



City of Arts & Innovation

City Council Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL DATE: NOVEMBER 7, 2023

FROM: PUBLIC UTILITIES DEPARTMENT WARDS: ALL

SUBJECT: RENEWABLE POWER PURCHASE AND SALE AGREEMENT WITH SUNZIA WIND POWERCO LLC FOR 125 MEGAWATTS FROM THE PATTERN WIND-POWERED ELECTRICITY GENERATING FACILITY FOR A TERM OF FIFTEEN YEARS AND AN ESTIMATED AVERAGE ANNUAL COST OF \$22,000,000 TO \$23,200,000

ISSUE:

Approve the Renewable Power Purchase and Sale Agreement with SunZia Wind PowerCo LLC for 125 megawatts from the Pattern wind-powered electricity generating facility for a term of fifteen years and an estimated average annual cost of \$22,000,000 to \$23,200,000.

RECOMMENDATIONS:

That the City Council:

1. Approve the Renewable Power Purchase and Sale Agreement with SunZia Wind PowerCo LLC for 125 megawatts from the Pattern wind-powered electricity generating facility for a term of fifteen years and an estimated average annual cost of \$22,000,000 to \$23,200,000.
2. Authorize the City Manager, or designee, to execute the Renewable Power Purchase and Sale Agreement and all documents necessary to administer the Agreement including the ability to make non-substantive changes, as well as to execute reasonable and customary consent to collateral assignments, future amendments to the Renewable Power Purchase and Sale Agreement under terms and conditions substantially similar or superior to the Renewable Power Purchase and Sale Agreement or, if needed, to terminate the Renewable Power Purchase and Sale Agreement in accordance with Agreement terms and conditions; and
3. Authorize the City Manager, or designee, to execute any agreements related to a Project Bifurcation under terms and conditions substantially similar or superior to the Renewable Power Purchase and Sale Agreement.

BOARD RECOMMENDATION:

On October 23, 2023, the Board of Public Utilities voted unanimously, with all members present, to recommend that the City Council Approve the Renewable Power Purchase and Sale Agreement with SunZia Wind PowerCo LLC for 125 megawatts from the Pattern wind-powered electricity generating facility for a term of fifteen years and an estimated average annual cost of \$22,000,000 to \$23,200,000.

LEGISLATIVE HISTORY:

In 2011, the California Renewable Energy Resources Act, Senate Bill (SB) X 1-2, was signed into law by the Governor, mandating that all electric utilities, including Riverside Public Utilities (RPU), procure increasing amounts of renewable energy primarily from in-state resources to serve the utilities retail needs during specified compliance periods. SB X1-2, which officially created the first set of tiered Renewable Portfolio Standard (RPS) targets, required RPU to supply 20%, 25% and 33% of retail energy needs using renewable resources by 2010, 2015 and 2020, respectively. RPS program regulations and guidelines are administered by the California Energy Commission (CEC).

In 2015, the Governor signed into law the Clean Energy and Pollution Reduction Act, SB 350, extending the RPS program and further increasing the RPS goal to 50% by 2030. This was followed in 2016 with the Governor's approval of SB 32, which required the California Air Resources Board (CARB) to ensure that statewide greenhouse gas emissions are reduced to 40% below the 1990 level by 2030.

The Governor signed SB 100 into law in 2018 further expanding the requirements of the RPS program. In addition to maintaining the target of 33% RPS by 2020, new compliance targets were established: 44% by 2024, 52% by 2027, and 60% by 2030. SB 100 is also known as "The 100 Percent Clean Energy Act of 2018" because it also codified in state law the policy of meeting all the State's retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045, and maintaining it in future years.

BACKGROUND:

The City of Riverside has been very supportive of the existing renewable targets set by the State and is committed to serving its retail energy requirements using more renewable energy. In order to satisfy the current RPS targets, while anticipating more stringent RPS requirements in the future, RPU continues to search for additional cost-effective, renewable energy procurement opportunities.

