energy without jeopardizing the health and welfare of people and the environment in which we live? One could only say there is no other path forward if they believe that the concerns raised by constituents/residents are deemed invalid or insignificant.

If we do rush this through without such oversight infrastructure in place and the foreseeable does happen, **are we** willing to become the national standard-bearer for how NOT to do this?

As global citizens, we are willing to do our part for the benefit of Mother Earth. But this project should be reimagined in a way that minimizes or even eliminates the risks presented in significant detail by the residents of the County.

Thank you for considering this point of view.

Stace Williams March 28, 2023 Page 1 **DATE:** March 28, 2023 **FROM:** Stace Williams 36 Cerrado Loop Santa Fe, NM 87508 **TO:** The Sustainable Land Development Code (SLDC) Hearing Officer Santa Fe County Planning Commission Santa Fe County Board of County Commissioners **SUBJECT:** OPPOSITION TO THE PROPOSED AES RANCHO VIEJO SOLAR PROJECT

Greetings. I am writing as a private citizen residing in Eldorado at Santa Fe. I hold a degree in Mechanical Engineering (Colorado State University, 1982), and I remain a passionate advocate of renewable or green energy that is both clean **and** safe. AES' proposed Rancho Viejo Solar Project is fundamentally unsafe, and that is why I oppose the approval of a Conditional Use Permit (CUP) for this project. My primary concern is with the Battery Energy Storage System (BESS). AES plans to use lithium-ion batteries to store energy when demand for power is low, so that it can be converted to electricity when demand for power is high and the sun is not shining. **The risks of lithium-ion storage technology at the**

scale AES proposes are too great to justify the benefits of the project.

Lithium-ion batteries are in wide use in both consumer devices, such as cell phones, laptops, hoverboards, and electric bicycles and vehicles, and in commercial settings for manufacturing facilities and for wind and solar electricity generation. These batteries are prone to fires known as "thermal runaway." Such fires can occur suddenly and without warning. They burn very hot and fast, and large arrays require the use of fire suppressant chemicals to extinguish them because the battery cells continue to combust even while very large amounts of water are used.

There have been several significant fires at commercial electric generation sites that used lithium-ion BESS. Of these, the 2019 at Arizona Public Service's McMicken site near Phoenix is particularly disconcerting. In that fire, AES' system worked as planned, according to their own report. The system detected a voltage decrease and subsequent temperature increase in the BESS and released a fire suppressant chemical within 2 minutes. Despite that, the fire continued for two hours, releasing poisonous hydrogen sulfide gas. When firefighters arrived, they opened the doors to the BESS, and there was an explosion. At least 8 first responders were injured in this incident.

As at their McMicken site, AES plans to use 3M[™] Novec[™] 1230 as the fire suppressant for Rancho Viejo. Novec 1230 belongs to the PFAS (per-and polyfluoroalkyl substances) class of "forever" chemicals, socalled

because they do not break down, thereby leading to widespread environmental contamination. Associated health risks prompted the US Environmental Protection Agency in March of this year to issue its first proposal to substantially limit the level of PFAS in drinking water. 3M announced in December 2022 that it will stop manufacturing Novec 1230 by the end of 2025 because of concerns about the rapidly evolving regulatory climate and a desire to eliminate the presence of PFAS in the environment. Stace Williams March 28, 2023 Page 2

In her February 28, 2023, email response to my question about use of Novec, AES spokesperson Rebecca Halford replied, "The news of Novec 1230 phase-out is recent and AES is watching as the industry reacts to this news. The use of this *clean* agent is common in several industries and AES expects alternatives to

emerge in the near future to capitalize on this growing market." (emphasis mine) As both the manufacturer and the EPA agree, Novec is not "clean," and at present there is no other fire suppressant available that is both effective and environmentally safe.

However, there do exist numerous other safe and clean ways to store energy for utility-scale generation

projects. These include different types of batteries—solid-state, iron flow, and zinc ion batteries, for example—and other technologies, such supercapacitors and bulk energy storage using mechanical or thermal approaches. Manufacturers here in the US, as well as in Canada, Germany, Israel, and Australia, are providing innovative, safe, and clean energy storage solutions for commercial solar generation facilities. A number of solar generation projects are already operating, or will soon be operational, that employ these superior alternatives.

In short, the BESS proposed by AES poses a real and significant risk of wildfire and environmental damage. Therefore, **Santa Fe County must not approve the CUP for Rancho Viejo**. Instead, I urge you to

require that AES revise its plan to use a cleaner and safer energy storage system at Rancho Viejo. While

we do need renewable electricity generation and the many benefits it provides, we cannot afford these risks. To be aware of them and still approve this project would be irresponsible and, I believe, negligent. Sincerely,

Stace (Stacey L) Williams (303) 915-9434 slwilliams@iadllc.com I am writing again to voice my opposition to the huge AES solar project, only 1 mile west of our home in Eldorado. This proposed industrial facility with over 239,000 solar panels will include a lithium-ion Battery Energy Storage System (BESS) larger than a football field with 69 storage containers, which will be located way too close to numerous residential subdivisions. I am myself the owner of a residential solar RV system on my home, and I am supportive of solar projects in the County, but something of this magnitude..

These BESS facilities are vulnerable to runaway fires, explosions, and gas leaks, which has happened at two AES facilities in Arizona recently (see https://coaching.typepad.com/files/mcmicken.pdf).

This is not the right place for this project, and it should not be located in an more rural area of NM, and not close to major subdivisions and thousands of residents.

Most Cordially,

Dear Mr. Larranaga,

I am writing to you about my opposition for the proposed Rancho Viejo Solar Project. Although supporting a solar project is exciting and becoming increasingly necessary in the face of the growing threat of climate change, the Rancho Viejo Solar Project is no as sustainable and climate friendly as it might seem. As State Williams states in her articles in Stroll Magazine and the Santa Fe New Mexican, AES Corporation plans to use lithium-ion batteries as their storage system. While these batteries are common in everyday life, used in cellphones, laptops, and even electric vehicles, these batteries are prone to spontaneously combust, starting fires. Some may say that the potential risk of fires from the lithium-ion batteries outweighs the use of fossil fuels, which can be prone to starting fires as well. However, in this day and age, and with the advanced technology available to corporations such as AES, our community should not have to compromise between two dangerous options. It has been seen that solar facilities using lithium-ion storage have experienced fires. The most notable example was in 2019 at Arizona's Public Service's McMicken Energy Storage Facility. Not only did the batteries start a fire, they released hydrogen fluoride, a known poisonous gas, into the atmosphere, injured four firefighters, and suppressed the fires using chemical Novec 1230. Novec 1230, while AES proposes to use if any fires occur from the Rancho Viejo batteries, is classified as a "forever" chemical, and has presented enough health risks that the manufacturer will stop production by the end of 2025. While solar is a necessary step to take in the coming years to combat climate change, this project is not the way forward. We cannot keep scraping by with the bare minimum and needing to continue to create "solutions" in order to save our planet. There needs to be a fundamental change in the way we view and manufacture energy. There are safer battery storage options that AES can implement instead, for example zinc alkaline or aluminum-ion.

