Northwest Marana Reliability Project

Welcome

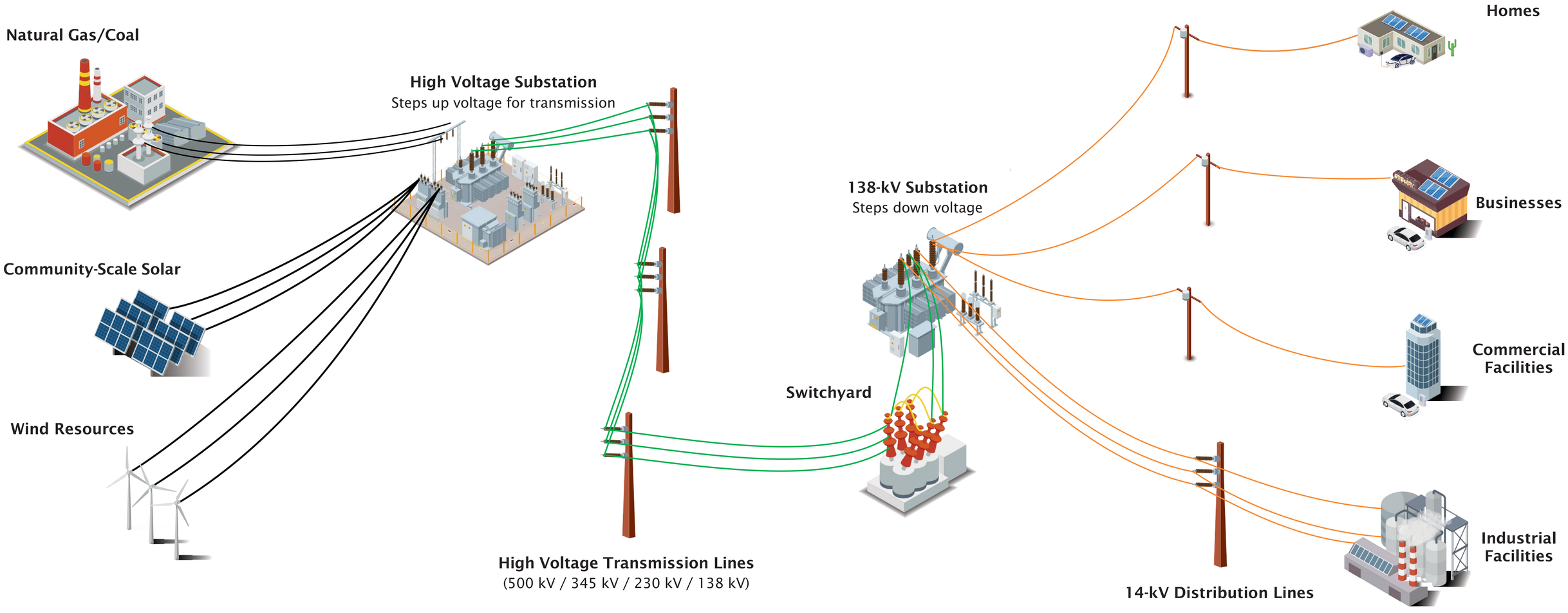
Bienvenidos, hablamos español

Please sign in

Favor de registrarse

Northwest Marana
Reliability Project

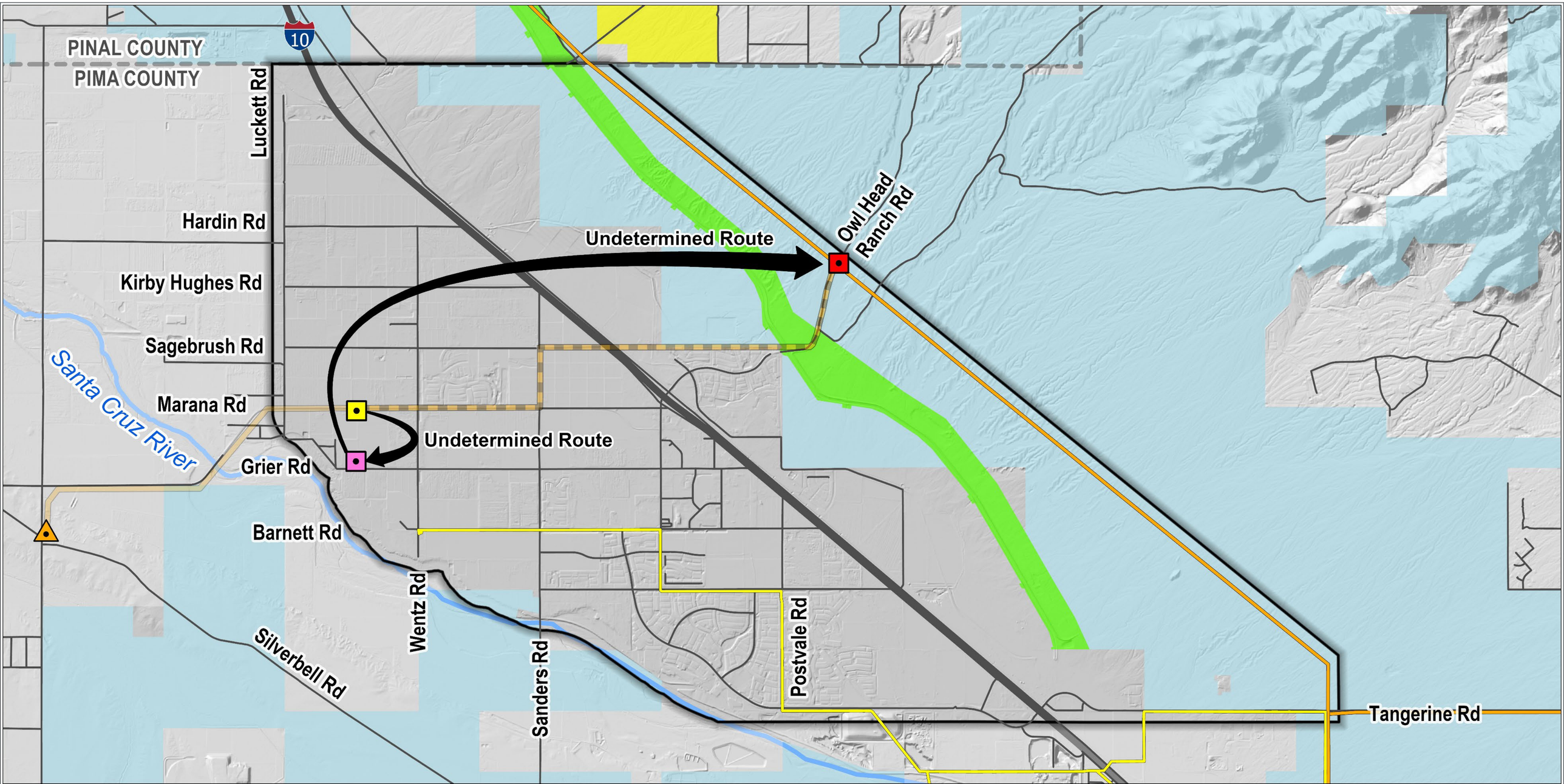
Our Energy Grid: How we deliver electric service to you



Generation

Transmission

Distribution



NORTHWEST MARANA RELIABILITY PROJECT

Study Area

TEP Tucson Electric Power

Project Features
- Study Area
- Circuit Tie
- Proposed Owl Head Ranch Switchyard
- Approved Grier Substation
- Approved Saguaro to Marana 115/138 kV Transmission Line

Reference Features
- Approved Saguaro to Marana 115 kV Transmission Line
- Existing 46 KV Line
- Existing 138 kV Line
- Existing AEPCO Substation
- Road
- Interstate
- County Boundary

Land Ownership
- Bureau of Land Management
- Bureau of Reclamation
- Private
- State Trust

Pima County, AZ
NAD 1983 UTM Zone 12N
32.4622°N 111.2°W

0 1 Miles
0 2 Kilometers

N

1:24,000

Base Map: Esri ArcGIS Online, accessed January 2025
Updated: 1/27/2025
Project No. 84883
Layout: Poster - Study Area
Aprx: 84883_Marana_Siting_posters

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A stronger, smarter grid will support the community's growing energy needs and maintain reliable service.