Since 2012, the Board of Public Utilities (Board) and City Council have approved over 230 megawatts (MW) of renewable resource contracts and/or extensions. The City currently has 116 MW of geothermal energy, 46 MW of wind energy, and over 100 MW of solar PV energy under contract. As shown on the 2022 Power Content Label (shown on the next page), the City currently serves 45.4% of its power mix with renewable resources.

In early 2021, staff identified a future, out-of-state wind project proposal that could supply Riverside with enough additional cost-effective renewable energy to meet or exceed the 2030 Renewable Portfolio Standard (RPS) mandates. The new wind energy will be dynamically

scheduled into the CAISO beginning in April 2026, and because the first point of interconnection will be within the CAISO, it will qualify as a Portfolio Content Category 1 (PCC-1) renewable resource. Under the terms of the proposed agreement, this contract will provide an additional 369,000 to 390,000 MWh/year of long-term PCC-1 renewable wind energy into Riverside's portfolio, allowing the City to comfortably exceed its 60% RPS by 2030 mandate three (3) years early.

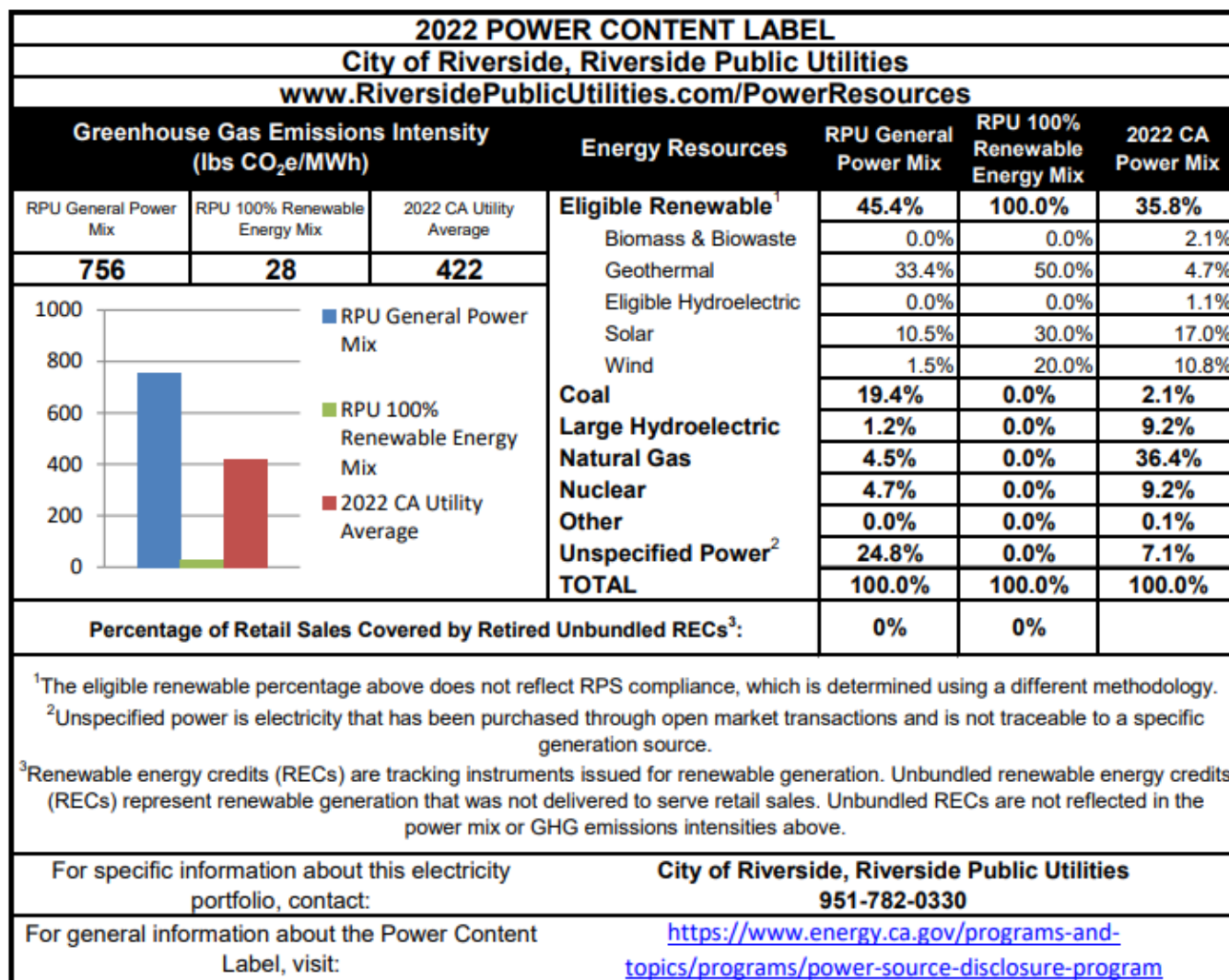


Figure 1: Riverside Public Utilities Power Content Label

Source: <https://riversideca.gov/utilities/residents/our-energy/power-resources>

DISCUSSION:

This proposed renewable Power Purchase and Sale Agreement (PPSA) will entitle the City to 125 MW of additional renewable wind capacity from the out-of-state SunZia Wind Project located in Lincoln, Torrance, and San Miguel Counties, New Mexico and developed by Pattern Energy. The wind energy will be delivered over a new 550-mile, 525 kV Direct Current (DC) transmission line into central Arizona, and then in turn over existing transmission to the CAISO intertie at Palo Verde. The proposed PPSA has the following characteristics and favorable terms:

Project: The new SunZia Wind Project is being developed by Pattern Energy, one of the largest renewable energy developers in North America. The new wind facilities will be located in Lincoln, Torrance, and San Miguel Counties in New Mexico. A new SunZia

transmission line will transport most of the wind energy across multiple southwest counties in New Mexico and southeast counties in Arizona (see Figure 2). Once built, the SunZia Wind Project will have a total nameplate capacity between 3,400 MW to 3,515 MW and represent the largest renewable wind energy generation facility in the United States, supplying wind energy to multiple southwestern states.

