Santa Cruz Reliability Project North

AGENCY BRIEFING

CLARK BRYNER – MANAGER, SITING, OUTREACH AND ENGAGEMENT

March 2025

Agencies

**Please type into the chat:**
- **Name**
- **Organization**
- **Title/Role**

- Federal Agencies
- State Agencies
- Pima County
- Santa Cruz County
- Town of Sahuarita
- Green Valley Coordinating Council
- Chambers of Commerce
- Telecommunication Companies
- Greater Nogales Santa Cruz County Port Authority
- School Districts
- Union Pacific Railroad
- Utilities
- Large private landowners

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Agenda

- How Power Gets to You
- Santa Cruz Reliability Project – Three Phases
- Need and Benefits
- Phase 1 – Santa Cruz Reliability Project North
- Revised Study Area
- Kantor Substation
- Proposed Transmission Line
- What is Siting?
- Planning and Siting Process
- Project Schedule
- Public Participation
- Q&A Session

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SERVICES

How We Deliver Energy Service to You
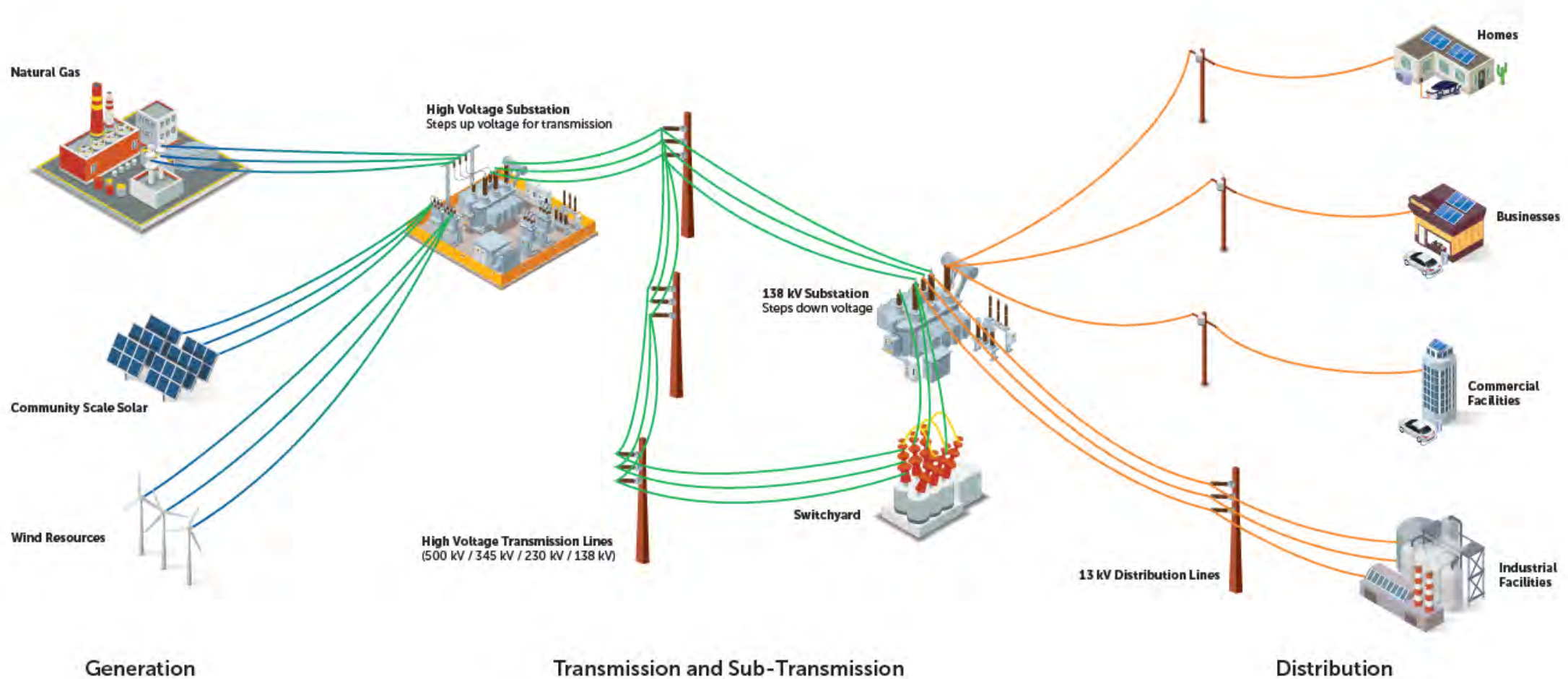
Legend