Need and Benefits

Need

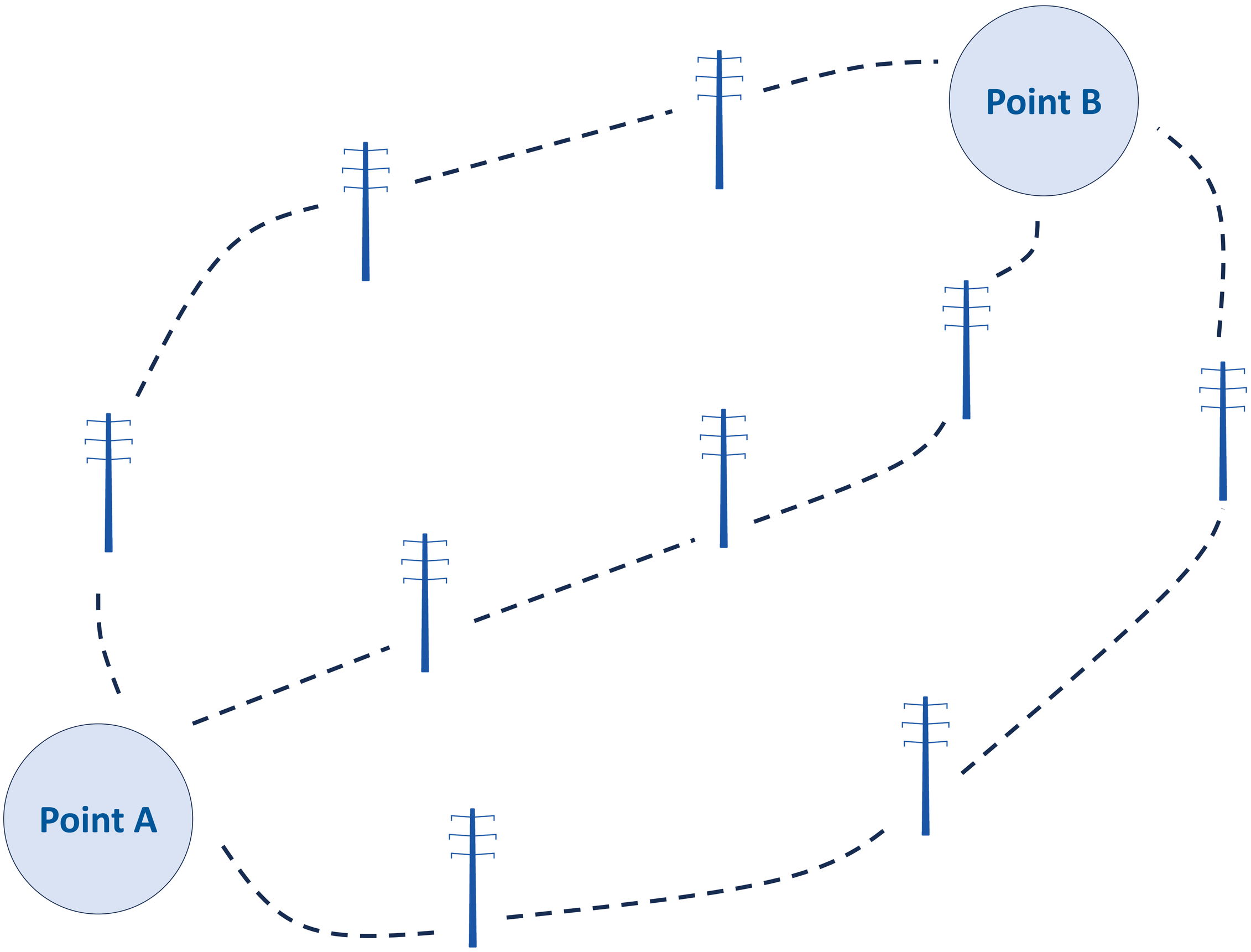
- Peak power demand in the area has nearly reached the capacity of lower-voltage systems.

Benefits

- Better electric reliability through a looped system that will help reduce the frequency and duration of outages.
- Greater transmission capacity to meet the area's growing energy needs.
- Improved grid capacity to support economic growth and prosperity.

What is Siting?

The process of determining the exact route or location where a high-voltage transmission line will be built between two or more points. These points could be new or existing substations, switchyards or energy resources.



A component of siting is permitting. Under Arizona law (A.R.S. § 40-360 et seq.), certain transmission line configurations require a Certificate of Environmental Compatibility (CEC) before construction and operation along an approved route.