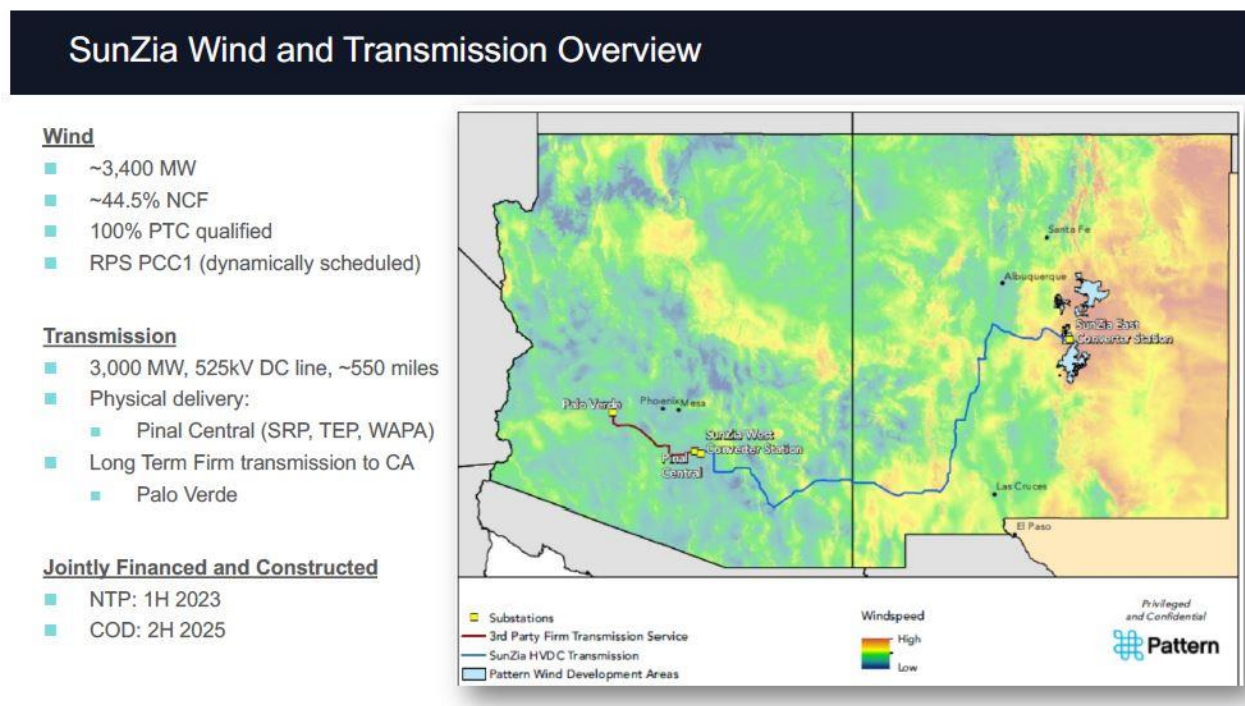


Figure 2: SunZia Wind and Transmission Overview Diagram

Term of the Renewable Power Purchase and Sale Agreement: A fifteen-year Agreement commencing upon the Commercial Operation Date, anticipated to be March 31, 2026.

Commercial Operation Date Guarantee: The SunZia Wind Project has an anticipated Commercial Operation Date of March 31, 2026, with a guaranteed Operation Date of September 30, 2026. Failure to achieve commercial operation by September 30, 2026, will result in payment of Delay Damages of \$62,500 per day. Failure to achieve commercial operation by March 31, 2027, allows either party to terminate the agreement.

Delivered Product: Riverside's share of the SunZia Wind Project is 125 MW of Energy, Capacity, and Renewable Environmental attributes.

Price: The all-in price for the Energy, Capacity, and Renewable Environmental attributes for the SunZia Wind Project is \$59.50 per megawatt-hour (MWh), fixed over the term of the agreement.

Performance Guarantees: The agreement includes enforceable guarantees for the delivery of Energy, Capacity, and Renewable Environmental attributes, with penalties that result in financial payments, or in more severe cases, the right to terminate.

Resource Adequacy Guarantees: The agreement includes the enforceable guarantee to derive resource adequacy (RA) benefits from our Capacity share throughout the term of

the agreement. Failure to deliver these RA benefits could result in the payment of liquidated damages.

Development Security: Within 30 days of executing this agreement, the SunZia Wind Project will provide a performance security in the form of cash or a letter of credit in the amount of \$11,250,000.

Performance Security: Upon Commercial Operation, the SunZia Wind Project will provide a performance security in the form of cash or a letter of credit in the amount of \$13,125,000.