As a 17 year old who is about to be a graduate from Santa Fe High School, I want to leave my community in the hands of people that care about our environment and what happens to it. This has become my home that I have grown to know as my desert oasis. I am urging you to oppose this project, to protect and save the unique Santa Fe environment that people around the world have come to love and cherish.

My name is Mark Young and I live at 47 Camerada Rd. on the west side of Eldorado.

I strongly oppose the huge solar project that is proposed between Eldorado and Ranco Viejo for many reasons, including safety, and the potential for fires. While I am pro solar this is way too large a project to be placed so close to major residential subdivisions. Please oppose this project. Thank you.

Sent from my iPhone

To: The Sustainable Land Development Code (SLDC) Hearing Officer, the Santa Fe County Planning Commission, and the Santa Fe County Board of County Commissioners

From: Allison Peacock and Adam Skalr at 117 San Marcos Loop, Santa Fe NM 87508

Re: The proposed AES Rancho Viejo Industrial Solar Plant

Date: April 2, 2023

To Whom It May Concern,

I am writing this letter in opposition of AES building a utility scale solar plant in the currently proposed area between three residential neighborhoods.

I am not opposed to solar and other forms of reusable energy. I believe we need to move away from our dependency on fossil fuels but I do not believe that this solar plant is in a location that actually benefits any residents of the area, human or animal.

My biggest concern for this utility scale solar plant is their use of lithium ion batteries for energy storage. Considering there are so many issues with lithium ion batteries in so many different contexts, it doesn't seem safe to place such a large amount between the three neighborhoods of Rancho San Marcos, El Dorado, and Rancho Viejo.

AES plans to put upwards of 69 shipping container sized storage units in the area to store the lithium ion batteries. This poses a considerable danger to all life around the area considering the dry plains environment they are surrounded by. We who chose to live in these neighborhoods understand that there is a high risk of fire, but adding unnecessarily to that risk for the sake of renewable energy negates any positive benefit to humanity that solar might hope to add.

There are no fire hydrants in my neighborhood of Rancho San Marcos and only one volunteer fire department in the area that has notified us that one of their trucks won't even hold enough water to put out a house on fire in our neighborhood. I'm concerned for the safety of our neighborhoods that surround this solar power plant and the safety of all the wildlife that currently inhabits the area.

I ask, if a solar power plant must be created, please consider another more safe area to build it. Placing that many lithium ion batteries in the middle of three neighborhoods in an area prone to wildfires is a danger to all life here.

AES has had fire issues in other areas they have built these solar plants. They must be held accountable.

Thank you for your consideration,

Allison Peacock and Adam Sklar

Dear Mr. Larranaga and Ms. Green,

Thank you for the work you do to manage the many and varied needs and problems that must land on your desk in regard to land development. I don't pretend to know how complicated it is, but I do hope that voicing my concerns to you about the utility-scale solar plant proposed by AES will at least let you know how some of your fellow Santa Feans regard it. In short, I would urge you to reject the plan, at least until our county and state can develop well-researched, intelligent regulations for the establishment and siting of such massive projects.

My chief concern is wildfire and the immediate threat to lives and property that the plant would pose in such astonishingly close proximity to homes. As you might know, there is a surprising quantity of readily-available evidence that major destructive wildfires, even as recent as last summer, in Arizona and New Mexico were ignited at utility-scale solar facilities and that much-touted claims for containment of lithium-ion batteries have proven catastrophically faulty/untrue.

As I understand it, the proposed location is not zoned for industrial development, **<u>nor should it</u>** <u>**be**</u> simply because an international corporation can boost its profits by cramming a plant squarely in the middle of residential communities. Perhaps there are industrial or waste spaces far from **any** homes and historic and agricultural sites that would be a better compromise? I welcome an urgent replacement of fossil fuels by cleaner energies, including solar. But urgency does not mean blind haste or short-term thinking that will undermine safety, quality of life for thousands of directly-affected residents, and destroy delicate ecosystems we have a duty to preserve.

The historic character of Santa Fe County resides partly in its natural and rural ruggedness, and its reputation for undisturbed open spaces for outdoor recreation and abundant wildlife drive much of the tourism on which the area thrives. It also attracts permanent residents who sustain the County year-round. I and my Eldorado neighbors purchased our homes precisely for their rural location, not because we wanted to live next-door to a gigantic utility plant.

As custodian of our land, <u>please</u> advocate for us and insist on an alternative to this ill-conceived commercial pitch.

Thanks for reading. Yours respectfully,

Margaret A. Loose, Ph.D. 3 Dulce Rd. Santa Fe, NM 87508 Jose Larranaga

I am a former FEMA Disaster Inspector. I spent months combing through the burned out community of Paradise, California. I can tell you this AES commercial proposal is wrong in a high elevation, basin with high winds and heavy undergrowth. Please refresh yourself on the below:



At the heart of the matter are the battery cells and thermal heat. Silicon fractures at the microscopic level, creating a short circuit when continuously charged in high thermal ambient temperature. A runaway is inevitable.....

Please don't move forward with this. It is wrong on the technology, wrong on the location, and wrong on the application. This feeds a grid. It can feed that grid at hundreds of locations throughout Santa Fe County or elsewhere where it doesn't threaten us with disaster.



My pic Joe Kelly Hughes 3 Fortuna Road Eldorado

Joe Kelly Hughes

The average Walmart is 178,000 square feet, or 4 acres. The Proposed AES Rancho Viejo Solar Project is around 1,000 acres. Or, the equivalent of having 250 Walmart's right next to each other. A nearly constant surface of solar panels - that will be visible throughout Santa Fe.

Santa Fe's own MEGA Walmart of solar panels will be the predominant feature on the horizon for an excessive portion of residents and visitors.

While this industrial facility will be closest to the communities of Eldorado, Rancho San Marcos, and Rancho Viejo. Do keep in mind that a facility of this size will stand out and at times reflect. Especially in morning when the sun rises, and evenings at sun set - the long rays of sunlight at those hours will bounce off the facility. Perhaps even affect local traffic and aviation.