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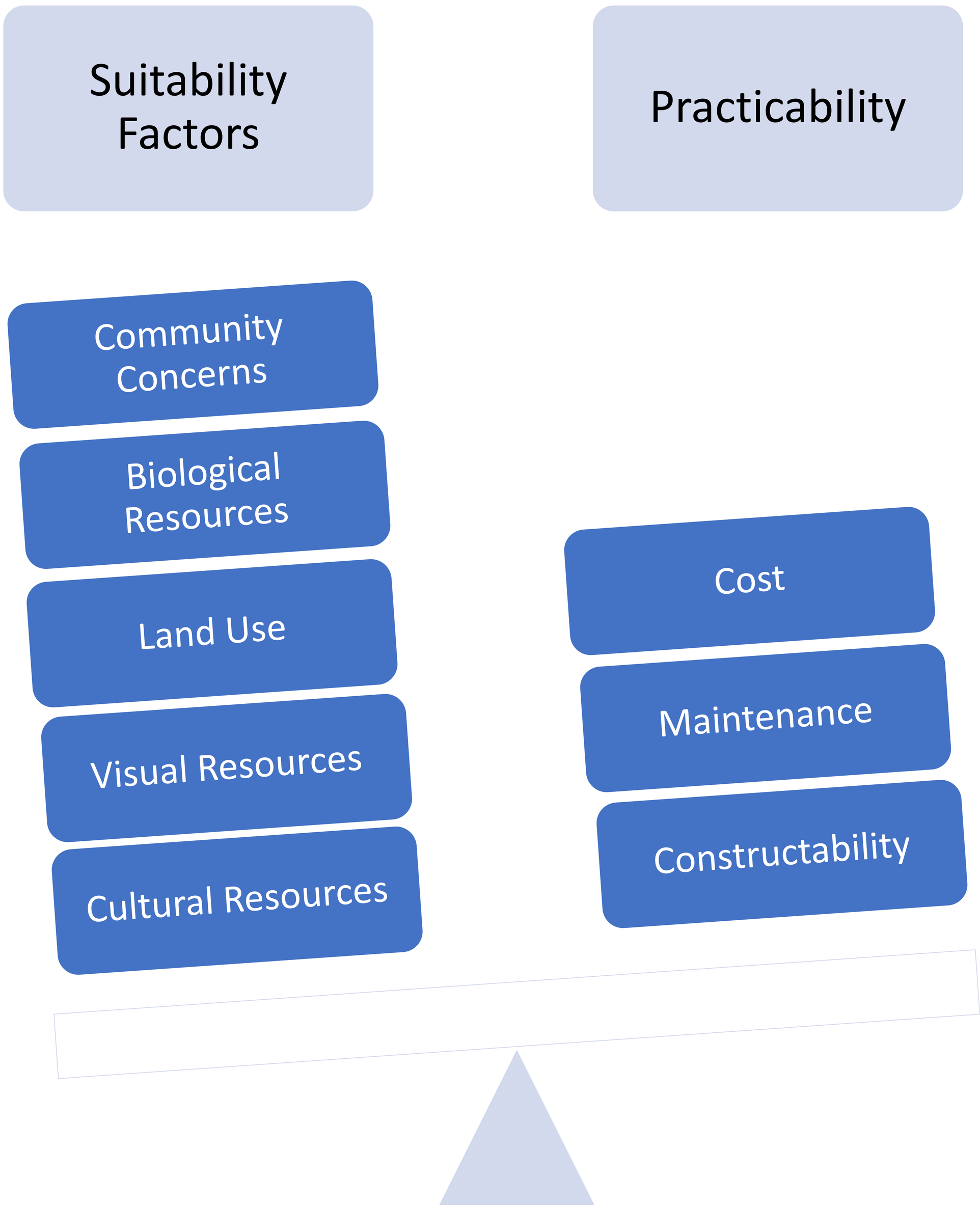
Project Route Development and Evaluation

Tucson Electric Power considers factors important to the community and environment, and balances them with constructability, maintenance, and cost to find the most suitable path for the transmission line that satisfies the need for the project.



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Pole Structure Example:
Tubular, Weathering Steel Monopoles

Typical structure, approximately 74 feet in height, located at 967 S Pantano Rd in Tucson.

