

December 6, 2024

# Frequently Asked Questions

## Diamond Tail Solar and Storage Project

*(Note: PCR will update this document as additional studies are completed and in response to public comment.)*

PCR has been working closely with the community over the last months, and we have heard your concerns, questions, and needs. We have listened and adjusted our plans to ensure that the Diamond Tail Solar and Storage Project reflects our commitment to being a good neighbor, safe, sustainable, clean energy development, and delivering a long-lasting, positive impact on the community. We have responded to the most frequently asked questions about the project in this document.

### **Project Environmental Benefits**

Diamond Tail Solar and Storage Project will deliver both environmental and economic benefits to the citizens and communities of Sandoval County. The project has been studied extensively, planned carefully, and will have no negative impact on regulated wetlands, watersheds, habitats, threatened or endangered species, or cultural/historical resources.

The facility will produce over 607,000 MWh of clean energy each year, enough to offset nearly 240,000 tons of CO<sup>2</sup> emissions and equivalent to powering more than 60,000 New Mexican homes annually.

### **New Mexico's Carbon Reduction Goals**

New Mexico has set ambitious targets for decarbonization at both the state and local levels, including the state's goal to generate 50 percent of our electricity from renewable sources by 2030 and 100 percent by 2045. These goals are achievable but require bold action. Success requires an all-of-the-above strategy, including solar, wind, energy storage, and electric vehicles. It also requires a diversity of projects, including utility-scale solar and wind, community solar, and rooftop solar, simultaneously. This is the only way to achieve the efficiencies and scale to meet these objectives cost-effectively and within the planned timeframe. The proposed project meets the urgent need for action to address climate change and energy equity in Sandoval County and in our region. A strategy of relying only on distributed rooftop solar cannot begin to reach all of our community's families that live in rentals, mobile homes, etc., or achieve the clean energy goals we've set. According to the U.S. Energy Information Administration, only 1% of New Mexico's electricity was generated by residential or commercial-scale PV (<1 MW) in 2020.



Moreover, the proposed project is one of many renewable energy projects necessary to replace the lost generation capacity once the coal-fired generating plants in the four-corners region are ultimately decommissioned, a milestone that will eliminate a source of significant pollution impacting our region since the 1960s.

The Natural Resources Defense Council estimates that cardiovascular and respiratory ailments directly related to our continued use of fossil fuels cost Americans some \$820 billion every year in healthcare costs. Add to this the enormous global costs of failing to slow climate change, and the case for accelerating the energy transition to renewable energy sources becomes clearer. The success or failure of most climate and energy equity efforts will depend on small-scale efforts, local policies, and decisions. We hope Sandoval County will take action toward the timely development of this proposed project (with reasonable conditions) while providing consistent guidance for similar future projects in the County.

Clean energy projects the size of the proposed Diamond Tail Solar and Storage Project do not create environmental impacts comparable to fossil-fuel generation plants, which require regular deliveries of fuel by train, truck, or pipeline, management of waste materials, huge amounts of water, mechanical infrastructure, lighting, and more, to say nothing of fossil-fuel emissions which impact our air, water, and land.

### **Grid Reliability**

It is a common misconception to assume that because your house already has solar, the proposed project will not benefit you. In reality, residential net metered solar systems depend on having reliable backup and nighttime energy supplied by the electric utility's grid. The proposed Project will supply PNM's electric grid with nearly 220 MW of solar energy, ultimately benefiting everyone connected to it and offering storage to help assure reliability among variable renewable energy sources, including other distributed solar systems (i.e., community solar and residential net metered systems). Energy storage is critical to making renewable energy work for everyone. By storing clean energy generated when the sun is shining, storage enables that energy to be used when it's needed, whether that's at night or when electricity demand is high. Ultimately, the combination of solar plus storage results in a more flexible and resilient energy grid.

### **Long-Term Sustainability**

The Diamond Tail Solar and Storage Project will help Sandoval County and its communities move toward a more secure and sustainable future. Reducing our reliance on fossil fuels reduces our carbon emissions and contributes to a healthier planet for future generations.



### **Economic Benefits**

The Diamond Tail Solar and Storage Project will provide significant financial benefits to Sandoval County, public services, and public schools. The Project represents a \$450 million investment in the community (inclusive of PILOT payments). This multi-million-dollar investment will create approximately 300 construction and four long-term operational jobs. Local companies and their employees will benefit by supplying key project components and materials needed for project construction. Construction workers will also bring economic benefits to the local economy through lodging, purchasing goods, and dining at local restaurants. PCR will also employ local contractors to handle long-term vegetation management at the site.