This will be true especially to anyone living at higher elevations looking southward. Anyone residing higher than St. Francis and having a southern view - to anyone in town who can look down on I-25 Including residents of the foothills. Or from any of the mountain trails and peaks such as the Dale Ball trails, Tesuque Peak, Deception, and Santa Fe Baldy. The new predominant feature on your horizon will be this industrial solar plant.

Or when driving north on I-25 and coming over the La Bajada Mesa looking at the expanse of the Santa Fe region. To your right, the predominant feature will be this industrial solar plant. Tourists eyes will not be drawn to the mountains, but to the giant industrial solar plant rivaling the size of a ranch.

I have two major concerns as a resident of Eldorado. Both are related to air quality.

One is dust control during and after construction. As a former civil and environmental contractor we routinely had to monitor dust amount of dust leaving the site to meet local and federal dust control regulations. For those with health issues there is no way to escape the dust entering our homes since all homes must have air-exchange rates or the occupants will use all the available oxygen.

The other concern is potential for evacuation should the batteries ignite. I don't know the radius that will be affected, but I do know the homes within 5 miles of the site are some of the more valuable homes in the county. Should this project be built the value of those homes are likely to decrease due to fact on an required evacuation. These lower values will result in less property tax collected by the County. An additional problem is where will all the affected residents live until they can return to their homes. The population of Eldorado alone will stress the availability of hotels/motels rooms in the City of Santa Fe.

Thank you for considering my objections to the location of this industrial electrical generating facility.

Antone Forneris, Retired Construction Economist and Contractor 18 Mariposa Road SF, NM 87508 TO: Whom it may concern, RE: 800 acres of silicon panels FROM: Elizabeth Simon 34 Camerada Road Santa Fe, NM 87508

This is a horrid project being proposed and I am against it.

It will totally wreck that area as far as it being any kind of wilderness/retreat area for local residents, not to mention wildlife. This seems to be the vision of Modernity....cover every inch with Turbines or Solar panels. When it's time for me to depart this planet, I think I'll be saying, "Thank God".

And of course, one need only ask, "Where do all these panels come from? What country benefits hugely from this?" I for one know the answer to both.

Dear Jose,

This is a comment regarding the proposed utility-scale 1,000+ acre AES Rancho Viejo Solar Project, with its 239,000 solar panels, for which the AES Conditional Use Permit application is currently under review by Santa Fe County. This industrial facility will include a lithium-ion Battery Energy Storage System (BESS) larger than a football field with 69 storage containers, which will be located only a mile from the community of Eldorado where over 6,500 residents live. As I mentioned in my previous comment regarding this project, I am focused on the danger and broader impact of this BESS battery technology because it is vulnerable to runaway fires, explosions, and gas leaks. This kind of incident has happened at two AES facilities in Arizona recently, which caused serious injuries to firefighters, and if it happened here it threatens not only the safety of firefighters but could also cause a wildfire which could spread into Eldorado and the other surrounding neighborhoods of San Marcos and Rancho Viejo.

Here is a link to the report (too large to attach)--WHICH FIRE MARSHAL JAOME BLAY HAS RECEIVED/REVIEWED, so you and Jeremy will want to be familiar with it--on one of these incidents at an AES facility in Surprise, Arizona, which seriously injured four firefighters, "Technical Support for APS Related to McMicken Thermal Runaway and Explosion, McMicken Battery Energy Storage System Event Technical Analysis and

Recommendations": <u>https://coaching.typepad.com/files/mcmicken.pdf</u>. Please also see the attached letter regarding this McMicken incident from Commissioner Kennedy (AZ).

I would also like to add that it should be obvious to Santa Fe County that such a massive industrial solar project, and all utility-scale solar projects, should be included as a Development of Countywide Impact. It can not be justified that wind projects are already included as a DCI, but solar projects are not. These large projects warrant much closer scrutiny, greater transparency, a strategic plan for a more appropriate location in either brownfield sites or industrial areas, and should be subjected to stricter regulations.

Thank you in advance for taking the time to read these important documents, so those responsible for the safety of Santa Fe County residents can better understand the hazards of the proposed Rancho Viejo Solar Project.

Regards,

Carol Beidleman Eldorado at Santa Fe Greetings,

I and my wife are new residents and voters in Santa Fe, with our new home in Eldorado. I am a retired electronics engineer, and while my area of expertise is elsewhere, I have some knowledge of solar energy systems.

I will leave it to others to assess and comment on the potential environmental impact of the proposed project, but am strongly in favor of solar and wind power replacing fossil fuel or nuclear energy.

My concern regarding this project is entirely related to the safety of the lithium-ion storage system. I have read some descriptions that suggest some thought has been given to it, but details are very much lacking. The number one question in my mind is what specific type of lithium-ion battery would be used? The volatility of such batteries varies by a factor of roughly 1,000:1 depending on the specific chemistry, so this is a critical question. Next would be details on the isolation of batteries: How much energy (maximum) could be held in each isolated group, and what measures would be taken to isolate them (distance, containment structure, automatic fire suppression, etc.).

As a consumer I also have to ask what effect this project would have on my electricity bill. That is, where will the money come from to pay for building the facility, how long will it take before it is operational, and what will the impact be on our electricity bill once operational?

Regards, Greg Marshall I oppose the solar project unless AES revises it's plan to use a safer and cleaner energy storage system. I am very concerned about my safety and my community's safety if this project goes forward next door to Eldorado

Freddi Fullington Eldorado resident Dear Jose Larranga,

As a 26-year resident of San Sebastian, in the Eldorado area, I am writing to express my opposition to the Rancho Viejo Solar Project, proposed by AES Corporation.

The high fire threat posed by the lithium-ion batteries used in the battery energy storage system makes this project outrageously dangerous to our community and all of its wildlife and wilderness.

The serious fires these batteries have caused in other areas, including the 2019 fire in Surprise, Arizona, make this project absolutely untenable for northern New Mexico. The alarming number of devastating wildfires we've seen in northern New Mexico in recent years, including last year's Hermit's Peak catastrophe, should give every Santa Fe Country official reason enough to pass on this project.

But AES's proposal to use Novec, a toxic chemical, to suppress fires caused by the batteries is equally as dangerous as the fire threat this project carries. Novec is so toxic to the environment and to humans, for instance through entering our drinking water, that the EPA has limited it. Its own manufacturer, 3M, has said it will cease making Novec by 2025.

Knowing that this project has a high fire risk and proposing a poison to put out any fires demonstrates that AES has no concern whatsoever for the community. Clearly, AES knows that the batteries pose a high fire risk. The company must also know about the hazards of Novec. Even with the promise of suppression, there's no guarantee that using this toxic chemical will extinguish a devastating fire.