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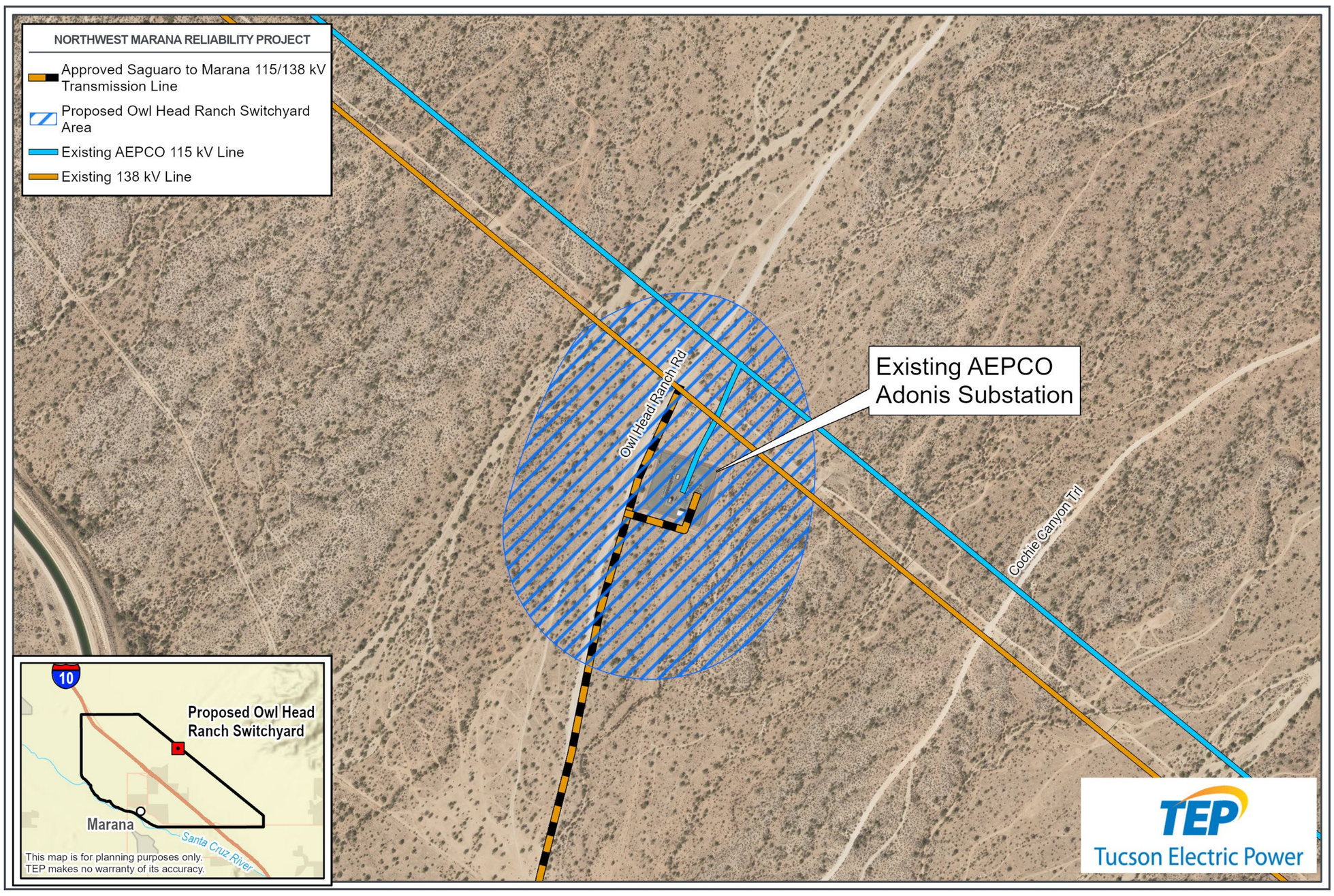
Owl Head Ranch Switchyard



The proposed Owl Head Ranch Switchyard will be built near the existing Arizona Electric Power Cooperative's (AEPCO's) Adonis Substation.

Existing Sonoran Substation

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VIEW POINT

GRIER SUBSTATION
PHOTO SIMULATION #1

EXISTING CONDITIONS

PHOTO SIMULATION

Note: This exhibit is for visual purposes only and subject to change pending final engineered plans. Transmission Structure locations are subject to ACC CEC approval. Locations shown are estimates.