### **Job Creation**

PCR works with local companies who hire locally to build our projects. The project's labor pool will be drawn primarily from Pueblo of San Felipe, Sandoval County, and Bernalillo County. We will work with the community and area colleges to train workers to create new career opportunities for residents.

The Diamond Tail Solar and Storage Project's construction will require skilled workers such as electricians, engineers, technicians, and installers who are in high demand and earn above-average wages. Once the project is completed, ongoing maintenance and monitoring jobs will be created to ensure the system runs smoothly, also offering competitive salaries.

### **Low-Cost Energy**

The electricity generated by the Diamond Tail Solar and Storage Project will be sold to the Public Service Company of New Mexico (PNM) under a 20-year power purchase agreement. PNM will, in turn, sell that electricity to its customers in Sandoval County and New Mexico. Solar energy costs have decreased significantly in the last decade, making solar cost-competitive or even lower cost than other traditional forms of generation. Utility-scale solar offers several advantages, including a stable, no-cost fuel source; scale and efficiency to optimize costs; and the ability (compared to rooftop solar) to share the costs and benefits of renewable energy equitably across the customer base. As is the industry standard for many utility-scale solar projects, after the 20-year PPA with PNM, the project will look to re-contract or sell the electricity in the merchant market for the remaining solar project life.

### **Health and Safety**

Utility-scale battery energy storage systems are a familiar and tested

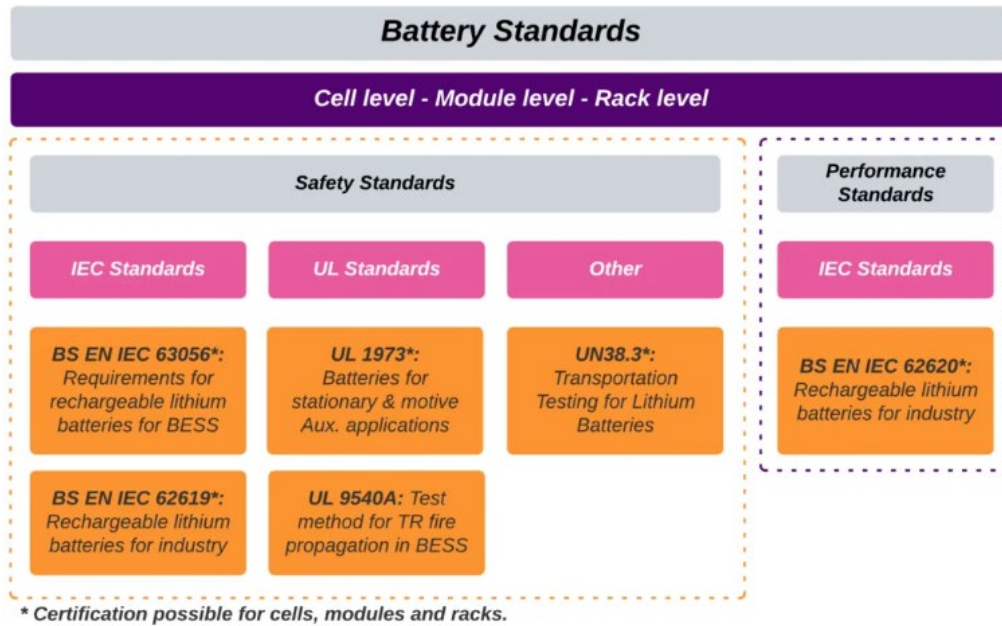


technology within the energy industry. According to the U.S. Energy Information Administration, the capacity of operating utility-scale battery storage systems in the U.S. will triple between now and the end of 2025 to about 30 gigawatts. There have been steady and significant advancements in materials, operations, safety and monitoring systems, and emergency response training and preparedness compared to early energy storage systems built a decade ago.

### **Lithium-Ion Batteries and Safety**

At PCR, safety is always our top priority. A Emergency Response Plan (ERP) will be performed for this project. The ERP will include a site and product-specific fire risk assessment and a first responder plan. Local first responders will have access to these plans. PCR will provide on-site and in-person training to local responders before the commercial operation of the system. The facility will be equipped with advanced safety monitoring and management systems. No special materials (suppressants or retardants) are required for use by emergency personnel to respond in the event of a containerized energy storage thermal event. Only standard water application to the adjacent BESS containers is required, and only in the extremely unlikely case that all internal alarm systems fail. All information the first responders require will be included in the first responder plan part of the ERP. Battery storage unit containers are “non-occupiable”, meaning first responders do not open or enter any container under any circumstance.