— In-Service 138 kV Transmission Line
- - - Undetermined 138 kV Transmission Line
- - - Upgraded 138 kV Transmission Line
▲ In-Service 138 kV Substation
▲ Proposed 138 kV Substation

0   5   10
Miles

THIS PROJECT

Phase 1 - SCR North

Regional Grid (TEP)

UNDETERMINED ROUTE

Kantor (UNSE)

2024-2025: Planning and Siting
2027-2028: Construction

Phase 2 - Nogales Tap-Kantor

Vail (TEP)

Nogales Tap (WAPA)

Kantor (UNSE)

CEC Issued in 2017 under Decision 76468
2028-2029: Construction

Phase 3 - SCR South

Kantor (UNSE)

UNDETERMINED ROUTE

Valencia (UNSE)

Gateway (UNSE)

2025-2026: Planning and Siting
2029-2030: Construction
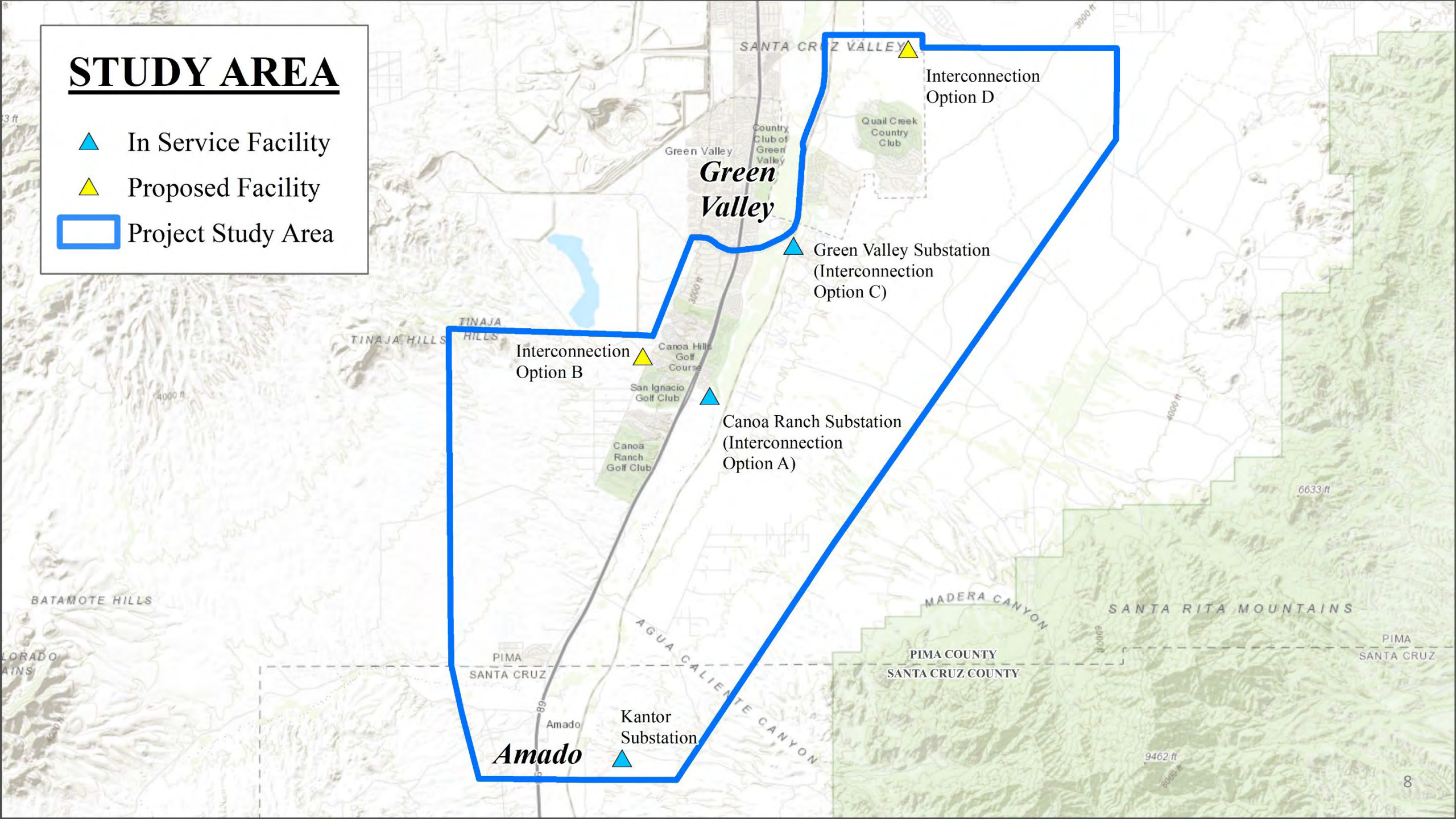
Need and Benefits

