

# Northwest Marana Reliability Project

**Welcome**

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Please sign in



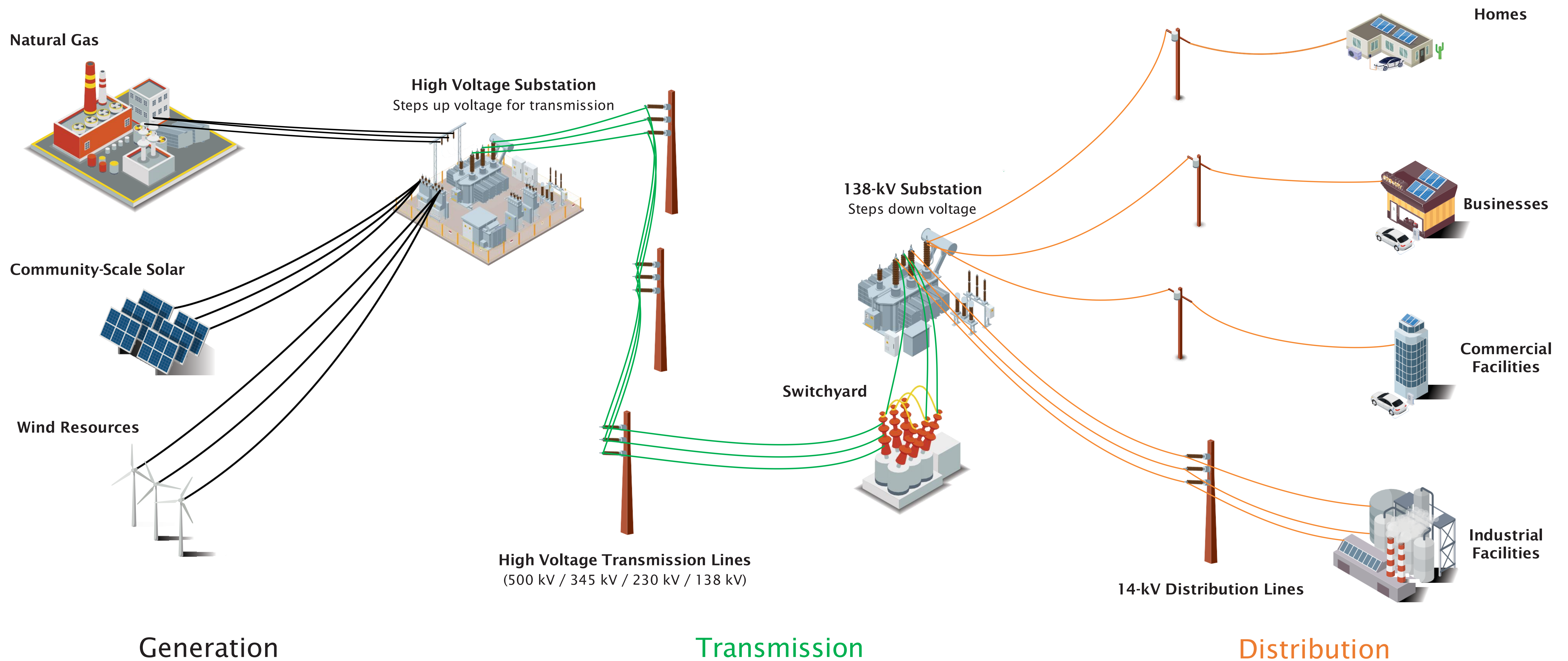
**Bienvenidos,  
hablamos  
español**

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Favor de  
registrarse



## Our Energy Grid: How we deliver electric service to you



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

## **Need and Benefits**

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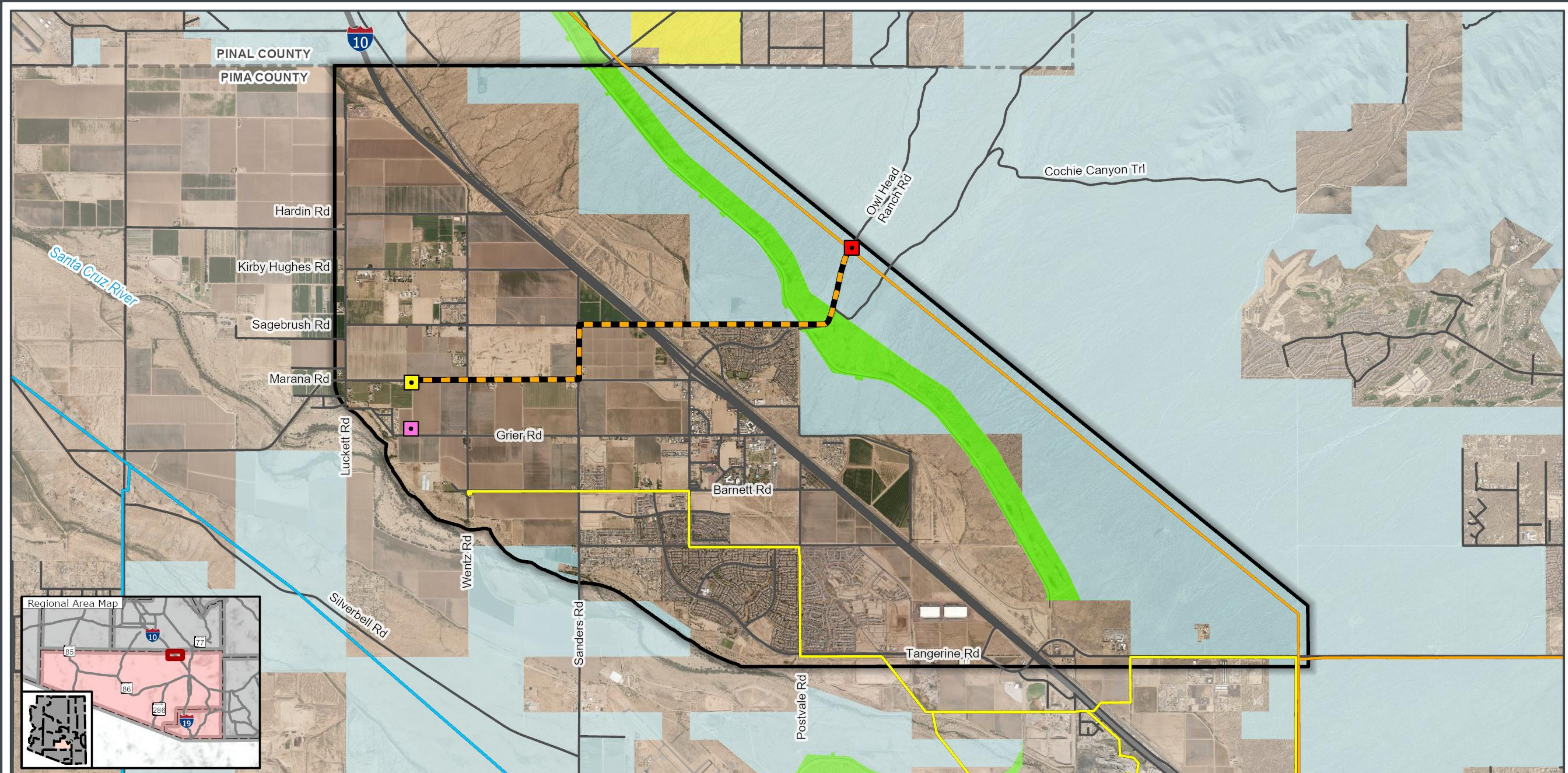
### **Need**

- 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.





**NORTHWEST MARANA RELIABILITY PROJECT**  
**Preliminary Study Area**



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

- Reference Features**
- Existing 46 kV Line
  - Existing 115 kV Line
  - Existing 138 kV Line
  - County Boundary
  - Road
  - Interstate

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

This map is for planning purposes only. TEP makes no warranty of its accuracy.