As with solar systems, battery storage systems must be designed and constructed according to the same Building/Electrical/Fire codes and standards that govern the construction of homes and other buildings with electrical systems in the community. Specific safety standards that battery storage system comply with include the following:



PCR is coordinating with Sandoval County’s Fire and Rescue (SCFR) to ensure that the project’s battery storage system is compliant with National Fire Protection Association and any other federal, state, and local requirements. In response to SCFR input, the project will include the following elements:

- PCR’s Fire Protection Engineer and SCFR will review and approve an Emergency Response Plan.
- The project’s primary emergency access route will be min. 20’ wide and maintained to ensure emergency vehicles can access the project site.
- A 30,000 gallon water storage tank will be installed and maintained near the project site entrance to allow emergency equipment to quickly access water in the event of an emergency.
- A perimeter and interior access roads will be installed and maintained around the project site to facilitate emergency vehicle access.
- The project site will include a perimeter fence to prevent unauthorized access.
- Ground vegetation will be cleared and maintained at least 50’ beyond the perimeter road.
- Emergency shutdown equipment shall be clearly marked and easily accessible to first responders.
- Training on these safety provisions along with the general operations of the solar system and battery storage system shall be provided to SCFR prior to the systems being placed in service and technical/safety documentation shall be made available to SCFR personnel upon request.

### **How will this project impact the environment? What studies have been conducted?**

As part of the development process, we conduct studies to identify sensitive features of our proposed project site. We design our facilities to avoid any impacts by identifying these resources at the front end. These studies include:

- A delineation of any wetlands and streams
- A search for any hazardous materials on site
- An assessment of the cultural resources on-site (archaeological and architectural)
- An identification of any threatened and endangered wildlife habitat on site
- An assessment of local floodplains and hydrology
- An assessment of soils and geology - including on-site geotechnical and pile load testing studies
- A survey of the terrain, boundary, and real estate encumbrances
- Infiltration testing to understand soil drainage rate

Based on the results of these studies, PCR preliminary designed Diamond Tail Solar and Storage Project design to avoid identified findings.

### **How much water will be used during construction and operation?**

During construction activities, water will be used for controlling dust, mixing concrete, and washing/cleaning activities. Construction water will be transported to the site (15/20 water trucks per day). During construction, approximately 70 acre-feet of water will be used per 12 months. During the operations and maintenance period, water will be used to clean solar panels once about a year, using approximately 0.4 acre-feet per year<sup>(1)</sup> (equivalent water use of about 2 residential homes).

(1) Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern U.S. 2013. Sandia National Laboratory ([https://energy.sandia.gov/wp-content/gallery/uploads/SAND2013\\_5238.pdf](https://energy.sandia.gov/wp-content/gallery/uploads/SAND2013_5238.pdf))

### **How will soil conditions be impacted?**

The project will be constructed at existing grade to the greatest extent possible, minor grading and/or grubbing may occur in limited areas of the project site. The area around the Project Collector (2 AC) and BESS (2 AC) will be graded and leveled to include a gravel surface with concrete foundation pads for certain equipment, including the individual battery unit containers. Grading will conform to accepted slope stability requirements. Pole mounts in the solar racking system do not require leveling the land or installing complex foundations. The installation method will be either pile or screw driven, depending on the compactness of the soil. Any significantly graded areas will be reseeded with certified weed-free native grass.





### **Does the project pose a fire risk?**

Solar systems are governed by the same Building/Electrical/Fire codes that govern the construction of homes and other buildings with electrical systems in the community. The project's solar and storage systems have the same fire risk as other electric utility infrastructure. The project's solar system will use polycrystalline silicon photovoltaic modules, which are not flammable. The global installed capacity of utility-scale battery energy storage systems (BESS) has dramatically increased over the last five years. While recent fires afflicting some of these BESS have garnered significant media attention, the overall rate of incidents has sharply decreased, as lessons learned from early failure incidents have been incorporated into new designs and best practices. Between 2018 and 2023, the global grid-scale BESS failure rate has dropped 97%.

### **Are solar panels safe?**

The project will use monocrystalline silicon photovoltaic (PV) modules (i.e., solar panels). No studies have shown evidence of any health issues caused by solar panels. All solar panels used by PCR pass the EPA's Toxic Characteristic Leaching Procedure (TCLP) test and are classified as non-hazardous and are not regulated as toxic materials.