- Improve the reliability and resiliency of the electrical transmission system serving Santa Cruz County.

- Maintain and strengthen reliability for Santa Cruz County and its residents, businesses and industries, including hospitals, schools, ports of entry and federal facilities.

- Meet current and future energy needs without impacting service to existing customer.

- Reduce and eliminate the potential for a major and sustained outage in Santa Cruz County.

- Support maintenance and other upgrades, allowing work to be performed without interrupting system operations.

Santa Cruz Reliability Project North (Phase 1)

- First phase of a three phase project.

- Construct a second 138 kilovolt (kV) transmission line to connect UniSource's Kantor Substation, in Santa Cruz County, to the regional electric grid in Pima County.

- Upgrade and expand the Kantor Substation to accommodate operations and maintenance requirements.

STUDY AREA

△ In Service Facility

△ Proposed Facility

▭ Project Study Area

Green Valley

Interconnection Option D

Green Valley Substation (Interconnection Option C)

Interconnection Option B

Canoa Ranch Substation (Interconnection Option A)

Amado
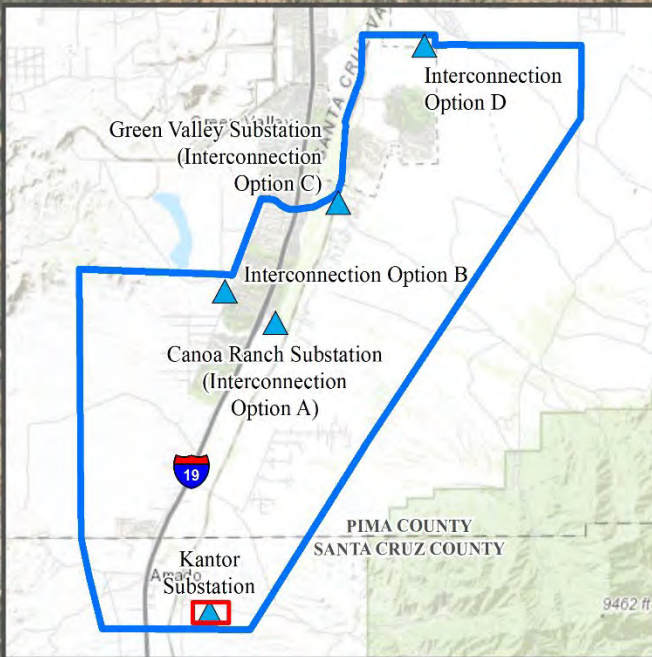
Kantor Substation

PIMA COUNTY
SANTA CRUZ COUNTY

Kantor Substation

KANTOR SUBSTATION EXPANSION

Project Study Area
Substation Expansion Area

FS Road 184

Existing Kantor Substation

Interconnection Option D

Green Valley Substation (Interconnection Option C)

Interconnection Option B

Canoa Ranch Substation (Interconnection Option A)