FROM THE SOUTHEAST CORNER
LOOKING NORTHWEST

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Reliability Project

Siting Process

Phase 1:
Pre-Analysis

- Conduct Field Visits
- Develop Study Area
- Identify Opportunities and Constraints
- Conduct Public Outreach
- Develop Preliminary Segments

Phase 2:
Data Inventory

- Conduct Research and Collect Data

Phase 3:
Suitability Assessment

- Develop Suitability Models
- Conduct Suitability Assessment
- Field Review
- Conduct Public Outreach
- Refine Segments

Phase 4:
Compatibility Analysis

- Conduct Compatibility Analysis
- Develop Route Alternatives
- **Conduct Public Outreach**
- Identify Preferred Route

We are here

Phase 5:
Concept Evaluation

- Field Review
- Submit CEC Application
- Public Notification and Hearing

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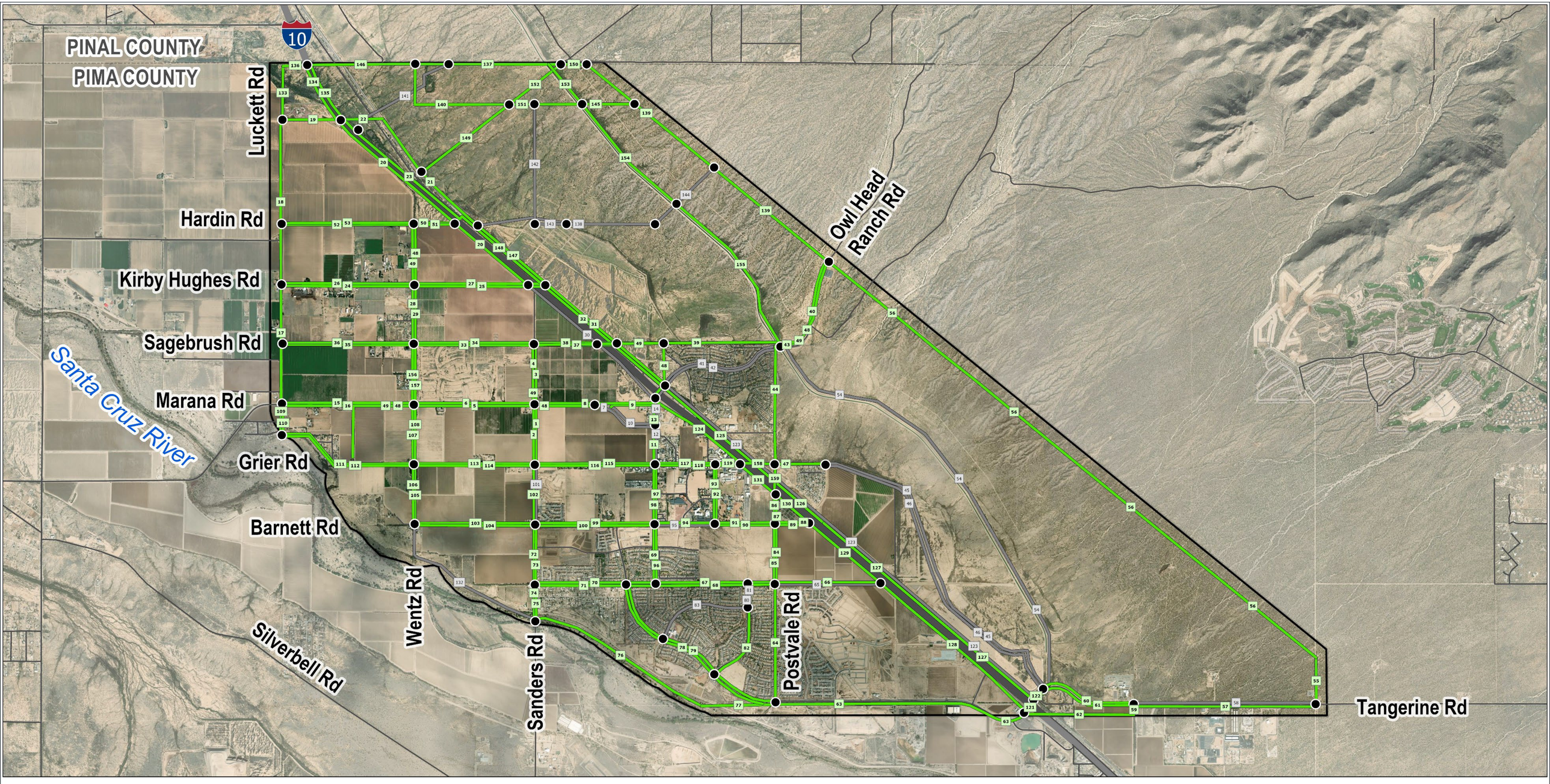
Siting Considerations