### **Can the solar array withstand intense storms, wind, and hail?**

Solar panels are extremely durable and rigorously tested to withstand harsh weather, including strong wind and hail. The project's solar panel manufacturers use thick tempered front-side glass, significantly increasing the module strength.

PCR will design the solar system to meet current industry standards, including being able to withstand wind speeds up to 100 mph and golf ball-sized hail.

### **What are solar panels made of? Are the components a health risk?**

Monocrystalline silicon solar photovoltaic (PV) modules (i.e., solar panels) are largely made of glass, aluminum, copper, and silicon, along with other commonly used plastic and wires. The cells on solar modules that are used to capture sunlight are made of silicon, which is a naturally occurring element. Monocrystalline-silicon solar PV modules are made of basic "solid-state" materials, meaning there are no liquid or gaseous components. The project will be constructed with Tier 1 panels. Tier 1 panels are high quality and rigorously tested for predictable performance, durability, and content. All solar panels used by PCR pass the EPA's Toxic Characteristic Leaching Procedure (TCLP) test and are classified as non-hazardous and not regulated as toxic materials.



### **Will the project emit concerning EMFs?**

Solar systems do not emit any material during their operation. Electromagnetic fields (EMF), often referred to as non-ionizing radiation, do not have enough energy to damage DNA. Studies show people are exposed to EMFs throughout their daily lives, including wall-sockets, mobile phones, and computers, without negative health impacts. Someone outside of the fenced perimeter of a solar facility will not be exposed to any significant EMF levels from the solar facility. No evidence of negative health impact from EMFs produced in a solar farm exists.

### **Community Experience**

We believe in being a good neighbor, ensuring responsible and sustainable renewable energy development that benefits the environment and local communities. At PCR, we understand that our success as a company is only as strong as our partnerships with the communities where we operate. Drawing on our deep expertise, we customize solutions to meet local needs. Our clean energy projects create jobs, generate substantial property tax revenue for local governments, and protect the environment by reducing carbon emissions.

### **As the project owner, who is PCR?**

PCR is a global energy company accelerating the future of energy. PCR is headquartered in Argentina. It has 100 years of experience in the E&P business. It is an independent energy company diversified in three Business Units: Oil & Gas, Cement, and Renewables. PCR has operations in Argentina, Ecuador, and USA. PCR is fully integrated into the renewable energy supply chain. Development, M&A, EPC, Financing, and Operations of all renewable assets are performed by an experienced management team. PCR currently operates six wind farms, with a total capacity of 527 MW, and has over 800 employees in 3 countries. In the U.S., PCR is developing 700 MW of solar projects with plans to grow that pipeline for a total buildout of 800 MW in the next 5 years.

### **Will the project be noisy once operational?**

The solar project will be a quiet neighbor. Only a few pieces of equipment at the site will make any sound. These are inverters, transformers, and batteries, and they are equipped with cooling fans. Project noise levels will approach typical background noise levels within 150 feet of inverter and battery locations. All proposed equipment for the project will be located well over 150 feet from any residence.



**How long will construction take? Will there be noise and disruption during construction?**

The entire construction period for the project is expected to last approximately 18/24 months. Construction will begin once all permits are received and pre-construction work and standard site due diligence are completed. Aside from construction vehicle operation, construction noise will be limited to the pile driving that happens early in construction, lasting approximately 120/150 days. Further, water trucks will be used for compacting project roads and managing construction dust.

**Will the project produce any light pollution at night?**

There will be standard, motion-censored security lighting on the project. This lighting will be pointed downward and away from any surrounding neighboring properties. There will be no consistent nighttime lighting at the project site.

**Will the project produce any glare or reflection?**

Solar panels are designed to maximize light capture and therefore have very minimal reflection and glare. Modern solar panels reduce reflection using anti-reflection coatings (ARC) and texturing the surface. According to the National Renewable Energy Laboratory, solar panels reflect as little as 2% of incoming sunlight and produce less glare than standard windows and open water bodies.

**Will a nearby solar array impact the cost of homeowner's insurance?**

Because project fire risk is mitigated through numerous safety features, emergency planning, available resources, and first responder training, the project is not expected to impact an individual homeowner's insurance for nearby communities.

**How will landscaping and vegetation be managed?**

The vegetation throughout the arrays must be properly managed to minimize the shading of tall grass on the panels. As part of the project's operation and maintenance plan, the ground cover will likely be managed through seasonal mowing, if necessary.