Why put this project here, knowing all of the risks? How does it help Santa Fe County or improve our lives? Based on all the evidence, Rancho Viejo Solar Project poses huge risks to all of us.

I urge you to not allow this project to proceed. As officials who represent all of us in this community and our wellbeing, it's incumbent upon Santa County to take the right action and not permit a global energy company—which will sell this energy created in our backyard to companies elsewhere—to recklessly endanger our health and our homes, even our lives.

Please do the right thing for New Mexico and for New Mexicans, many of whom have lived here for generations, and turn down this project.

Thank you for taking the time to consider my comments.

Lynn Cline

Lynn Cline Author, journalist KSFR Santa Fe public radio host Writer's Ink lynncline.com As a resident of Eldorado and former heavy/civil and environmental contractor I am concerned about air quality during and after construction for the proposed Rancho Viejo Solar Project. In my past controlling dust on and leaving the site was a major concern and/or a contract requirement. As I understand, this industrial size generation facility calls for grading ~1,000 acres. What dust control measures are going to be required during and after construction? There are a significant of Eldorado residents that will have their breathable air compromised by the dust coming from the site. As you know, this area of New Mexico experiences strong winds in the spring and is generally a windy environment.

All residential properties must have adequate air-exchange rates to continually provide oxygen for humans and pets that live in the homes. While homes can block some of the dusty air, they can't block it all. Please ask the owner what contract requirements will be in place during and after construction. If none exist, please ask the proper authorities to provide the necessary contract language to protect all the citizens surrounding this project.

My company did a project in Conroe, Texas where the contract required perimeter dust monitoring. If the dust exceeded contract values, based on EPA acceptable limits, the job came to a halt, until the dust emissions were back in acceptable limits. This is one example, I've also done civil projects where dust suppressants were used to protect the onsite personnel and surrounding residential neighborhoods.

Thank you for considering my concerns.

Antone L. Forneris 18 Mariposa Road Santa Fe, NM 87508 aforneris@yahoo.com On Sat, Feb 11, 2023 at 10:05 AM Ruben Mendoza <<u>rhmendoza40@gmail.com</u>> wrote: This proposed project is seriously flawed and is being designed to be built between three major Santa Fe County residential areas (Ranch Viejo, Rancho San Marcos & El Dorado). AES has historically violated many safety protocols and has been fined tens of millions of dollars for violations. Not a company you want in our beautiful environment.

Their project proposes a Battery Storage System of 39 very large containers full of Lithium batteries. There is a reason you are asked at the US Post Office and at airports whether your packages or luggage contain Lithium batteries.

Lithium is very volatile & flammable. The technology is not yet fully understood or perfected. There is a one minute video on YouTube which illustrates this very well with just a simple AA battery. It's called "Lithium is Dangerous". It is worth your time to watch it.

If a fire started at their facility, Rancho San Marcos homes would be within 3 minutes of a run away fire event. El Dorado within 9 minutes and Rancho Viejo with 11 minutes. Santa Fe County does not have the Fire Fighting capability to fight a large Lithium fire which cannot be put out with water.

I would strongly recommend that you do some research into Lithium and consider the well being of thousands of County citizens from the above mentioned neighborhoods. We truly could have a major disaster in Santa Fe County if this goes through. There are many alternative sites which are safer & farther away from populated areas.

Thank you for your kind consideration.

Ruben Mendoza (619) 415-9154

Ruben Mendoza (619) 415-9154 Dear Jose Larra and AES Solar Planners,

I am writing this letter as an interested private citizen, but my comments are referenced by my experience as a member of the Santa Fe County Trails and Open Space Committee, as the Wildlife Chair for Indivisible SOS, Santa Fe, and as a New Mexico educator.

I am writing this letter of support and concern regarding AES Solar application in the San Marcos area of Santa Fe County. Let me state up front that I am an advocate for the transition to renewable sources of energy. Solar energy makes great sense for New Mexico.

My concern is for the massive scale of the solar array relative to all the small communities where this will be located. I live in a neighboring community. So do multiple species of wildlife, as the San Marcos area is located in a wildlife corridors zone that connects several mountain ranges. There are also significant Santa Fe county Open Spaces in this area that may be impacted by this massive structure. I suggest that great care be paid to the scale and configuration of these panels so that they are not disruptive to wildlife or an eyesore (or earsore) – or any other downgrade in the quality of life for all the residents. Perhaps if the panels were configured in smaller segments, in a visually pleasing pattern, perhaps in a Zia symbol, or some other friendly shapes it would less objectionable visually, and would not obstruct the activity of wildlife, including disruption watersheds. Please take into consideration these suggestions in order to make a more user-friendly transition to solar energy. Thanks for your time and attention! Jan Cohen, M.Ed email: <u>hh1joylane@yahoo.com</u> Dear Mr. Griego,

There are alternatives to battery storage for solar farms. Some alternate methods use gravity. Excess electricity generated during daylight is used to lift massive weights, which are allowed to descend at night to generate electricity. It might be valuable for you and your staff to become familiar with these methods. We need not be fooled into believing that batteries are the only way.

Here's an introductory article from a trusted source.

https://spectrum.ieee.org/gravity-energy-storage-will-show-its-potential-in-2021

Bob Wartell Eldorado Dear Commissioner Hughes,

My wife Dayna Matlin and I recently read in the Santa Fe New Mexican about the proposed AES Solar Farm in District 5 of Santa Fe County located just south of Rancho Viejo and just west of Eldorado where we reside, on the far western edge of the development as it happens.

And while we are generally supportive of sustainable energy projects in the state's ongoing efforts to reduce the use of fossil fuels, we have some questions and concerns regarding the placement of this particular project.

As I'm sure you're aware there have been at least two fires and one explosion in the lithium-ion battery buildings of similar projects in Arizona, one owned and operated by AES and the other by a different entity the former of which required a specialized robot before the building could be entered safely by fire fighters. No doubt you're also aware that the winds out here generally blow from the west and can often be substantial, as was recently demonstrated to disastrous effect in the Hermit's Peak/Calf Canyon fire, which was the result of two supposedly *controlled* burns.

What you may not be aware of—and was not mentioned in the article-- is that, just beyond the western fence line of Eldorado there is a major natural gas line, which rises above ground in a monitoring station beside my property and those of my neighbors. And, by my admittedly coarse calculations, the proposed solar farm is approximately one mile from that gas line. Hence, should the solar farm's battery building catch fire or explode during even moderate wind conditions, it's not hard to imagine a wildfire crossing that distance in under an hour if not less time. And were such a fire to reach and engulf the above ground gas line at the monitoring station, I dare say the results could be catastrophic.