RPS Provisions: The Agreement offers strict RPS provisions which include a Renewable Energy Credit (REC) withholding of the average market value or \$20 if RECs are not received. The agreement also requires the facility to maintain CEC Compliance Standards with a spending cap of \$1.25M annually with a total of \$3.125M for the duration of the term.

RPS Outcome: This agreement will qualify as a Portfolio Content Category 1 (PCC-1), dynamically scheduled renewable resource. Under the currently proposed PPSA terms, this contract would provide an additional 369,000 to 390,000 MWh/year of long-term PCC-1 renewable wind energy into Riversides portfolio, allowing the City to comfortably exceed its 60% RPS by the 2030 mandate four years early (see Figure 1). Additionally, utilities are required to ensure that at least 75% of the renewable resources in their portfolios qualify as PCC-1 renewable resources. This agreement will help Riverside stay in compliance with this requirement.

Reduction of greenhouse gas emissions from electricity generation: The PCC-1 renewable energy supplied by this agreement will allow Riverside to reduce its carbon footprint by approximately 158,000 to 167,000 metric tons of carbon dioxide (MT CO₂) per year, facilitating significant progress towards the City's carbon reduction goals. This is the estimated greenhouse gas emissions reduction that will result from the displacement of market purchased electricity with an emissions factor of 0.428 MT CO₂/MWh.

Sustainability Outcomes: This proposed PPSA will directly contribute to Strategic Priority 4, Environmental Stewardship Goals 4.1 and 4.6 under the Envision Riverside 2025 Strategic Plan (described in the Strategic Plan alignment section of this report). Additionally, both Pattern and SunZia have committed substantial resources to a diverse range of sustainability efforts throughout New Mexico and Arizona, as highlighted in the attached Pattern|SunZia *Commitment to Local Communities and Environmental Stewardship* brochure (Attachment 1).

