

U.S. Department of Energy (DOE)

Local Government Energy Program:
Communities Sparking Investment in
Transformative Energy (C-Site)

Paso del Norte Port of Entry Microgrid Project

May 21, 2024



AGENDA

- Grant Overview
- II. Scope of Work
- III. Budget
- **IV.** Application Timeline
- V. Council Action



Grant Program Overview

DOE C-SITE Grant

- Planning, design, and construction projects allowed over 3 years
- 5% match required (International Bridges P3)
- Application deadline is May 31, 2024

Alignment with City of El Paso programs:

- International Bridges Capital Improvement Plan (CIP)
- <u>Uptown-Downtown Plan</u>: Segundo Barrio Corridor
- <u>Supply El Paso</u>: Creating opportunities for disadvantaged, minority-owned, veteran-owned, and women-owned businesses, or 8(a) firms
- <u>El Paso Recompete Network</u>: Expanding workforce development initiatives consistent with Executive Order 14025



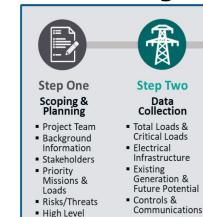


Program Overview

The City of El Paso was selected for technical assistance from the U.S. Department of Energy National Renewable Energy Laboratory (NREL) in 2024

- \$450,000 Technical Assistance Grant
- Focus on communities between Paso del Norte and Stanton ports of entry and Bridge of the Americas (BOTA)

NREL Microgrid design process (Department of Defense)



Goals

Performance

Step Two

Collection

Energy Costs

Historical



Conceptual

Design

Boundaries &

Architecture

Generation

Analysis &

Selection

Controls &

Technical &

Communications

Design Constraints

& Requirements

Implementation







Step Four

Project

Development

Acquisition &

Operating

Strategies

Financing

Refinement

Development

Request for

Proposal

Solicitation

Contractor

Selection

Funding or

Project





Implementation

■ Engineering Design

Functional Testing

Commissioning &

Post Award

Construction &

Performance

Operations &

Maintenance

Testing





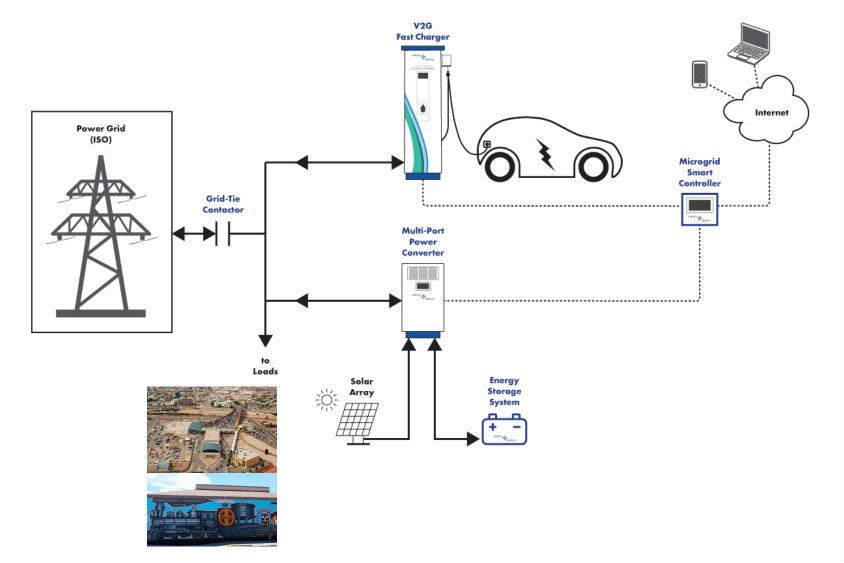
Transforming ENERGY

NREL Technical Report NREL/TP-7A40-72586





Proposed Microgrid Architecture





Scope of Work

Goal: The Project will ensure energy resilience and provide a continuous supply of energy in the event of an energy disruption or emergency for critical infrastructure at the Paso del Norte Port of Entry.

Project deliverables:

- Public engagement
- Drawings of electrical infrastructure
- Microgrid design and assessment
- Microgrid construction and equipment installation
- Transmission lines to Chihuahuita Rec Center
- Model for replication to other areas





Scope of Work

City-owned parking lot located on 1002 S. Santa Fe Street





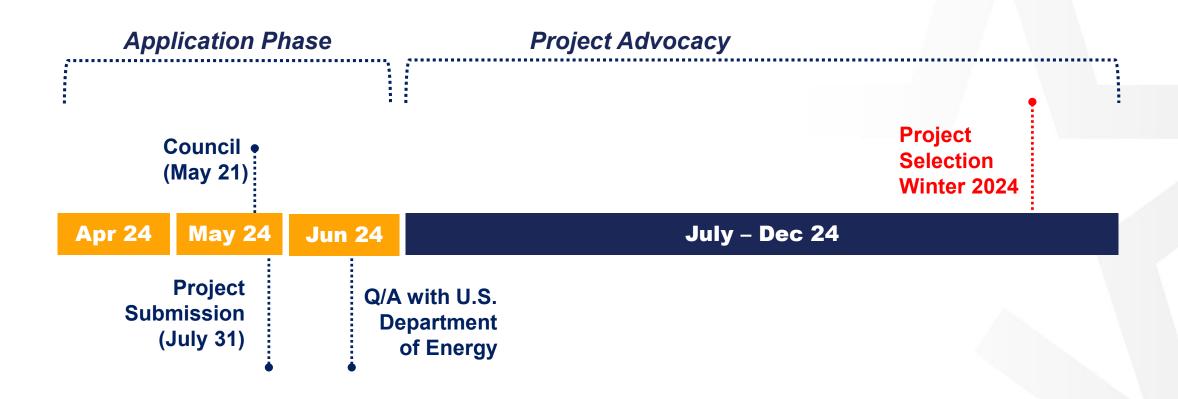


Grant Budget Request

Project Component	Grant
Microgrid Design and Training (NREL)	\$400,000
Site Resiliency	\$100,000
Parking Structures	\$550,000
Solar Generation (60KW limit)	\$900,000
Battery Storage (1,000 KW / 1MW)	\$1,000,000
Public Engagement and DEI	\$50,000
Contingency (5%)	\$160,000
Federal Grant (95%)	\$3,000,000
City Match (5%)	\$160,000
Total	\$3,160,000



Application Timeline





Council Action

Discussion and action on a Resolution authorizing the submission of an application to the U.S. Department of Energy (DOE) Local Government Energy Program: Communities Sparking Investment in Transformative Energy (C-SITE) requesting funds in the amount of \$3,000,000.00, with a 5% match of \$160,000.00 from the City, for the Paso del Norte Port of Entry Microgrid Project.

MISSION



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

VISION



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



VALUES

Integrity, Respect, Excellence, Accountability, People