Now, I am not alarmist and tend to view things in simple and practical terms. Indeed, I've copied your fellow commissioner Anna Hansen on this email even though she represents a different district because I had numerous meetings and discussions with her when I served for four years on the Santa Fe Film and Digital Media Commission. And I trust she can vouch for my reasonable and thoughtful approach to both the challenges and opportunities that present themselves to the county.

So, my reason for reaching out to you is to seek your advice as to how we can learn more about this proposed farm and when, how—and to who if not you-- would be the appropriate way to raise some of these concerns as this project works its way through the approval process so that, should the solar farm gain approval, the county and those of us who live in proximity to it can be assured that every possible precaution is taken to prevent such another destructive and costly wildfire. For example, do the Santa Fe Fire or Police Departments even have the sort of robot that was required to quell the fire at the AES Arizona facility? Or is a fire suppression system inside the building adequate to prevent a fire should the batteries explode? Not being an expert in such facilities I can imagine a considerable list of questions along such lines.

Nor am I entirely familiar with all the boards, commissions or planning groups required to approve such a solar farm, so I apologize in advance if these concerns should be directed elsewhere. It simply seemed to me that, as you were mentioned and quoted in the article, that contacting you was at least the best place to start.

Thanks for your time and consideration. And I look forward to your response.

Sincerely,

Lee Zlotoff

Dear Planning Commissioners,

We join a growing number of Santa Fe County stakeholders that are concerned with the CUP application made by AES to install a utility scale solar and battery energy storage system adjacent three local communities and a national scenic byway.

In particular, we are concerned with Santa Fe County's ability to objectively assess the impacts of large scale developments within an immature regulatory framework. While the Santa Fe County Sustainable Land Development Code (SLDC) provides some guidance and thresholds, the overarching interpretation of how the SLDC applies to utility scale projects has not been established, and possibly not even conceived at the time the SLDC was written.

This proposed project may appear to tick a number of boxes within state and federal environmental and political landscapes, but without significant investment in understanding specific impacts, any decision runs the risk of being ill-informed.

The CUP application process should make it abundantly clear that there is no direct benefit to those local communities that will be adversely impacted.

Namely:

- There is **no** correlation between the proposed site and addressing the power demand by local communities but rather it benefits the PNM managed power grid, including intra and interstate interests, through renewable energy targets.
- The site selection should **not** be the purview of local opportunistic land owners but a state-wide application of adequately considered and coordinated renewable energy planning.
- There will be **no** direct reduction to power utility costs for local users above that of any unlikely reduction born by state-wide PNM cost management.
- This is **not** a community or residential scale installation and drawing comparisons to those photovoltaic applications is misleading.
- Using local areas as a test-bed for emerging technologies such as Battery Energy Storage Systems significantly increases the **risk** (fire, land values, wildlife and aesthetics) to local communities and the environment.
- The proposal does not adequately address SLDC guidelines for environmental impact including dust, noise, water usage and pollutant discharge and spillage.

We appreciate that this CUP application will generate opposing views and we look forward to having the opportunity to provide educated input into a well-balanced discussion and appropriately measured decision.

Yours Sincerely,

Kim and Sandra Nitschke 17 Serena Road

Santa Fe, NM 87508

PS - The recent events in East Palestine, OH point to a pattern of neglect and abuse with regard to relations between large industrial corporations and the unfortunate individuals who stand in the way of corporate profit at any cost.

The aftermath of the train derailment in Ohio is a very strong cautionary tale about collusion between corporations and government and the ability of corporations to evade responsibility for the destruction of lives, property, and the environment. Therefor, the best and safest thing to do is to disallow industrial activities proximal to residential neighborhoods.

We built our house here because of the clean air and beautiful environment, we love living here, and we will organize to defend our home against encroachment by predatory industrial development.

David Coulson dcoulson@cybermesa.com

505.466.1624 505.603.4787

Begin forwarded message:

From: David Coulson <<u>dcoulson@cybermesa.com</u>> Subject: Solar Project Date: March 30, 2023 at 9:49:19 AM MDT To: <u>orromo@santafecountynm.gov</u>

Hello -

I'm looking for information about the proposed solar generation facility proximal to Eldorado. As you might imagine, we are very concerned about visual blight from power lines, risk of fire and explosion from an immense li-ion storage facility that has the potential to destroy the environment for miles around, etc.

The proposed facility has the potential to destroy real estate values in our neighborhood, and we feel that there should be a way to find out detailed information about the proposal.

There is a meeting scheduled for April 13 at 4:00pm for public comment, so already alarm bells are going off, because meetings that are designed to discourage public participation usually occur when people who have to work cannot attend.

When did the zoning for this land change???!!!! It was always considered residential, not industrial?

Centralized production of power is always less efficient than distributed production, especially with solar energy. Why will residents proximal to this project pay for the privilege of inefficient production that profits a few at the expense of the environment?

How can residents get information about this project?

Thank you in advance for any help you can offer.

David Coulson dcoulson@cybermesa.com 505.466.1624 505.603.4787

Greetings.

I am an Eldorado homeowner and resident. While I am a proponent of renewable energy, and don't want to be a NIMBY-ist, I have deep concerns regarding the fire hazards of the proposed AES Rancho Viejo Solar Project.

I'm understanding that it's a utility-scale solar project, nestled in close proximity to two housing developments and a school.

I am protesting this permit, and would like the parties to research a new site for this project.

Sincerely,

Dianne Duenzl

Dianne Duenzl 62 Avenida de Compadres Santa Fe, NM 87508 505-920-0564



in Santa Fe

A Registered Organization

County

PO Box 29900 Santa Fe, NM 87592 <u>kmbilton@gmail.com</u>

March 27, 2023

Santa Fe Board of County Commissioners c/o Mr. Jose Larranaga, via email Building and Development Manager Santa Fe County Growth Management/Land Use Dept.