Pima County, AZ  
 NAD 1983 UTM Zone 12N  
 32.4588°N 111.2019°W

0 1 Miles  
 0 1 Kilometers

Base Map: Esri ArcGIS Online, accessed November 2024  
 Updated: 11/4/2024  
 Project No. 84883  
 Layout: Preliminary Study Area  
 Aprx: 84883\_MaranaSiting

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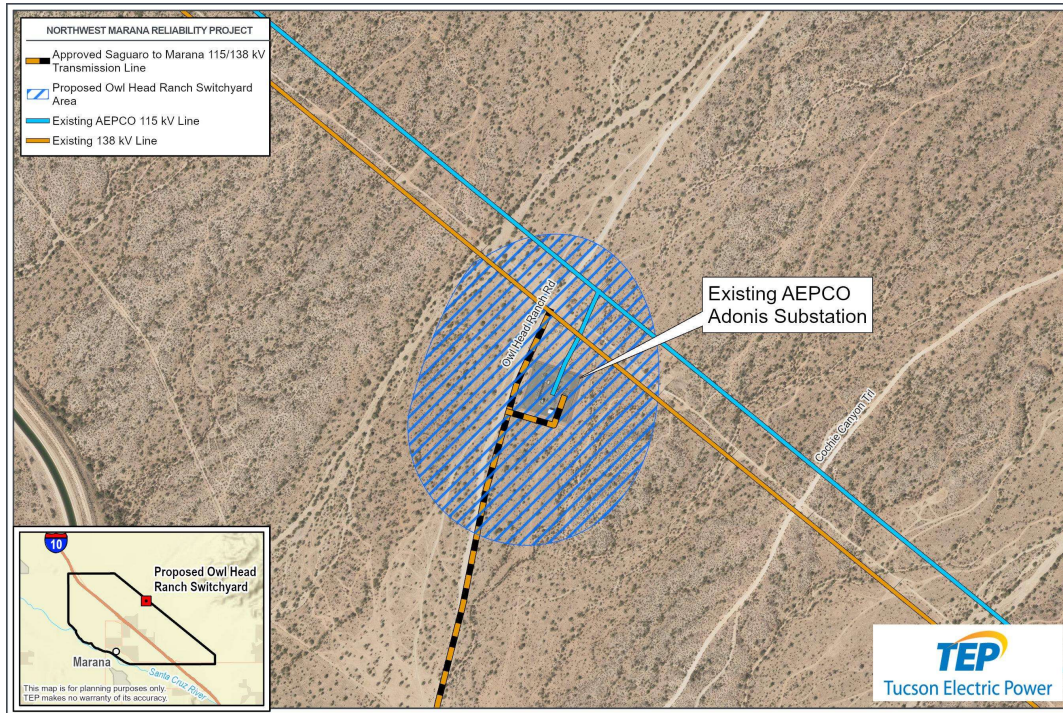
## **Pole Structure: Tubular, Weathering Steel Monopoles**

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

## Owl Head Ranch Switchyard



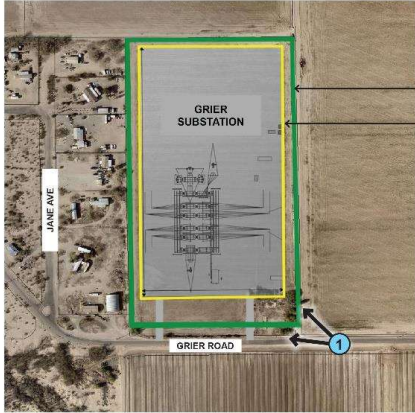
The proposed Owl Head Ranch Switchyard will be built near the existing Arizona Electric Power Cooperative's (AEPCO's) Adonis Substation.



