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Thomas J. Ferry
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Arizona Electric Division
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AZ CORP COMMISSION
DOCUMENT CONTROL



January 30, 2002

Mr. Ernest Johnson
Director - Utilities Division
Arizona Corporation Commission
1210 West Washington Avenue
Phoenix, AZ 86607

**RE: Ten Year Plan, Citizens Utilities Company
Arizona Electric Division - (2002- 2011)**

Dear Mr. Johnson:

In accordance with Arizona Revised Statute, Section 40-360.02, Citizens Communications Company's Ten Year Plan regarding planned transmission line construction is attached.

Please let me know if you have any questions or comments.

Sincerely,

Thomas J. Ferry

Enclosures

cc Ken Cohen
Resal Craven
Bill DeJulio
Ernesto Ojeda
Carl Dabelstein
Sean Breen

Arizona Corporation Commission
DOCKETED

JAN 30 2002

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CITIZENS COMMUNICATIONS COMPANY

ARIZONA ELECTRIC DIVISION

TEN YEAR PLAN

2002-2011

**Prepared for the Arizona Corporation Commission and the Power Plant and
Transmission Line Siting Committee**

Filed on January 31, 2002

INTRODUCTION

This report is submitted by Citizens Communications Company, Arizona Electric Division (Citizens) in compliance with Arizona Revised Statutes, Section 40-360.02 requirements for every person contemplating construction of any transmission line within the state during any ten year period to file a ten year plan with the Commission on or before January 31 of each year.

Part I is a description of Citizens' planned construction of:

- * Santa Cruz Electric 115 kV Transmission Line – A second transmission line and associated facilities to serve Citizens' Santa Cruz Electric Division.
- * North Havasu 230 kV/69 kV Substation – A new bulk power substation to be located on the north side of Lake Havasu City, AZ.

Part II is a description of Citizens' contingent projects consisting of:

- * 230/69 kV transmission line from Griffith Substation to North Havasu Substation in Mohave County, AZ.
- *
*
- * Santa Cruz Transmission Capacity Increase.
- * Future Distribution additions at Citizens Gateway Substation

Attachments 1 and 2 are drawings depicting the approximate locations of the facilities and follow the detailed descriptions. Attachment 3 is a one line diagram illustrating a range of possible solutions to be studied to increase the delivery capability of the existing 115 KV line serving Citizens Santa Cruz service area.

Citizens participated in the Southeastern Arizona Transmission Study completed in March, 2000 the results of which were provided to the ACC staff and included as part of their first Biennial Transmission Study. Citizens is also participating in the Central Arizona Transmission Study. Study results for Phase I of the Central Arizona Transmission Study and a status report on Phase II of the study will be provided as appendices in the ten-year plan submitted to the ACC this year by Salt River Project. To the extent Citizens' projects impact the Arizona Transmission System, Citizens will rely on those filings to comply with A.R.S. § 40-360.02.C7 in this filing.

PART I - PLANNED CONSTRUCTION

A. TRANSMISSION FACILITIES

| | |
|---|---|
| Name | Nogales Second Transmission Line |
| Location a) Point of Origin b) Point of Termination | Citizens' Gateway 345/115 kV Substation Citizens' Valencia Substation (Existing) |
| Size a) Operating Voltage b) Capacity c) Length | 115 kV 110 MVA (thermal) Approximately 3 miles |
| Corridor | Generally South and East from TEP's proposed Gateway 345 kV substation crossing Interstate 19 and traversing private ROW. Routing to be within the corridor as described in the CEC Order issued in Case 111. The approximate center line of such route is shown on Attachment 1. |
| Purpose | Increase transmission system reliability and provide additional load serving capacity to Citizens' Santa Cruz Service Area. |
| Schedule a) Begin construction c) In Service | 2003 December 2003 |

PART I - PLANNED CONSTRUCTION (Continued)

B1. SUBSTATION FACILITIES

| | |
|-----------------------|---|
| Name | Gateway 345/115 kV Substation |
| Location | Located near Nogales, AZ (See Attachment 1) |
| Size | 265 feet X 450 feet (estimate) |
| Capacity | 100 MVA |
| Equipment | Two-345 kV power circuit breakers, three 115 kV power circuit breaker bays (one installed initially) and associated switches, bus, fittings, relay metering and communication equipment |
| Operating Voltages | 345 kV, 115 kV, 13.2 kV (Future) |
| Transmission Source | TEP's South - Gateway 345 kV line. |
| Purpose | Provide interconnection and source for Citizens' second transmission line to Santa Cruz Electric service area and a future distribution substation as provided for in CEC Case 111. |
| Date | |
| a) Begin construction | 2003 |
| b) In Service | December 2003 |

PART I - PLANNED CONSTRUCTION (Continued)