Financial Impacts: Staff have performed a detailed Production Cost Modeling analysis of this proposed PPSA to better quantify its costs and benefits. As shown in the attached *Summary of Financial Proforma* (Attachment 2), the total \$/MWh fair market value of this PPSA is \$77.73/MWh, which is materially above the \$59.50/MWh PPSA price.

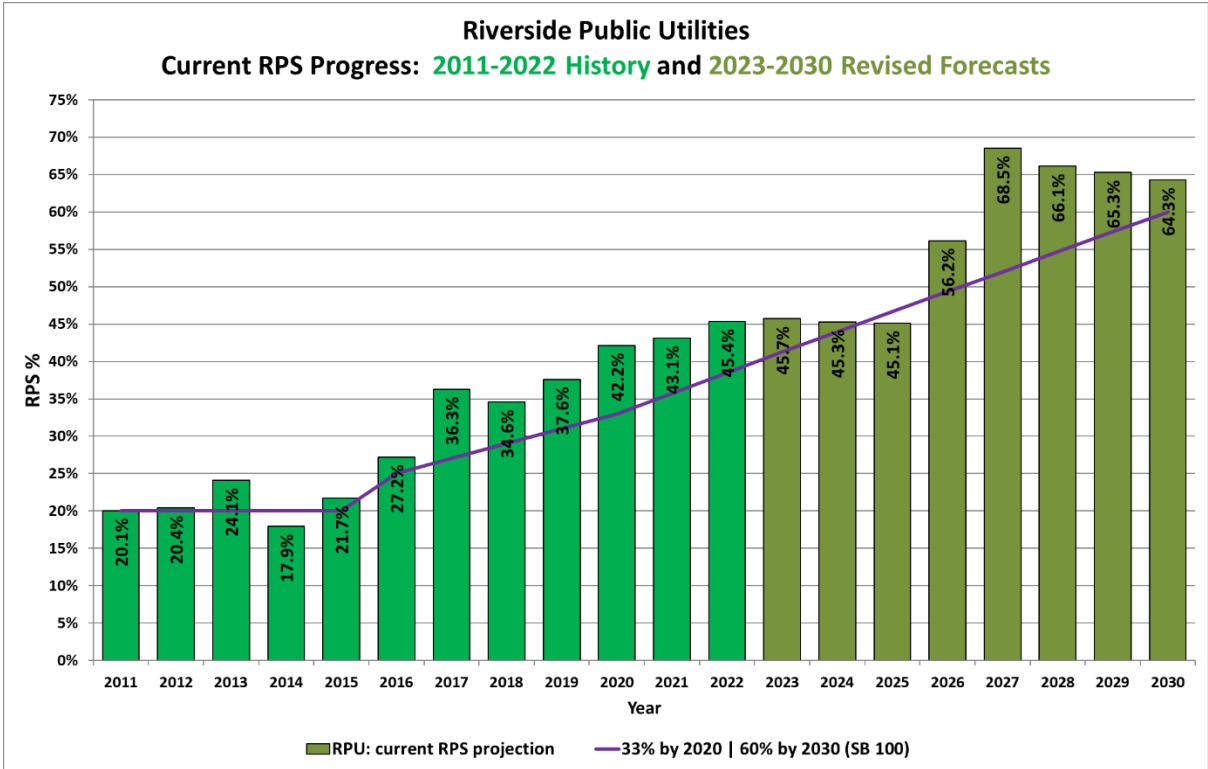


Figure 3. RPS projections through 2030, assuming the new SunZia wind resource is added to RPU’s portfolio

Figure 3 shows how Riverside’s current RPS projections through 2030 will change if the new SunZia wind PPSA is successfully executed and added into the power source portfolio of Riverside Public Utilities (RPU). With this new resource added to our current renewable resource mix, Riverside will remain well above its safe-harbor RPS levels up to and beyond 2030 (and with sufficient excess renewable energy to cover the small 2025 deficit).