**Is there any impact on the water table? Will the project increase stormwater runoff outside of the project area?**

No, the project will not increase stormwater runoff outside of the project area and will be properly managed within the project area. Rain falls on the solar panel and runs off the edge of the panel, where it falls off the drip line and infiltrates the ground below.



**Will the project impact local roads and traffic?**

The public may see or hear construction vehicles transporting material to the site during construction from Hwy NM14. Once construction is complete, there will be minimal vehicles accessing the site. PCR is coordinating with the New Mexico Department of Transportation (NMDOT) to conduct all necessary analyses and obtain required permits to transport material and equipment to the project site.

The project will have two access routes, utilized for different purposes:

1. During construction and for emergency cases, the project site will be accessed from NM-14 across the Rancho de Chavez, located in Santa Fe County. This access route across private land will also be used in the event of an emergency during the project's operation period. The access agreement with the private landowner has been recorded with Santa Fe County.
2. During operations and maintenance, vehicles will access the project site from NM-14 using Puertocito Road. Sandoval County maintains Puertocito Rd. within the county under a prescriptive easement. The beginning of Puertocito Rd. (0.38 mile) lies within Santa Fe County. PCR is engaged with both counties regarding ongoing roadway maintenance.

**What type of fencing will be used?**

The project will use an agricultural-style fence with woven wire and wooden posts for the enclosure to preserve the rural character of the existing community. A 6' security fence with three-strand barbed wire will enclose the battery storage area.

**What is the setback of the project?**

Setbacks are measured from property lines; the project will be setback 40' from the perimeter fence to the first tracker structures. The project boundary is more than one (1) mile away from the nearest residence.

**What is the decommissioning plan for the project's end of life? Will materials get recycled?**

When a solar project reaches the end of its life, the owner/operator is responsible for executing the approved Decommissioning Plan, including abiding by all local and state decommissioning requirements. This includes the removal, recycling, and disposal of all solar panels, racking, equipment, and other structures associated with the project, as applicable. The land surface within the project area will be restored to pre-project conditions to allow a return to agricultural use, or other uses consistent with the the landowner's plans and County land-use policies. Our supply chain process identifies and prioritizes equipment manufacturers that align with our environmental, safety, and human

rights commitments. Some of these commitments include buying equipment from manufacturers whose supply chains and suppliers comply with a national recycling program. We also seek to buy high-efficiency products, reducing the total raw materials and parts required for each project.

### **Why is the solar project located here?**

The location for this project was selected based on an assessment of 1) PNM's transmission network, 2) available substation capacity, and 3) an examination of the landowner's property to identify the most suitable lands.

### **Does Battery fires emit toxic fumes and pose a risk to the community?**

Past incidents demonstrate that fires are contained within the facility, and air quality in neighboring areas remains at safe levels.

- Laboratory testing of emissions from Li-ion cells in thermal runaway shows that emissions are similar to those found in plastic fires.
- During an ESS battery fire, only trace amounts of chemicals are detected in sampling around the event, and overall air quality remains at safe levels.
- During a fire at a Tesla Megapack at Moss Landing in California, concurrent air-quality testing showed no hazards to human health.

### **Should fire suppression systems be mandatory for all lithium-ion battery systems?**

Regulations that aren't vetted by organizations like the National Fire Protection Association or are inconsistent with the International Fire Code may make projects less safe.

- Established national and international codes and standards already require BESS to incorporate the appropriate safety features to contain any potential fires or thermal events.
- Successful suppression of a fire does not guarantee that the underlying thermal runaway event has been terminated, so containing a fire is the best way to protect first responders and communities.
- The energy storage industry is working to avoid events such as the 2019 explosion at an installation in McMicken, Arizona, in which four firefighters were injured. Prior to this event, the industry was focused on extinguishing fires as quickly as possible, but McMicken showed that explosion can be a greater hazard and fire containment is a better strategy.
- The accepted best practice for the rare ESS fires that do occur is to contain them, managing the burn of the limited affected unit in a controlled manner while protecting nearby structures and equipment. This strategy eliminates any explosion hazard, avoids issues with stranded energy and reignition, and minimizes contaminated runoff of firefighting water.