RE Request that Proposed AES Rancho Viejo Solar be Designated as a Development of Countywide Impact (DCI)

Dear Commissioners,

This letter requests Santa Fe County to designate the proposed AES Rancho Viejo Solar facility as a Development of Countywide Impact (DCI) per Santa Fe County Sustainable Land Development Code (SLDC) Chapter 11. (Ordinance 2019-2 adopted 8/27/19) The designation is warranted given the solar farm's size, duration and location in a desert challenged by severe drought conditions, with limited water availability and sparse emergency services nearby. The long-term threats such a solar farm pose to local inhabitants and the environment, should the lithium-ion batteries (LIB) fail causing a 'thermal runaway event', should alone qualify this project as a DCI. This facility will more than meet the following DCI criteria set forth in the SLDC (concerning factors underlined):

... "potential for far-reaching effects on the community, place major demands on public facilities and the County's capital improvement plan and budget, and have the potential to affect the environment and public health, safety, and welfare beyond the impacts on immediately neighboring properties, including adverse noise, light, odor and vibration; explosive hazards; traffic congestion; and burdens on County emergency response services.

The following research findings, while by no means exhaustive, provide a rationale for DCIdesignation of Rancho Viejo Solar.

- Ongoing, severe drought in Northern New Mexico has <u>created desert conditions inhospitable to</u> <u>lithium-ion batteries</u>. These conditions can be understood as 'abusive conditions described by Quang et al below:
 - Ouang et al (2019) conducted an international review of the "Thermal Hazards of the Lithium-Ion Battery and the Corresponding Countermeasures", finding that "As a result of the high energy density of LIBs, they are sensitive to abusive conditions such as high temperature, crashing, overcharge, over-discharge and short-circuit. Moreover, the typical components of a battery, e.g., plastic packing, separator and electrolyte are combustible. Thereby, the accidents induced by LIBs are frequently reported and can occur in a range of applications." <u>https://www.mdpi.com/2076-3417/9/12/2483</u>

New Mexico's drought is likely to worsen, not improve, over the life of the Rancho Viejo Solar facility, creating climate stress on aging LIB as well as the facility infrastructure.

- 2. This facility will require consistent, special oversight and monitoring. Most academics and industry experts agree that <u>LIB fires require use of chemical suppressants</u>. AES contends that 'no special materials' are needed. Only water. What they omit is that research shows that it takes up to 10 times the amount of water to extinguish a LIB fire than normal, and chemicals are also required.
 - Bennett et al (2020) studied high desert water availability in Northern New Mexico through 2050, predicting decreasing levels of surface water. <u>https://www.sciencedirect.com/science/article/pii/S2214581819303027</u>
 - Santa Fe Basin Study (2015) explored effects of climate change, drought and increasing temperatures on water supply and potential adaptations to increasing scarcity. <u>https://www.usbr.gov/watersmart/bsp/docs/finalreport/SantaFe/Santa-Fe-Basin-Final.pdf</u>
- 3. The AES 'Fire Protection Plan' describes automated fire suppression mechanisms that will spew chemicals onto storage units "if heat is detected". NOVEC 1230 or similar, which are being phased out re toxicity of PFAs.
 - In December 2022, IBM announced it will exit per- and polyfluoroalkyl substance (PFAS) manufacturing and work to discontinue the use of PFAS across its product portfolio by the end of 2025.

https://news.3m.com/2022-12-20-3M-to-Exit-PFAS-Manufacturing-by-the-End-of-2025

This 3M action was taken to comply with environmental laws because PFA-based fire suppressants are 'forever chemicals' that damage human and animal health.

4. The rural character of the Rancho Viejo Solar facility location impedes quick, 24/7 professional emergency response in the case of explosions or desert wildfires. <u>The fire services of surrounding communities are volunteer services who work from unstaffed fire stations</u>. This is not a criticism of rural, residents who donate their time and effort to support public safety in their towns. But, while AES promises to provide responder training, and to donate scholarships to train future responders, these corporate intentions don't create the necessary safety net of 24/7 immediate response services. This services scarcity will place additional demand on Santa Fe County services. <u>https://www.santafecountynm.gov/fire/volunteer-fire-districts/turquoise-trail</u>

https://www.santafecountynm.gov/fire/volunteer-fire-districts/madrid

- 5. Site contamination will occur. Despite AES assurances, who will be responsible for ongoing, physical monitoring of the site other than tracking the site operations remotely via computers?
 - Sun et al (2016) performed toxicity analyses of combustion products from commercialized Li-ion batteries. "More than 100 emitted gaseous products are identified, most of which are hazardous to human beings and trigger negative impact on the environment." <u>https://www.sciencedirect.com/science/article/abs/pii/S2211285516302130</u>
- 6. Disposal of spent LIB and environmental problems of lithium (Li) waste are growing international concerns. What is the plan for Rancho Viejo Solar facility waste disposal over operational decades? When the facility's life cycle is spent, what can Santa Fe County expect from AES so that the site is not environmentally unsafe?
 - Shakoor et al (2023) explain that globally, Li production reached 100,000 metric tons in 2021, a 256% increase from 2010 (USGS 2012–2022). 74% of Li supplies go into rechargeable Li-ion batteries powering electronic products and electric vehicles. On the one hand, the soaring demand for Li has led to an exponential increase in its supply; on the other hand, electronic waste is increasingly contributing to soil contamination with Li + ions or Li2O. Lubricating grease accounts for 4% of total Li industrial applications and enters the environment through road runoff. Another 14% is used for ceramics and glass production and ends up in municipal waste/landfills. Even Li ingested by humans is excreted through the kidneys within 24 h and is discharged into sewage. Highly variable concentrations of Li in the environment and food products have deleterious effects on animal and human health and represent a growing challenge for regulators. https://www.sciencedirect.com/science/article/pii/S2666498423000170
 - Yanamandra et al (2022) highlight the urgent need to develop disposal and recycling processes for LIB as at present less than 1% are recycled or used in other applications. https://link.springer.com/article/10.1007/s41745-021-00269-7
 - Mrozik et al (2021), addressing the growing problem of LIB disposal note that recent global surge in demand for LIBs "requires a concomitant increase in production and, down the line, leads to large numbers of spent LIBs. The ever-increasing battery waste needs to be managed accordingly. Currently, there are no universal or unified standards for waste disposal of LIBs around the globe. Each country uses one or a combination of practices such as landfilling, incineration and full or partial recycling depending on the number of batteries leaving the market, current legislation and infrastructures. Informal disposal or reprocessing is not a rare activity."

https://pubs.rsc.org/en/content/articlehtml/2021/ee/d1ee00691f

While solar energy is arguably the wave of the future, it does not come without its own set of problems and risks. Lithium-ion batteries (LIB) are basically still experimental and their use in a growing array of products and processes, as including solar energy generation, create real dangers of thermal runaway events. Such an event on the dry desert south of Santa Fe could be catastrophic.