Kantor Substation

PIMA COUNTY
SANTA CRUZ COUNTY

9462 ft

Example Pole Structure

Tubular, Weathering Steel Monopoles

Typical height 75 - 85 feet
Typical span length of 600 - 1,000 feet
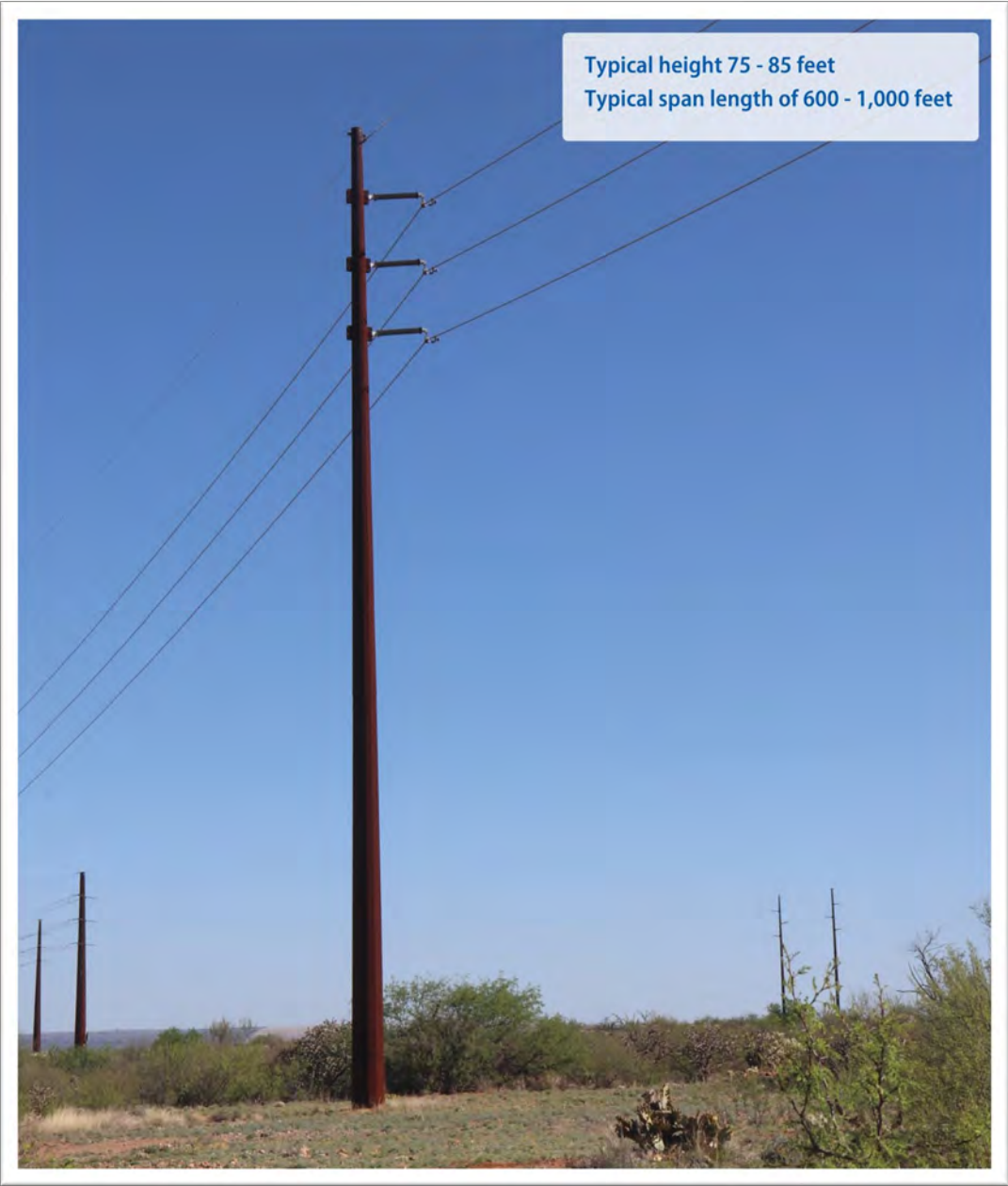
What is Siting?
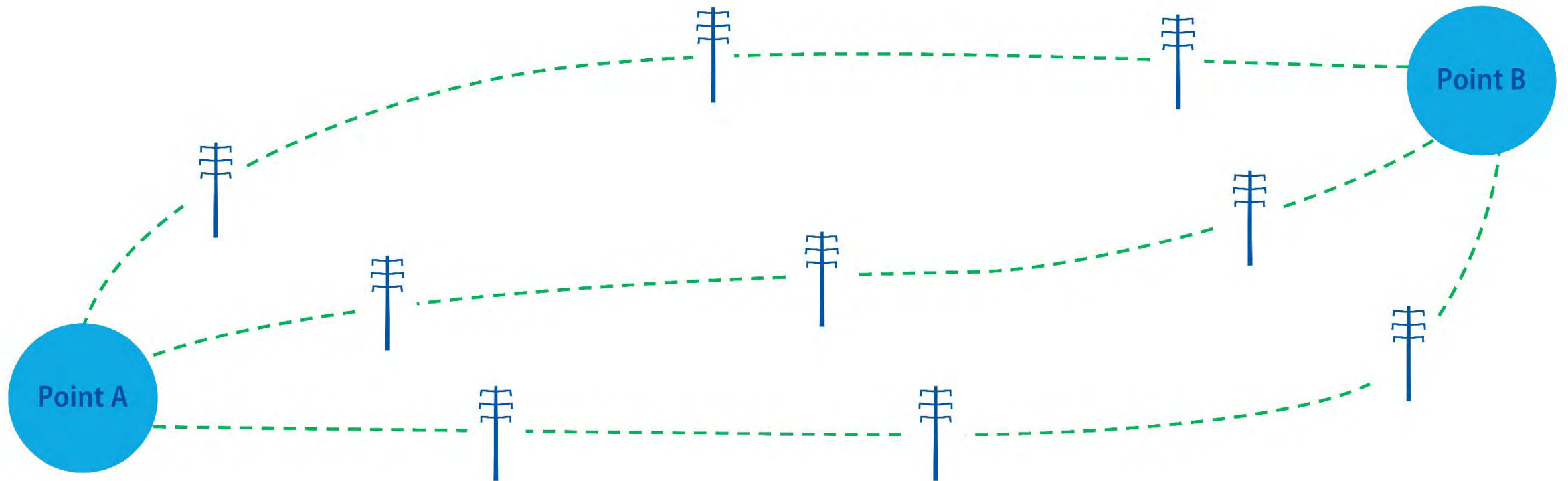
Project Route Development and Evaluation