### **If a battery storage fire, will the air quality be impacted? What about water quality?**

Battery storage system fires are rare and becoming less common even as more and more battery storage systems are built across the country. A recent case study of an electric utility's battery storage system fire that occurred on September 5<sup>th</sup>, 2024, in the City of Escondido, CA, provides detailed information about air and water quality impacts during the incident. During the incident, San Diego County Hazmat arrived to conduct air monitoring; only normal products combustion of a structure fire were detected and at levels considered by NIOSH and OSHA to be well below exposure thresholds. The electric utility's third-party contractor also conducted air quality monitoring during the incident. At no time during the incident did the levels of Oxygen deviate from 20.9 percent, which is considered normal atmospheric level. Any decrease in the percentage of Oxygen would indicate that there was some unknown gas in the atmosphere that was not able to be detected by monitoring equipment. Fortunately, no such deviation was detected. The use of Fluoride reactive test strips was negative at all locations. Additionally, Hydrofluoric acid was not detected at any of the sampling locations.

The analysis of water runoff samples collected during the incident suggests that the water quality remained within acceptable limits for most contaminants, especially when considering public health standards for drinking water. The low levels of metals detected, combined with the absence of more toxic elements like lead and cadmium, suggest that the water poses minimal risk both to human health and the environment.

For additional details, see the City of Escondido's report:

<https://www.escondido.gov/CivicAlerts.aspx?AID=96>

## **New Written Questions Received from Attendees at Dec. 3<sup>rd</sup> and 4<sup>th</sup> Public Meetings**

### **How many lightning rods will be installed in the solar farm, and how tall will they be?**

The project electrical design has not been finalized, so the exact number of lightning rods has yet to be determined. The project design will comply with all federal and state electrical codes and standards.

### **In case of emergency, have you thought about the fact that there is no infrastructure or evacuation?**

PCR's fire protection engineer is developing an Emergency Response Plan in consultation with the Sandoval County Fire Department. This plan will describe



in detail project and emergency response roles, incident response protocols, training, resources, access/egress routes, contact information, etc.

**What level of insurance and indemnification will PCR carry to address the potential liabilities arising from wildfire burn?**

The project will be insured at levels that meet or exceed industry standards and financing requirements. Renewable energy projects have a very high standard on insurance. Most common type of insurance are:

- **Property damage insurance:** Protects physical assets like solar panels, wind turbines, and buildings from damage or destruction. It can also cover business interruption due to a covered incident. This covers up to 100% of the asset value.
- **Business interruption insurance:** Compensates for lost income due to interruptions caused by damage to renewable energy assets. This covers up to 12 months of business interruption.
- **Commercial general liability insurance:** Covers third-party exposures and ensures compliance with operations, leases, and permits.
- **Workers' compensation insurance:** A statutory requirement for employees and contingent for contractors.
- **Environmental liability insurance:** Protects against environmental damage. This may be included within Property damage insurance, not being necessarily separate.
- **Catastrophic (CAT) event insurance:** May be required based on the location of the project.

**Who is the PCR insurance carrier and what coverage will PCR be procuring to cover the risks of this operation?**

PCR's other projects are insured by BM&B (<https://www.bmbinc.com/>). The project would have the coverages listed above.

**How frequently will the construction access road be watered down with a water spray truck to control dust?**

This needs to be evaluated in detail considering water availability, dust management, access road design (gravel), and traffic timing.

**What percent of water will be used to make concrete onsite versus the percent of water to be used to control dust on the construction access road?**

PCR estimates that during construction 15% of the water will be used for concrete foundations and 85% will be used for controlling dust on access roads.

**Water for construction use has been mentioned. My question pertains to operational/ ongoing water usage. In a dusty environment such as where we live, it's not uncommon to have four washes a year-perhaps even more. Based on the 220 MW quoted- that might work out to 400,000 panels. That would equate to roughly 40,000 gallons each cleaning cycle. What would be the source of this water, and are there any additives put in the water in a washing cycle- if so what? How might these additives affect the flora/fauna of the area?**

We estimate we need to clean once a year using approximately 15,000 gallons of water. This water will be brought to the site using water trucks. The water will be sourced from bulk water suppliers in the Albuquerque or Santa Fe areas, with the possibility of some water being supplied from areas closer to the project, like Golden, NM. The PV cleaning process uses water without any additives.

**Will taking water from the Henderson Store in Golden, NM affect the wells of people living in Puertocito village and other homes in the area near the solar farm?**

Any water sourced from Golden area wells will be subject to limits imposed by the New Mexico Office of the State Engineer.

**The water for the tank just in case comes from where? Water trucked in for construction comes from where?**

The water will be sourced from bulk water suppliers in the Albuquerque or Santa Fe areas, with the possibility of some water being supplied from areas closer to the project, like Golden, NM.