B3. SUBSTATION FACILITIES

| | |
|-----------------------|---|
| Name | Valencia 115 kV Substation Expansion |
| Location | Located near Nogales, AZ (See Attachment 1) |
| Size | 200 X 200 feet (estimate) |
| Capacity | 45 MVA (Existing) |
| Equipment | Add two 115 kV line terminations, three 115 kV power circuit breakers, and associated switches, bus, fittings, relay metering and communication equipment |
| Operating Voltages | 115 kV, 13.2 kV |
| Transmission Source | Citizens' Gateway 345/ 115 kV Substation |
| Purpose | Provide termination and connection for Citizens' second transmission line to Santa Cruz Electric service area as provided for in CEC Case 111. |
| Date | |
| a) Begin construction | 2003 |
| b) In Service | December 2003 |

PART I - PLANNED CONSTRUCTION (Continued)

B4. SUBSTATION FACILITIES

| | |
|-----------------------|--|
| Name | North Havasu Substation |
| Location | Three miles north of Lake Havasu City. (See Attachment 2) |
| Size | 400 feet X 400 feet |
| Capacity | 80 MVA (with provision for expansion) |
| Equipment | 1 – 230 kV/69 kV 80 MVA transformer 1 – 69/20.8 kV transformer 1 – 69/13.2 kV transformer 4- 230 kV circuit breakers (three initial) 5- 69 kV circuit breaker bays (three initial) Associated bus, switches, fittings, structures and control room. |
| Operating Voltages | 230 kV, 69 kV, 20.8 kV, 13.2 kV |
| Transmission Source | Parker Davis No. 1 Trans. Line Griffith – North Havasu Trans. Line (Future). |
| Purpose | Reinforce Lake Havasu City 69 kV sub-transmission. Improve service reliability as provided for in CEC Case 88. |
| Date | |
| a) Begin Construction | Fall 2002 |
| b) In Service | Spring 2003 |

PART II - CONTINGENCY CONSTRUCTION ¹

TRANSMISSION FACILITIES

| | |
|--|---|
| Name | Griffith - North Havasu Trans. Line |
| Location a) Point of Origin b) Point of Termination | Griffith Substation North Havasu Substation (future) |
| Size a) Operating Voltage b) Capacity c) Length | 230 kV, 69kV 300 MVA (thermal) 40 miles (approximately) |
| Corridor | West of and parallel to I-40 to Gem Acres Interchange. Diagonal southeast to the Parker Davis line at Highway 95. Parallel to PD-1 to North Havasu Substation site southeast of the Lake Havasu City Airport. Routing to be within corridor as approved and described in CEC Order issued in Case 88. The approximate center line of such route is shown on Attachment 2. |
| Purpose | To reinforce existing transmission grid, provide a transmission interconnection between Citizens' load centers in Mohave Co., provide transmission source for proposed I-40 industrial corridor. |
| Date a) Begin construction b) In Service (phased in) | As required by load growth. Prior to expiration of CEC Order (07/02/07). |

¹ Contingency Projects are provided for general information. Timing will be determined by results of transmission studies presently underway.

PART II - CONTINGENCY CONSTRUCTION (continued)²

TRANSMISSION FACILITIES

| | |
|--|---|
| Name | Santa Cruz Capacity increase |
| Location a) Point of Origin b) Point of Termination | Nogales 115 kV Switchyard or Citizens Gateway 345/115 kV Substation Valencia 115 kV Substation or Sonoita 115 kV Substation |
| Size a) Operating Voltage b) Capacity c) Length | 115 kV 100 MW (thermal) 0 to 7 miles (approximately) |
| Corridor | Capacity increase will be achieved by a combination of actions including but no limited to operation of existing generation during peak load periods, installation of local reactive support, re-conductor a portion of the existing 115 kV transmission line or construction of a third 115 kV transmission line from Citizens' Gateway to Citizens' Sonoita Substation. Study results and recommended actions to be filed with ACC on or before July, 3, 2002. See Attachment 3 |
| Purpose | To meet n-1 planning criteria after the second transmission line to Santa Cruz is in service thereby satisfying condition number 21 of the CEC order in Case 111. |
| Date a) Begin construction b) In Service (phased in) | As required by load growth. As required by load growth. |

² Contingency Projects are provided as general information. Detailed plans will be developed as part of a transmission studies presently under way.