Community Input

Biological Resources

Land Use

Visual Resources

Cultural Resources

Cost

Maintenance

Constructability

Suitability Factors

Practicability

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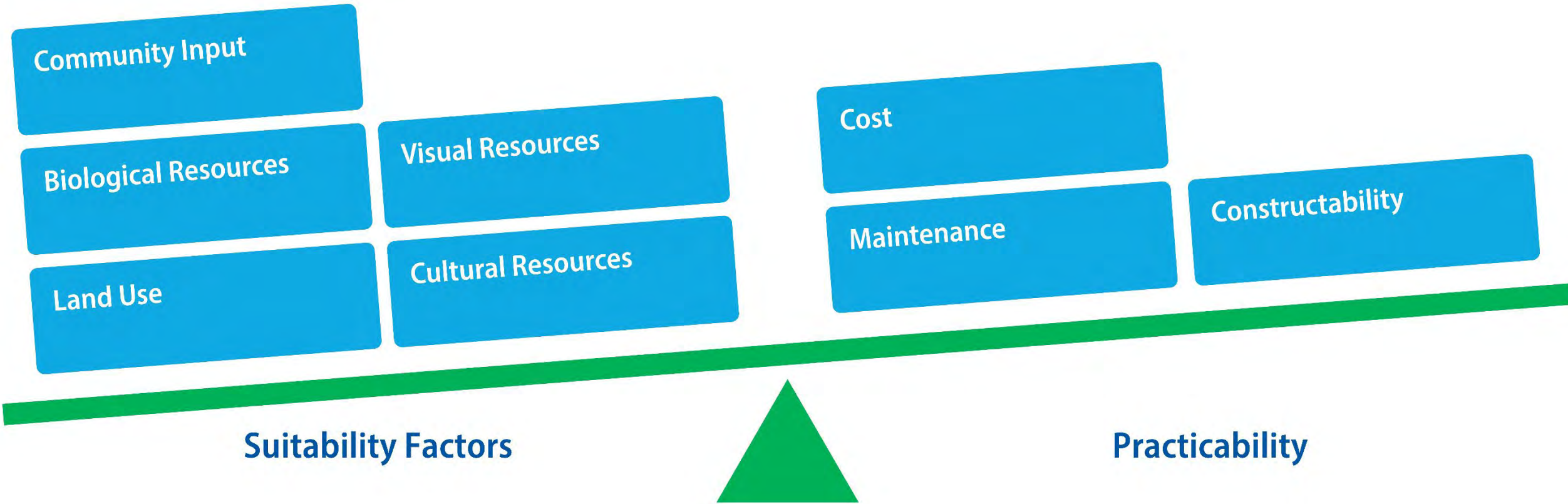
Planning and Siting Process Flowchart