**How much water is needed for the project?**

During construction, water will be used for controlling dust and mixing concrete. Construction water will be transported to the site (15/20 trucks per day), approximately 19MM gallons/year. During O&M period, water will be used to clean solar panels once a year (2 months) (1/panel ~500k panels = 25 trucks/m), equivalent to water use of about 2 residential homes/year <sup>(1)</sup>. Water Use and Supply Concerns for Utility-Scale Solar Projects in the Southwestern U.S. 2013. Sandia National Laboratory ([https://energy.sandia.gov/wp-content/gallery/uploads/SAND2013\\_5238.pdf](https://energy.sandia.gov/wp-content/gallery/uploads/SAND2013_5238.pdf))



**How much water will be needed to cool generator coils, etc.?**

The project doesn't use water to cool any equipment.

**Assuming that there are four closest Power Pack Battery enclosures located adjacent to a given Power Pack enclosure that is burning, then four different water sprays will need to be applied by the fire fighters to cool down the four adjacent enclosures. How long will the 30,000-gallon water storage tank last before it runs out?**

The Emergency Response Plan will specify the incident response protocols, which may or may not include application of water to adjacent battery units. Battery units will be installed according to the manufacturer's requirements, which are designed to contain any fire to a single involved unit. The size of the on-site water tank was specified by Sandoval County for use on preventing wildfires from either entering the project site or leaving the project site.

**What level of experience does PCR as in dealing with a fire in a facility such as being proposed?**

PCR has been in operation for more than 100 years and owns and operates a large cement factory in Argentina, oil and gas extraction in Argentina and Ecuador, and several wind farms in Argentina.

In all its installations, PCR evaluates with specialists the potential risks of the installation, designs the systems, and provides the necessary equipment to avoid accidents.

In the event of an incident occurring, the ERP is in place at each site and this will be the case for this project.

**What exactly is the decommissioning plan and proposal timeline?**

See upload decommissioning plan at Sandoval County's website. The timeline will occur 30 years from the start of operations. PCR will provide a Performance Bond to cover decommissioning costs

**What are the inclinations of the panels proposed and have they been modeled throughout the year for reflections to nearby southern inhabitants. I believe the standard orientation for south facing panels is an angle equivalent to ones elevation. So for SPECE, this would be 31 degrees commercial farms would normally be on trackers, with the angle changing during the day. What is the plan for this proposal?**



The project will use trackers orientated N-S, and the modules move during the day from E to W. The max angle will be 55°- 60°, depending on the brand and model tracker selected. PV modules are design to absorb light, so they have almost no reflection in the sun.

**What is done to avoid glare from reflection?**

The panels are built with AR (anti-reflective) glass. Please see the datasheets uploaded to Sandoval's website.

**What security lighting is necessary?**

To be defined when the electrical detail engineering is prepared. It is expected that any security lights will be motion activated.

**Will any PFAS material be used for the solar panels?**

No.

**If a bystander is standing at the site boundary fence during fully involved battery fire, and if the wind is blowing primarily in her or his direction, will he/she be exposed to an unsafe concentration of toxic gases?**

No, see reply pages 11 and 12 of this document

**Will the invertors/ convertors emit noise?**

Yes, but they do not affect the vicinity residences. See the Noise Assessment (Sound) report at Sandoval County's website.

**In 2022 my homeowners insurance was cancelled after 41 years with my carrier. I was able to find homeowners insurance at a considerable increase. Since then, my policy has increased on average 37% annually. When questioned, the response I have received was "I live in a zip code that has been deemed a wildfire risk." The introduction of a solar farm and storage facility of this magnitude will certainly be calculated into the next policy cycle as an increase. This is unduly harmful to me.**

Diamond Tail Solar and Storage project will be built in a "very low" Wildfire Hazard Potential and 1.5-mile distance from the nearest residence. PCR will design and build the project to meet all electrical industry and safety standards, coordinate with emergency response services, and provide training and resources to ensure that any incidents at the project site will not impact adjacent residences.

**In the declining graph of Failure Incidents-per-Installed-GW versus date, what is the time period for the number of failures; day, month, year, or lifetime of the solar farm? For example, the graph shows number of failures per GW as equaling ~ 1 in the year 2020. Is this ~1 failure per day per GW, or ~1 failure per month per GW, or ~1 failure per year?, or ~1 failure per plant lifetime per GW?**

The orange curve shows failure per year per GW.