Academic and industry researchers agree that when batteries fail or overheat, they release flammable, toxic gasses that can spark fast-spreading fire that is extremely difficult to extinguish. Recent lithium battery testing by the Fire Safety Research Institute showed it took only 15 seconds from the first sign of smoke to the windows being blown out in a house. In a traditional fire, it typically takes about three minutes for a room to be engulfed. We strongly urge Santa Fe County decisionmakers to look beyond the immediate project enticements offered by AES – millions in tax revenues, hundreds of jobs, job training and education for local youth – and act prudently in recognition of long terms risks to the inhabitants and environment at the gateway. Long after the initial windfalls promised by AES and PNM, there will be 800+acres of lithium-ion batteries baking in the sun on a desert only becoming drier as the decades go by. One spark, one overheated LIB overlooked by mechanical suppression failure not seen during a shift change at some distant computer operations room, and disaster strikes our friends and neighbors to the south. We have seen it happen, last year, when we watched in horror as our neighbors to the north lost homes as more than a million acres burned. Thank you for your consideration and choosing to designate the Rancho Viejo Solar project a Development of Countywide Impact. Katherine Bilton, President Lisa Burns, Past President Patty Montes-Burks, Vice President Judy Reinhartz, Vice President Kirk Delaplaine, Community Relations Jaclyn Hollabaugh, Member at Large Judy Perkins, Member at Large

Santa Fe Gateway Alliance (SFGA) is a Registered Organization with the mission of preserving of the southern gateway to Santa Fe for residents and visitors. Since 2017, SFGA's initiatives have been supported by concerned residents of communities located at the 'top' of the Turquoise Trail National Scenic Byway (Churchill Estates; El Dorado; La Cienega; La Pradera; Village of Madrid; Oshara Village; Rancho San Marcos; Rancho Viejo; Turquoise Trail; Turquoise Trail Business Park (Bisbee Court), Valle Lindo; Valle Vista; Vista Ocaso).

President – Dennis Kurtz Page / 1 Treasurer – Gail Buono Vice-President – Janet McVickar Secretary – Laird Graeser

THE SAN MARCOS ASSOCIATION

P.O. Box 722

Cerrillos, NM 87010

https://thesanmarcosassociation.org/

March 20, 2023

To: Santa Fe County SLDC Hearing Officer

In care of Jose Larrañaga, Building and Development Supervisor – Santa Fe County Growth Management Department

Re: AES – Rancho Viejo Solar Facility Conditional Use Permit (CUP) Application Hearing The San Marcos Association (SMA) (https://thesanmarcosassociation.org/) is a non-profit community service organization (IRS Code 501(c)(4)), and a Registered Organization under Chapter 2 of the Sustainable Land Development Code (SLDC) of Santa Fe County. Our goals are to protect the rural, residential character of the area for which we advocate; to monitor development to see that it is consistent with that character and with applicable plans and ordinances of Santa Fe County (specifically the SLDC in this case); and to advocate on behalf of property owners/residents of the area in matters of public service, utilities, and the general welfare of people. SMA's area of advocacy includes the parcel where the proposed Rancho Viejo Solar Facility would be located. AES has submitted a Conditional Use Permit (CUP) Application to construct the Rancho Viejo Solar Facility, a solar power plant that would generate some 96MW of electricity and transmit it over 2 miles using 115KV high voltage power lines to a PNM substation where it would enter the power grid. This facility would be located on approximately 800 acres of land zoned Rural Fringe. By any engineering, planning, or governmental definition, the Rancho Viejo Solar Facility is a 'utility-scale solar' facility. See for example the Solar@Scale Government Guidebook (p. 14)

[https://mail.google.com/mail/u/0/?tab=rm&ogbl&zx=9x4f32kome8i#sent?projector=1].

The SMA Board of Directors, while supporting responsible development and sustainable energy production, including Community Solar, believes this development is not eligible for a CUP under the SLDC for the reasons elaborated below. We respectfully request that the Hearing Officer *Deny* this application.

First, this facility is a "Gas or electric power generation facility" as listed on 150A Attachment 3.11 (Appendix B: Use Matrix) [https://ecode360.com/attachment/SA6524/SA6524-

150Ac%20Appendix%20B.pdf] of the SLDC (Structure Code 6400) and is **prohibited** (**X**) in districts zoned Rural Fringe. The Rancho Viejo Solar Facility will produce electricity to be sold to PNM and no other customer. Structure Code 6400, from the Land-Based Classification Standards (LBCS) of the American Planning Association (APA), the basis for the SLDC Use Matrix (Appendix B 150A Attachment 3.1), is the code for "Gas or electric power generation facility" and contains within it Code 6460 - "Solar and other forms of energy facility." Such facilities include "*windmills, solar panel farms, etc.* " The proposed solar facility is clearly an electric power generation facility according to the LBCS; being a solar facility in no way excludes it from consideration as such. [https://www.planning.org/lbcs/standards/structure/] Should the applicant assert for any reason that this proposed *President – Dennis Kurtz Page / 2 Treasurer – Gail Buono Vice-President – Janet McVickar Secretary – Laird Graeser*

facility is Not a "Gas or electric power generation facility" as listed on 150A Attachment 3.11, SMA respectfully requests that such a characterization be factually substantiated before the Hearing Officer.

Second, should the applicant assert that the Rancho Viejo Solar Facility is a "Commercial solar energy production facility" (150A Attachment 3.11) (a characterization found nowhere in the CUP application or on the applicant's website [https://www.aes.com/rancho-viejo-solar]), and is therefore eligible for a CUP, SMA respectfully requests that such a characterization be factually substantiated before the Hearing Officer.