Phase 1:
Pre-Analysis

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

⭐ **We Are Here**

Phase 2:
Data Inventory

- Conduct Research and Collect Data

Phase 3:
Suitability Assessment

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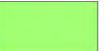- Field Review
- Refine Segments

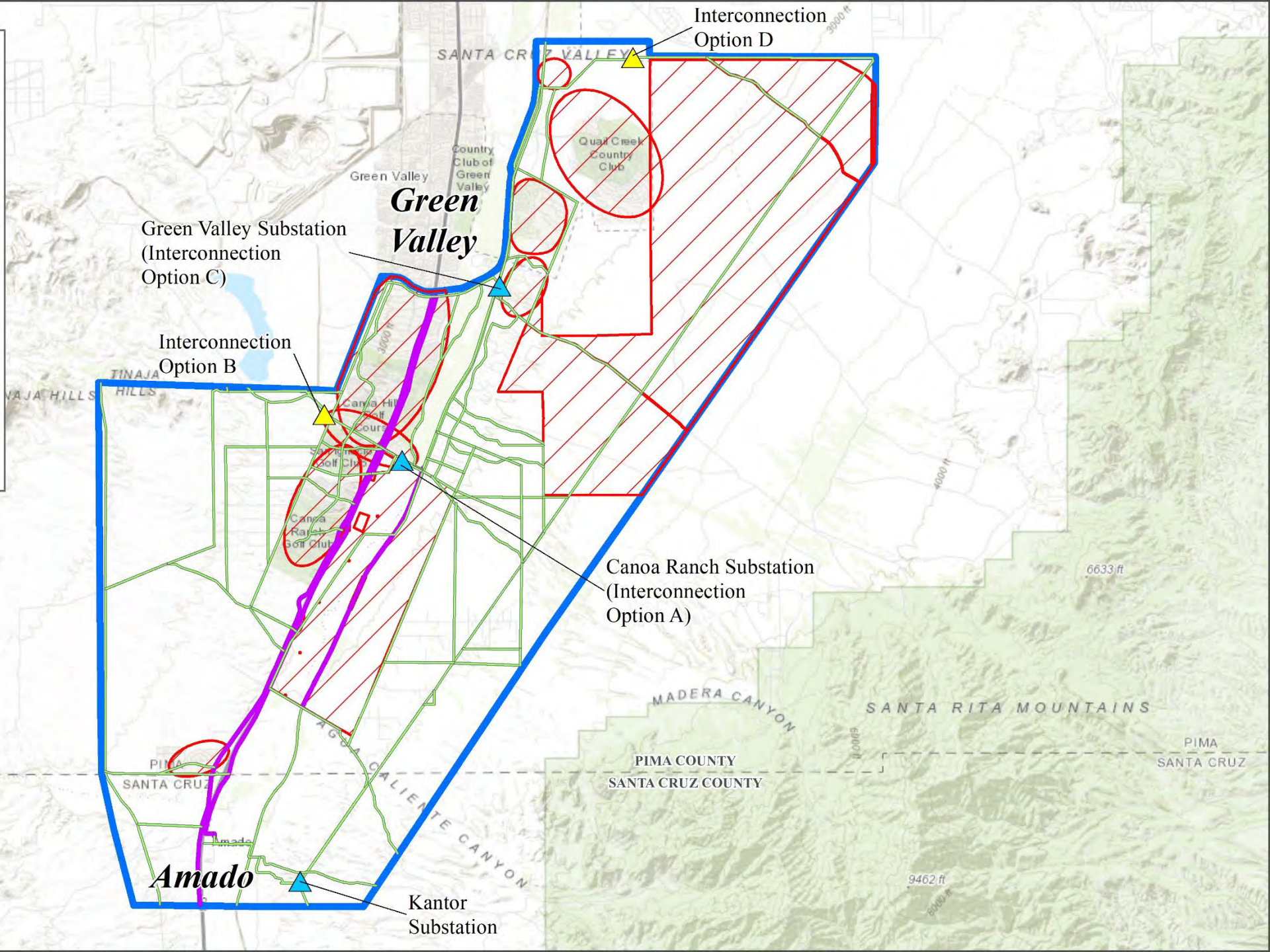**Phase 4:**
Compatibility Analysis

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

Phase 5:
Concept Evaluation

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

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Opportunities & Constraints

- ▲ In Service Facility
- ▲ Proposed Facility
- Opportunity
- Constraint
- Both
- Project Study Area

Interconnection Option D

Green Valley Substation (Interconnection Option C)

Green Valley

Interconnection Option B

Canoa Ranch Substation (Interconnection Option A)

Amado

Kantor Substation

SANTA CRUZ VALLEY

Country Club of Green Valley

Quail Creek Country Club

Green Valley

Canoa Hills Golf Course

Canoa Ranch Golf Club

TINAJA HILLS

NAJA HILLS

BATAMOTE HILLS

AGUA CALIENTE CANYON

MADERA CANYON

SANTA RITA MOUNTAINS

PIMA COUNTY
SANTA CRUZ COUNTY

PIMA
SANTA CRUZ

ORADO
AINS

Draft Preliminary Segments

Legend:
- ▲ (blue) In Service Facility
- ▲ (yellow) Proposed Facility
- ○ Segment End Point
- ─── Preliminary Segment
- ▭ Project Study Area

Interconnection Option D

Green Valley Substation (Interconnection Option C)

Green Valley

Interconnection Option B

Canoa Ranch Substation (Interconnection Option A)

Amado

Kantor Substation