Tucson Electric Power (TEP) will consider several factors before applying for a Certificate of Environmental Compatibility. These factors, used by TEP to analyze potential line routes, include the following:

- Wildlife and plant life
- Scenic areas, historic sites and archaeological sites and structures
- Environment
- Noise emission levels and interference with communication signals
- Potential public recreational uses
- Existing development plans
- Engineering feasibility and challenges
- Project costs and potential impacts on customer rates
- Public input

Scan the QR code or complete a comment form to share your perspective on the values that matter most to you in this assessment.



NORTHWEST MARANA RELIABILITY PROJECT

Refined Segments

Tucson Electric Power

Project Features

- Study Area
- Retained Link Segment
- Removed Link Segment
- Segment End Point

Reference Features

- Road
- Interstate
- County Boundary

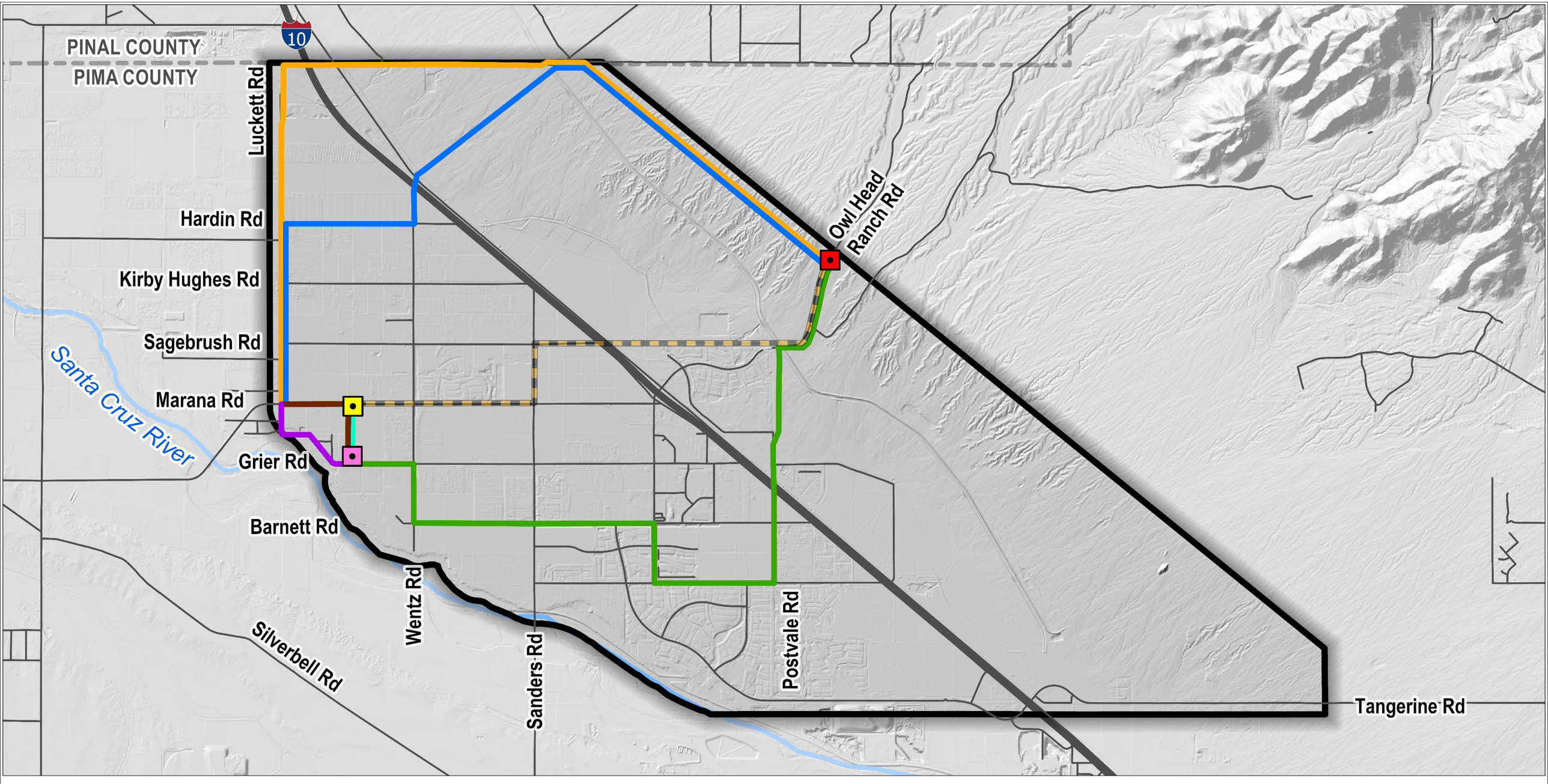
Pima County, AZ
NAD 1983 UTM Zone 12N
32.4622°N 111.2°W

