



City of El Paso – Aviation Department

5 MW Solar Farm Project



Strategic Alignment City of El Paso

- Goal 1: Create an environment conducive to strong, sustainable economic development
- Goal 8: Nurture and Promote a Healthy, Sustainable Community
- 30 BY 30 Initiative under ITEM 24: Create and implement an Urban Energy Plan





Pillar 2: Municipal Energy

RREAC Strategic Goal Alignment

Progress Update

Goal 2.1 Reduce overall energy consumption and enhance energy efficiency in municipally owned facilities.

Goal 2.2 Increase efficiency for street and parks light infrastructure.

Goal 2.3 Increase solar generation at City owned facilities.

Goal 2.4 Enhance and increase EV fleet and chargers at municipal facilities

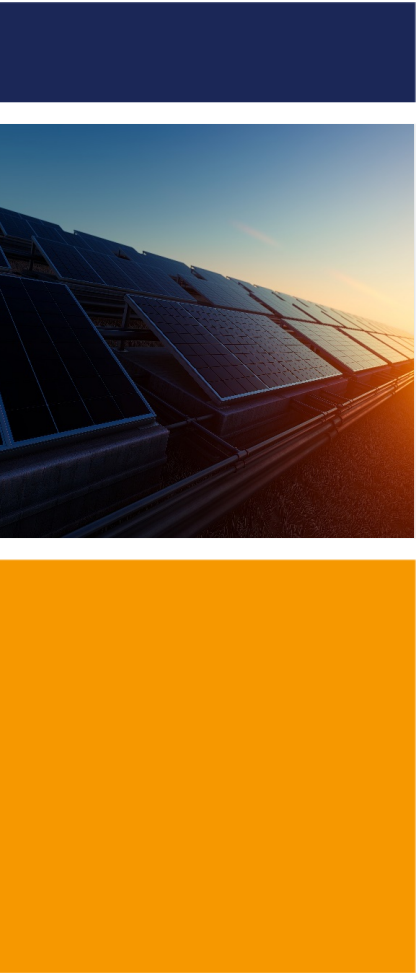
- **Airport: 5MW** using a **VPPA** agreement with EPE.
- **Airport: 1MW behind-the-meter carport system.**
- **Airport: Microgrid** (Solar; Storage; EV; other) as part of MOU with GM; UTEP; Chamber; and EPE.
- **PPA for multiple city facilities.**
- **Low or No Emission Vehicle Program and BBF** applications (Sun Metro).
- **EV chargers** as part of MOU with GM; UTEP; Chamber; and EPE.
- **Fleet electrification pilot** (PD and SAM).
- Pursuing new **FTEs**, including Facilities Engineer, Energy Manager and Engineer Specialist.



Strategic Alignment El Paso Electric

- Goal 1: Build a trusted partnership with our customers and community.
- Goal 3: Leverage technology to drive efficiency and security.
- Goal 4: Lead in environmental sustainability





Project Description

- Solar farm footprint approximately 40 acres, located on airfield
- Ground mounted solar PV system with a 5-MW capacity with a 2-MW battery option; the second largest solar installation in El Paso
- Electricity generated will offset the airport's consumption and other City facilities
- This is a partnership with the City of El Paso and EPE



Solar Farm Location



Benefits

- **Environmental**

- Greenhouse Gas (GHG) Emissions Reduction
 - GHGs cause climate change by trapping heat in the atmosphere
- Improved air quality
- Renewable Energy Credits (RECs)

- **Economic**

- Virtual Power Purchase Agreement (VPPA) removes the burden of the capital cost investment from the City
- Ground mounted, single-axis tracking systems are up to 25% more efficient
- Utility-scale solar facilities are significantly less expensive than rooftop solar installations
- Budgetary certainty (utility bills)

- **Resilience** – A battery on the system can strengthen the system around the Airport and can provide grid support in the event of a brownout or blackout



Airport and City

- Airport Total Demand of all the meters is 3 MW
 - Terminal
 - Cargo Center
 - Airfield Lighting
 - Rental Car Center
 - Air Rescue Fire Fighter Station
 - Other minor Meters
- City to use 2 MW for City Facilities
 - City Hall
 - PDHQ
 - FD
 - Parks
 - Libraries
 - Museums

Rate Components

AIRPORT:

Rate will be a function of:

- Capital Costs
- O&M Costs
- EPE Cost (Virtual)

CITY:

Rate will be a function of:

- Capital Costs
- O&M Costs
- EPE Cost (Virtual)

- EPE and the City will work together to determine a competitive rate that works for both parties

City Protections and Oversight

- The issuance of the RFP does not obligate the City to move forward with the virtual power purchase agreement (VPPA), only a contract approved by City Council may do so
- The rate (price) will have to be approved by the Public Utility Commission of Texas (PUCT)
- EPE will pay rent in the event EPE defaults on its obligations under the VPPA

Partnership

- EPE will own and maintain the installation
- Airport and the City will benefit from the renewable generation by signing a VPPA
- VPPA allows for flexibility on the applicable City accounts because the facility is not attached to a particular building or facility
- The proposed term of the VPPA is 30 years



Process Timeline

Staff briefings will be provided at each step of the process

August 2021

EPE Renewable Generation Study identifies EPIA property as potential solar farm site

October 2021

Consultant completed a feasibility and site study

Spring 2023

Complete contract negotiations

Early 2024

NTP for construction

September 2021

ELP and EPE begin discussions on large scale solar installation

May 2022

EPE & ELP work together to issue an RFP

Summer 2023

City Council review and approval of a final contract





Mission

Deliver exceptional services to support a high quality of life and place for our community



Values

Integrity, **R**espect, **E**xcellence,
Accountability, **P**eople



Vision

Develop a vibrant regional economy, safe and beautiful neighborhoods and exceptional recreational, cultural and educational opportunities powered by a high performing government

Misión

Brindar servicios excepcionales para respaldar una vida y un lugar de alta calidad para nuestra comunidad

Valores

Integridad, **R**espeto, **E**xcelencia,
Responsabilidad, **P**ersonas

Visión

Desarrollar una economía regional vibrante, vecindarios seguros y hermosos y oportunidades recreativas, culturales y educativas excepcionales impulsadas por un gobierno de alto desempeño

Project Timeline

- August 2021 – EPE Renewable Generation Study identifies EPIA property as a potential solar farm site
- October 2021 – EPIA completes a feasibility study that identifies 40 acres of airfield land as a viable location to support a solar farm
 - Study also identified three other potential solar generation locations
 - Short term parking – Solar covered parking
 - EPIA warehouse – rooftop panels
 - ConRAC – Solar covered parking third deck
- May 2022 – EPE releases RFP
- Spring 2023 – Contract negotiations
- City council involvement: Approval of a final contract
 - Staff briefings will be provided at each step of the process