Under the terms of the agreement and due to the size of the development, the SunZia Wind Project may need to be bifurcated into two separate projects. Language in the proposed PPSA addresses this issue in detail and preserves all the aforementioned rights and benefits for the City of Riverside, should such a bifurcation occur. In the event of a bifurcation, this PPSA will be replaced with two separate PPSAs that maintain the same terms and conditions of this agreement.

The Purchasing Manager concurs that the recommended actions are in compliance with Purchasing Resolution No. 23914, Section 702, Exception (O) which provides that competitive procurement through the informal or formal procurement process shall not be required “When the Procurement is for wholesale energy, energy ancillary services, energy transmission, wholesale water commodity, and water transmission purchase by or on behalf of the City’s Public Utilities Department”.

The Office of Sustainability concurs that the recommended actions will help the City of Riverside towards its dual Strategic Plan goals of reaching a zero-carbon electric grid and contribute to the citywide goal of carbon neutrality by 2040. More specifically, this endeavor will allow Riverside to reduce its carbon footprint by approximately 158,000 to 167,000 metric tons of carbon dioxide (MT CO₂) per year. Another way to view the positive annual impact is to compare the carbon footprint of a typical passenger vehicle, which emits about 4.6 metric tons of carbon dioxide per year (assuming 22 miles per gallon and driving 11,500 miles per year). Reducing 167,000 metric tons of carbon dioxide by delivering power sourced via wind, as proposed, is the equivalent of removing the carbon dioxide emissions from 36,304 vehicles per year.

STRATEGIC PLAN ALIGNMENT:

The City's Renewable Procurements directly contribute to Strategic Priority No. 4 Environmental Stewardship and Goals 4.1 and 4.6:

Goal 4.1: Rapidly decrease Riverside's carbon footprint by acting urgently to reach a zero-carbon electric grid with the goal of reaching 100% zero-carbon electricity production by 2040 while continuing to ensure safe, reliable, and affordable energy for all residents.

Goal 4.6: Implement the requisite measures to achieve citywide carbon neutrality no later than 2040.

The item aligns with each of the five Cross Cutting Threads as follows:

1. **Community Trust** – RPU is committed to transparency and accountability in its energy portfolio and planning. Each proposed power purchase or power purchase and sale agreement is adopted and approved in a public process by the Board of Public Utilities and City Council to ensure transparency and community trust.
2. **Equity** – RPU's resource portfolio serves energy throughout the community. Through its procurement of renewable resources, RPU is committed to ensuring that every member of the community has equal access to clean and renewable energy.
3. **Fiscal Responsibility** – RPU is committed to fiscal responsibility principles in its energy procurements and compliance. All prospective resources undergo a complete economic evaluation to ensure their cost-effectiveness in RPU's power resource portfolio and minimize impacts to the utility's cost of service.
4. **Innovation** – Staff keep up to date on the changing regulations and requirements as it relates to the RPS along with study of new renewable energy technologies (as well as related enabling technologies, such as battery energy storage) as they become available. RPU evaluates the market viability and maturity of current and future renewable generation technologies (along with supporting technologies), incorporating them into its long-term planning where appropriate.
5. **Sustainability & Resiliency** – Renewable energy resource types are inherently sustainable, as they do not rely on unsustainable finite sources of fossil fuel or other inputs to reliably operate.

FISCAL IMPACT:

The estimated annual average cost of power under the Renewable Power Purchase and Sale Agreement is approximately \$22,000,000 to \$23,200,000, starting in 2026. Funding for this project will be offset by the expiration of the Intermountain Power Project, and the expected future market power costs will be included as part of the future biennial budget process and budgeted in the Public Utilities' Power Resources Energy Account No. 6120100-422914.

Certified as to

availability of funds: Kristie Thomas, Finance Director/Assistant Chief Financial Officer

Approved by: Rafael Guzman, Assistant City Manager

Approved as to form: Phaedra A. Norton, City Attorney

Attachments:

1. Pattern|SunZia *Commitment to Local Communities and Environmental Stewardship*
2. Summary of Financial Proforma
3. Renewable Power Purchase and Sale Agreement
4. Presentation