Existing Sonoran Substation



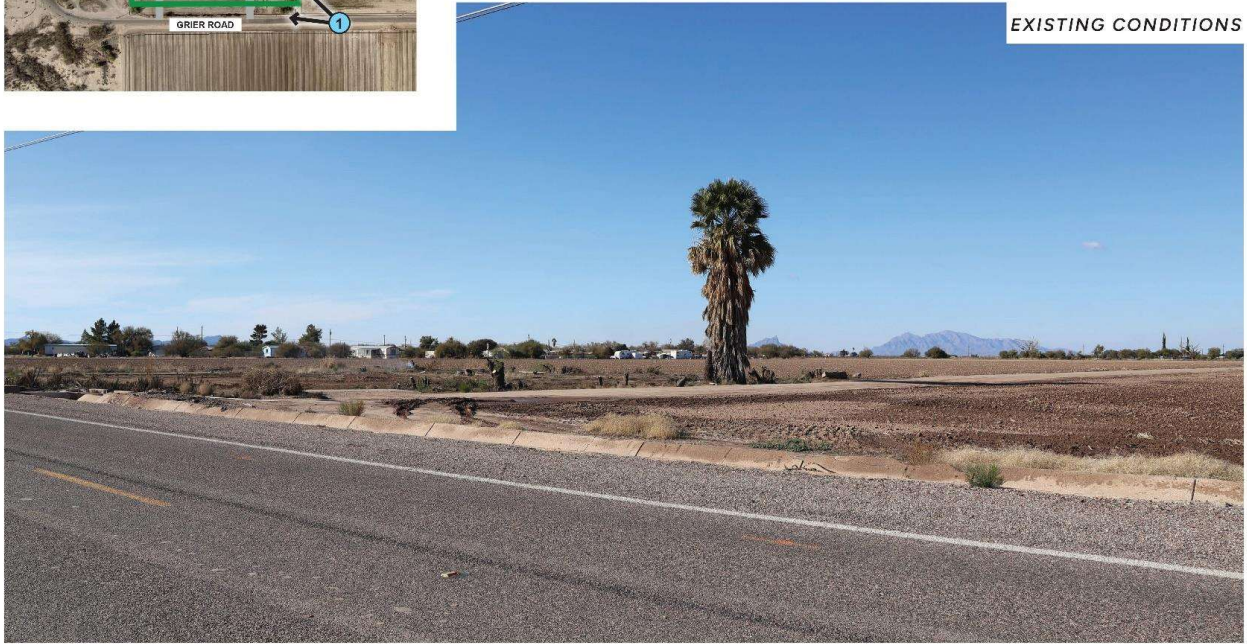
## VIEW POINT



LANDSCAPE BUFFER / SCREEN  
12' DECORATIVE MASONRY WALL

## GRIER SUBSTATION PHOTO SIMULATION #1

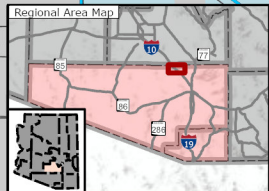
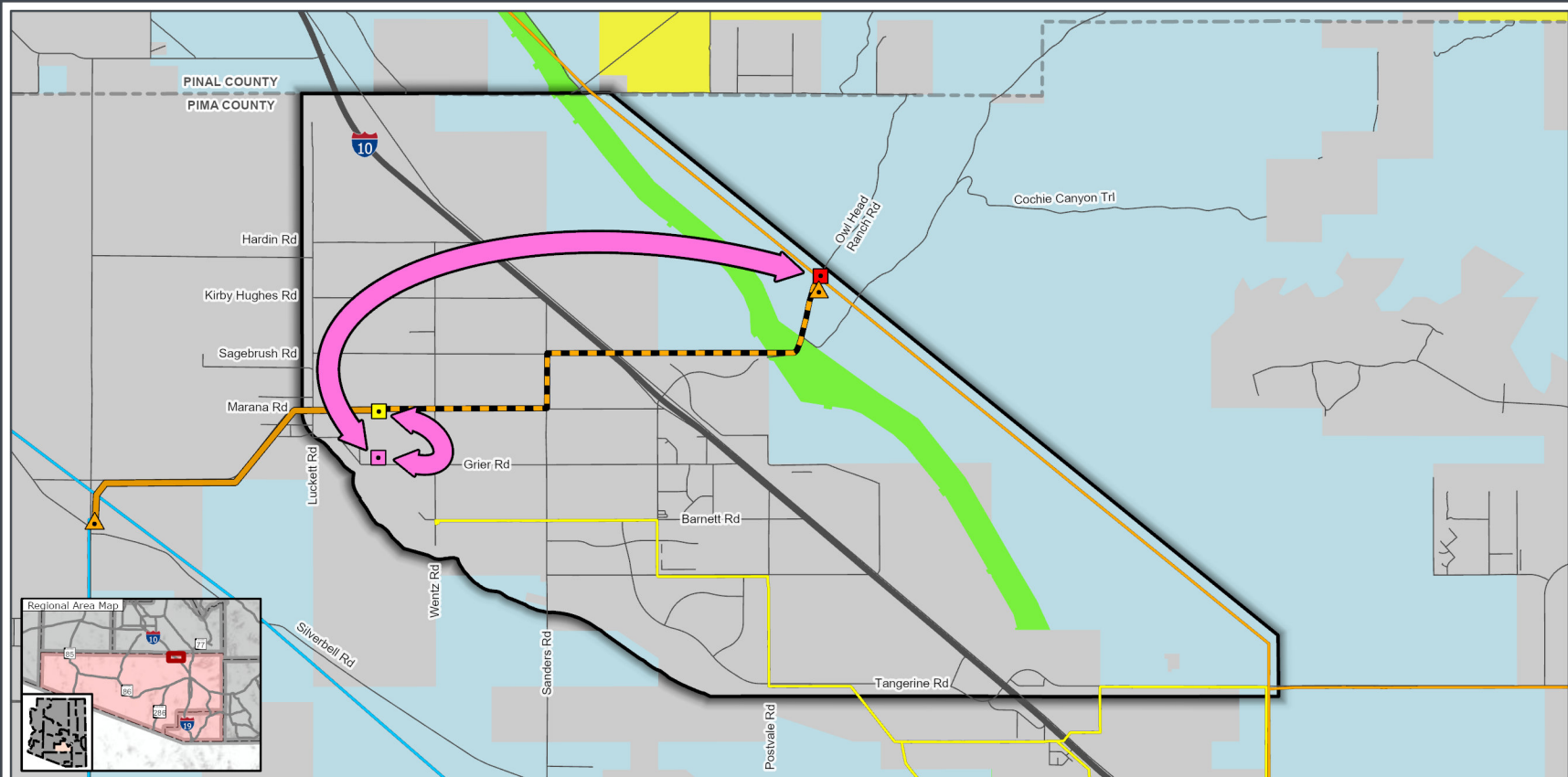
### EXISTING CONDITIONS



### 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.



**NORTHWEST MARANA RELIABILITY PROJECT**  
**Conceptual Connections**



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

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

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

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Pima County, AZ  
 NAD 1983 UTM Zone 12N  
 32.4624°N 111.1967°W



Base Map: Esri ArcGIS Online, accessed November 2024  
 Updated: 11/14/2024  
 Project No. 84883  
 Layout: Concept Map  
 Aprx: 84883\_MaranaSiting



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## Siting Process

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### 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
- Refine Segments

### Phase 4: Compatibility Analysis

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

### Phase 5: Concept Evaluation

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



## Siting Considerations

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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



Existing development plans



Scenic areas, historic sites and archaeological sites and structures



Engineering feasibility and challenges



Environment



Project costs and potential impacts on customer rates



Noise emission levels and interference with communication signals



Public input



Potential public recreational uses



Interested in shaping the evaluation of transmission line routes? Scan the QR code or complete a comment form to share your perspective on the values that matter most to you in this assessment.



## Timeline





## Why Not Install Transmission Lines Underground?

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### 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.



## We Want to Hear from You

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### How to Provide Official Public Comment

#### Fill out an online comment form at:

[tep.com/northwest-marana](http://tep.com/northwest-marana)

#### Email comments to:

[nwmarana@tep.com](mailto: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.

#### More Information

[tep.com/northwest-marana](http://tep.com/northwest-marana)



### Cómo proporcionar un comentario público oficial

#### Llenando un formulario de comentarios en línea:

[tep.com/northwest-marana](http://tep.com/northwest-marana)

#### Enviando comentarios por correo electrónico a:

[nwmarana@tep.com](mailto: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.

#### Más información

[tep.com/northwest-marana-espanol](http://tep.com/northwest-marana-espanol)