The SLDC definition of "Commercial solar energy production facility" is "a renewable energy production facility that uses sunlight to generate, and may store, energy for sale or profit." (Appendix B 150A Attachment 2.14) [https://ecode360.com/attachment/SA6524/SA6524-150Ab%20Appendix%20A.pdf] This definition is redundant (defining "Commercial" as "for sale or profit"), and so broad that it includes virtually any solar facility that generates electricity, except a residential installation. That the SLDC distinguishes between the aforementioned "Gas or electric power generation facility" (prohibited in Rural Fringe) and the broadly defined "Commercial solar energy production facility" (eligible for a CUP) indicates a considered distinction. In this context, the word 'commercial' is used in contrast to a 'residential' installation where electricity generated is not for sale or profit; it is not intended to include any for sale or profit solar energy facility. An additional distinction is scale. Utility-scale facilities are prohibited in the Rural Fringe zoning district while smaller solar facilities may be permitted. In further support of this assertion, Santa Fe County seems to regard the CUP-eligible "Commercial solar energy production" facilities noted in Appendix B 150A Attachment 3.11 to be of "Neighborhood-Scale." The proposed 800+ acre AES Rancho Viejo Solar Facility would not be a neighborhood-scale development. SMA understands this from the following information. Figure 1 shows an image of portions of a worksheet used in discussions led by County staff in revising the San Marcos Planning District Use Matrix, commonly call the "overlay." Community members used this worksheet (some 9 pages long), under the guidance of County staff, to determine if and/or how to modify the overlay – to create the legal restrictions on development in that Planning District. This process, paused in 2020, involved a threeway comparison of existing San Marcos Planning District uses for each zoning district (labelled "2016 SMD" in the header), existing SLDC uses ("SLDC"), and uses proposed by County staff for the revised Planning District overlay ("2020 SMD"). We realize that the proposed Rancho Viejo Solar Facility does not lie within the San Marcos Planning District; but that is not the purpose of this argument. On Figure 1, the row pertaining to "Commercial solar energy production facility" contains, on the far right, the following note provided by County staff: "Create development standards for the siting and installation of Neighborhood-Scale renewable energy production facilities." That note, intended to guide discussion regarding legal restrictions of commercial solar energy facilities in Rural-Fringe districts, clearly indicates that the County believes that "Commercial solar energy production" facilities should be of "Neighborhood-Scale" - something the Rancho Viejo facility would not be. If the applicant asserts that the Rancho Viejo facility should be considered as a "Commercial solar energy production facility" for the purposes of the SLDC, SMA respectfully requests that the applicant factually substantiate this assertion before the Hearing Officer. President -Dennis Kurtz, Page 13 Treasurer – Gail Buono Vice-President – Janet McVickar Secretary – Laird Graeser

In summary, The San Marcos Association respectfully requests that the AES Rancho Viejo Solar Facility CUP application be **Denied**, on the grounds that it is not eligible for a CUP. It is not eligible because, pursuant to definitions contained within the SLDC and its supporting documents:

1) It **would** be a Gas or electric power generation facility and thus prohibited according to the SLDC in Rural-Fringe zoning districts; and

2) It would **not** be a "Commercial solar energy production facility" and so would not be eligible for a CUP on that basis.

Thank you for your consideration. SMA awaits your reasoning and decision concerning the points we have raised in this case.

Sincerely,

Dennis D. Kurtz, President

Cc: Jose Larrañaga via email - joselarra@santafecountynm.gov

Penny Ellis-Green via email - pengreen@santafecountynm.gov

Robert Griego via email - rgriego@santafecountynm.gov

Figure 1: Sections of Worksheet provided by County staff to guide discussion when revising the San Marcos Planning District Use Matrix in 2020

Portions of page 1 (to show header) and page 8 (containing the Commercial solar energy production facility line)

are combined.

Please do not approve of the permit for the Rancho Viejo solar project as it is a potential fire and environmental hazard and not safe and I do not want a large commercial solar farm a short distance form our home in Eldroado. Thanks

Most Cordially,

Mary Young 47 Camerada Road Santa Fe, NM 87508 While I am in favor of alternative energy sources, such as wind and solar, I would like to voice my opposition to the proposed Rancho Viejo Solar Project on three grounds:

1) The proposed facility has too close a downwind proximity to a major populated area. The greater Eldorado area of Santa Fe County is well known for its wind storms, especially in the spring.

- Having a 240,000 Industrial solar installation a mere mile downwind from a population density in the tens of thousands is not a sound public policy. Solar panels in the desert environment of Santa Fe will foster major growth under the structures. Which, as we all know, dries to become major fuel sources. Ignition of this, which could be as simple as an AES company truck parking on top of dry vegetation. Easily igniting the type of fast moving wind firestorm that Boulder, Colorado suffered from two years ago. Having the potential to impact thousands of homes.

2) Installing a Large Scale Industrial Lithium-Ion Battery Energy Storage System on a scale not seen in North America, is not in the interest of the Earth's environment or the local community.
- It is well documented that lithium is environmentally destructive in its mining operations and the world has a finite amount that can be extracted. An Industrial storage system of this magnitude would be much more effectively deployed in other areas of the green economy, such as in individual electric vehicles.

- The deployment of a battery storage facility at the Rancho Viejo Solar Project is only to further enrich AES and its corporate stock holders and officers. Enabling them to sell electricity at peak demand times, thus maximizing their profits at the expense of the larger society that is forced into paying exuberant prices.

- If this Project was to proceed, there is plenty of electrical demand right here in New Mexico that will utilize the 240,000 solar panel output. Which could also start of offset PNM's antiquated reliance on coal fired power plants serving New Mexico. There thus is no need for this proposed massive Industrial Battery Energy Storage System.

- Furthermore, large scale Industrial Battery Energy Storage System's are not prone to failure. The larger the facility is, combined with the 30+ years of deployment, you get a larger the risk. At the moment, local Santa Fe County emergency response agencies - nor the State of New Mexico - have clear guidance on how to fight such a potential fire. Evacuation and letting the Industrial fire burn out is the prescribed method. As witnessed two years ago in Australia. Thousands of local residents will enjoy spending a week or two living in emergency shelters or hotels while watching the calamity of a large scale lithium fire burn itself out over a few weeks.

3) The projected \$30 million tax benefit to Santa Fe County is deceptive - as this is over the entire lifespan of the project.

- As the Industrial solar facility ages, it can only be expected that its owners will follow countless other corporations in seeking to renegotiate and reduce their tax liability. Be that as it may, the other question is if Santa Fe County "needs" or is dependent upon this revenue source.

Many in Santa Fe mistakenly believe this city and county is a tourist economy. While, tourism does drive some revenue, the real driver of the local economy is the billions in annual retirement payouts and deposits that are made to the local population. Retirees spending on homeownership

and local amenities. Underpinning a robust economy. A much more prudent approach for the City of Santa Fe and Santa Fe County would be to look beyond get-rich-quick schemes at the expense of the local population, and instead look at how to invest in the quality of life of the existing local population. Things such as improved recreational facilities and infrastructure, an improved health care industry, attracting top talent to the local workforce. Not to mention, insuring Santa Fe is an affordable place for the workforce to live. A city and county full of well off retires, all looking at a giant industrial solar project enriching the few, is not in anyone's interest.

To summarize, reality is that this proposed large scale Industrial solar project could easily be relocated 20 miles east, where it is hundreds of miles downwind from any major population area.

Where the local county would also benefit much more from the taxes the facility would provide. As far as the Industrial scale battery storage facility, let us not contribute to the continued worldwide environmental issues. Let that lithium go into batteries deployed in source that are truly fighting climate change, not merely lining the pockets of individuals and corporations that are already hoarding wealth.