0 1 Miles
0 2 Kilometers

N

1:24,000

Base Map: Esri ArcGIS Online, accessed January 2025
Updated: 1/22/2025
Project No. 84883
Layout: Poster - Refined Link Segments
Aprx: 84883_Marana_Siting_posters



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Alternative Routes

TEP Tucson Electric Power

Project Features

- Study Area
- Circuit Tie
- Proposed Owl Head Ranch Switchyard
- Approved Grier Substation
- Approved Saguaro to Marana 115/138 kV Transmission Line (Under Construction)

Grier Substation to Owl Head Ranch Switchyard

- Alternative 1
- Alternative 2
- Alternative 3
- Alternative A
- Alternative B

Grier Substation to Circuit Tie

- Grier to Circuit Tie - Preferred Route

Reference Features

- Road
- Interstate
- County Boundary

Pima County, AZ
NAD 1983 UTM Zone 12N
32.4622°N 111.2°W

0 1 Miles
0 2 Kilometers

N

1:24,000

Base Map: Esri ArcGIS Online, accessed March 2025
Updated: 3/11/2025
Project No. 84883
Layout: Poster - Alternatives
Aprx: 84883_Marana_Siting_posters

Why Not Install Transmission Lines Underground?

Cost

- Underground transmission lines cost significantly more to build and maintain.
  - The difference escalates with voltage. Higher voltages = higher underground costs.
  - 5-10x more expensive – or more. Costs vary for each project.
- Higher costs lead to higher electric rates.
- Arizona Corporation Commission has not allowed rate recovery of unnecessary costs.
- Interested parties can create improvement district to fund undergrounding in their area.

Efficiency, Consistency

- No engineering or safety justification.
- Every other TEP transmission line is installed overhead.
- Majority of transmission lines in the United States are installed overhead.
- Underground construction disturbs more land, existing facilities and archaeological resources.

Reliability

- Comparable to overhead construction, with higher maintenance costs.
- Fewer outages but longer repair times.
- Life expectancy of underground equipment is shorter.
- 138-kV transmission poles withstand extreme weather, traffic impacts.

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Timeline

Public Open House # 1 - *November 2024*

Public Open House #2 (Virtual) – *February 2025*

Public Open House #3 - *March 2025*

Certificate of Environmental Compatibility Application Submittal - *Spring 2025*

Transmission Line Siting Committee Hearing - *Summer 2025*

Arizona Corporation Commission Open Meeting - *Summer 2025*

Project in Service - *2028*

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We Want to Hear from You

How to Provide Official Public Comment

Fill out an online comment form at:
tep.com/northwest-marana

Email comments to:
nwmarana@tep.com

Call:
1-833-655-0399 and leave a voicemail message

Mail a letter with comments to:
Northwest Marana Reliability Project
ATTN: Theresa Knoblock
343 West Franklin Street
Tucson, Arizona 85701

An interactive map is posted on our website.

Cómo proporcionar un comentario público oficial

Llenando un formulario de comentarios en línea:
tep.com/northwest-marana

Enviando comentarios por correo electrónico a:
nwmarana@tep.com

Llamando al:
1-833-655-0399 y dejar un mensaje de correo de voz

Enviando una carta con comentarios a:
Northwest Marana Reliability Project
ATTN: Theresa Knoblock
343 West Franklin Street
Tucson, Arizona 85701

Para ver un mapa interactivo, visite la página web del proyecto.

More Information

tep.com/northwest-marana

Más información

tep.com/northwest-marana-espanol