**What is the expected LiFePO<sub>4</sub> batteries? Will they need to be replaced? A Google search reports that the number of discharge cycles ranges from 2,500 to 15,000 cycles. That covers a range of 7 to 41 years.**

10,000 cycles ~ 20 years.

**What will be the remaining % charge of the battery energy storage system (BESS) after 4 hours, typically?**

20%.

**How many individual LiFePO<sub>4</sub> battery cells per PV Panel?**

8064 LFP per MPXL

**How was the optimum number of battery storage hours per day (i...e., hours) determined?**

The common design on the industry is: X MW of solar + 0,5X MW of BESS 4h duration

**What is the power failure probability of a single LiFePO<sub>4</sub> battery cell over its lifetime?**

Waiting for information from Tesla.

**How often does BESS fail?**

In 2023 it was 0.30/GW

**Will you provide us with a copy of the “Wood Mackenzie” report on Failure Statistics from 12/21/2023? Also, the Electric Power Research Institute’s 2024 White Paper Insights from EPRI’s Battery Storage System (BESS) Failure Incidents Database-Analysis of Failure Root Cause?**

Yes, we will send it to P&Z to upload it to Sandoval’s website

**How many PV panels will be installed?**

Approximately 500,000

**Environmental Impact Statements (EIS): When will a full-blown EIS be accomplished?**

Please see the environmental reports uploaded to Sandoval's website.

**What third party independent agencies have reviewed the Phase I ESA?**

NEPA is not applicable - no Phase I ESA. No, the report was prepared by Terracon, an independent and well-known consultant in the market.

**Are there any threatened or endangered species inside the solar farm or the construction access road? If so, how will the situation be managed?**

Yes, Vireo's is an endangered species within the project area. To mitigate the impact towards Vireo the project must avoid certain activities such as removing trees through the nesting period.

The owl burrows is other endangered species that has habitat compatible with the site. Before construction a new survey checking for owl burrows will be carried to prepare detailed mitigation plan that could include relocation if needed.

**I heard that the roundabout intersection presently under construction in Cedar Crest (Sandia Crest Road) has an unusually- low vehicle weight limit that will prevent heavy trucks from driving through the intersection. Will this prevent semi-trucks from hauling heavy trucks from driving through the intersection? Will this prevent semi-trucks from hauling heavy cement, water, inverter units, and battery units through this intersection?**

We do not know right now the exactly route for the main components trucks, we expect to use I-40 and NM14. The maximum weight for trucks will 80,000 lb, and only batteries and the main transformer will have an overweight (84,000 lb).

**Will PCR maintain Puertocito during and/or after construction?**

No, PCR will not use Puertocito road during construction.

**Where are the workers (construction) coming from?**

We expect at least 80 % of workers from the NM.

**When is the construction for the project meant to take place?**

Our estimation is Q4 2026 or Q1 2027

**How long will it take to construct High Voltage transmission power lines?**

One year. This will move in parallel with construction.



**Will PCR be applying to Sandavol County for a waiver or relaxation of the rules governing dust control on the construction access road during construction?**

No.

**Will PCR operate the facility?**

Yes.

**Operational Disposal: During the life of the project how will “used” or “obsolete” solar panel, batteries, and other equipment be disposed of? Does PCR have commitments from disposal sites to accept this equipment?**

PCR will hire specialist companies that dispose of and destroy panels and equipment.

**Price Regulation: PNM operates in a regulated price environment. Will PCR pricing be subject to the same requirements and scrutiny?**

Yes, PCR will have to participate in PNM RFP to get a PPA with a competitive price of energy.

**Life Cycle Costs: What are the anticipated life cycle costs for the project and who is responsible for these costs?**

The cost of the project is confidential information for the Company

**Will I benefit from the solar energy generated through the project?**

It depends on PNM grid distribution.

**Money brought in by solar project goes to Sandavol County- but will effect Bernalillo County (use of water, traffic etc) what is the benefit to those in Bernalillo County?**

As the project is in Sandoval County, property tax and school district payment has to be paid to Sandoval County and not to Bernadillo

**Did Souder, Miller & Associates pay residents on Puertocito Rd for easement rights?**

No.

**Did Souder, Miller & Associates do the environmental assessment? Isn't this meant to be done by a third party?**

The environmental assessment was done by Terracon, not by SMA.

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**How is Souder, Miller & Associates then helping represent at this meeting (PCR)?**

PCR hired SMA to assist with Public meetings.