SANTA CRUZ VALLEY

Quail Creek Country Club

Country Club of Green Valley

Green Valley

TINAJA HILLS

NAJA HILLS

BATAMOTE HILLS

MADERA CANYON

SANTA RITA MOUNTAINS

PIMA COUNTY
SANTA CRUZ COUNTY

PIMA
SANTA CRUZ

Project Schedule*

Under Arizona law, certain transmission line configurations require a Certificate of Environmental Compatibility (CEC) before construction and operation along an approved route.

- Q3 '23-Q2 '24 – Transmission Line Planning and Siting

- Fall 2025 – CEC Application Submittal

- Fall 2025 – Arizona Power Plant and Transmission Line Siting Committee Hearing

- Q1 2026 – Arizona Corporation Commission (ACC) Open Meeting

- 2028 – Phase 1: Project in Service

- 2029 – Phase 2: Project in Service

- 2030 – Phase 3: Project in Service

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* Target schedule, subject to change

Public Participation

- Fill out an online comment form at: ueasz.com/santa-cruz-reliability-north

- Send comments to: scrnorth@uesaz.com

- Call (520) 917-6635 and leave a voicemail message

- Mail a letter with comments to:
  ATTN: Santa Cruz Reliability North
  P.O. Box 711
  Mail Stop CB200
  Tucson, AZ 85701-0711

Public Open House Opportunities

Thursday, March 20, 2025. 9-11 a.m.
Hosted by the Green Valley Coordinating Council
Green Valley Recreation East Center
7 S Abrego Drive
Green Valley, AZ 85614

Thursday, March 20, 2025. 5-7 p.m.
Sopori Elementary School
5000 W. Arivaca Rd.
Amado, AZ 85645

Q&A Session

Please use the raise hand feature in MS Teams

or

Type your question into the chat