PART II - CONTINGENCY CONSTRUCTION (continued)³

SUBSTATION FACILITIES

| | |
|-----------------------|--|
| Name | Citizens Gateway Station Expansion |
| Location | Citizens Gateway 345/115 kV Substation (See Attachment 1) |
| Size | 230 feet X 450 feet |
| Capacity | 20 MVA (with provision for expansion) |
| Equipment | 1 – 115 kV/13/2 kV, 20 MVA (with provision for 2 nd transformer) 1 – 115 kV circuit breaker (with provision for future additions) 1 – 13.2 kV circuit breaker bays (with provision for additions) Associated bus, switches, fittings and structures. |
| Operating Voltages | 115 kV and 13.2 kV |
| Transmission Source | Citizens Gateway 345/115 kV Substation |
| Purpose | To provide additional load serving capacity in the vicinity of Nogales, AZ as provided for in CEC Case 111. |
| Date | |
| a) Begin Construction | Fall 2003 |
| b) In Service | Spring 2004 |

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**115KV TRANSMISSION
LINE ROUTES**

Nogales, Arizona

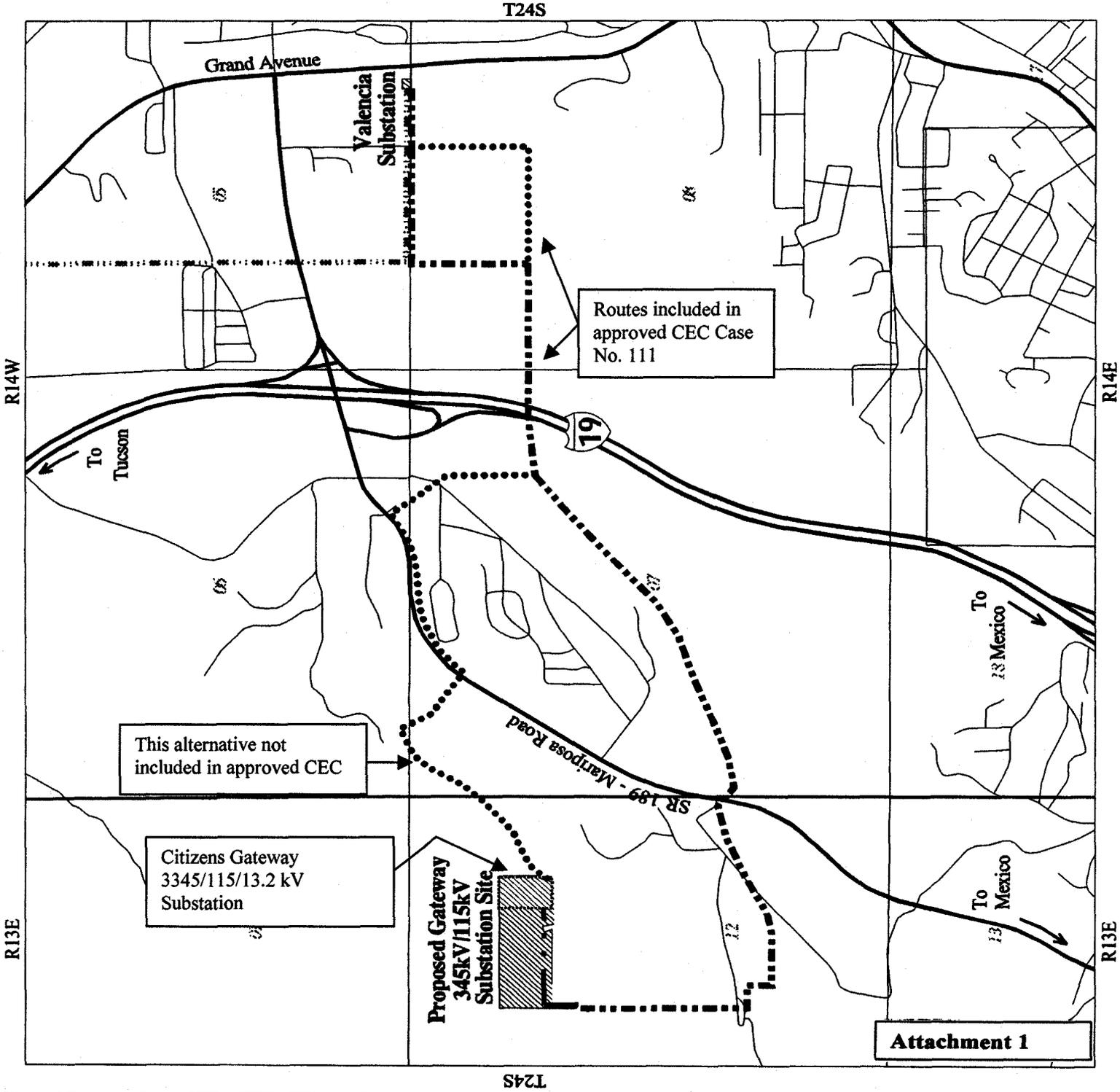
Legend

- ▬▬▬ Proposed 115KV Transmission Line Route
- Alternative 115KV Transmission Line Route
- Existing 115KV Transmission Line
- == Major Roads
- Minor Roads
- Section Lines
- Township and Range Boundaries

Citizens Utilities



Drawn Working Document
11/15/11 11:58 AM



ROW and CEC for this line segment transferred to Griffith Energy Project.

WAPA

Kingman

Existing Hilltop Substation

Existing Griffith Substation

MOUNT NUTT

WILDERNESS

WARM SPRINGS

WILDERNESS

WABAYUMA

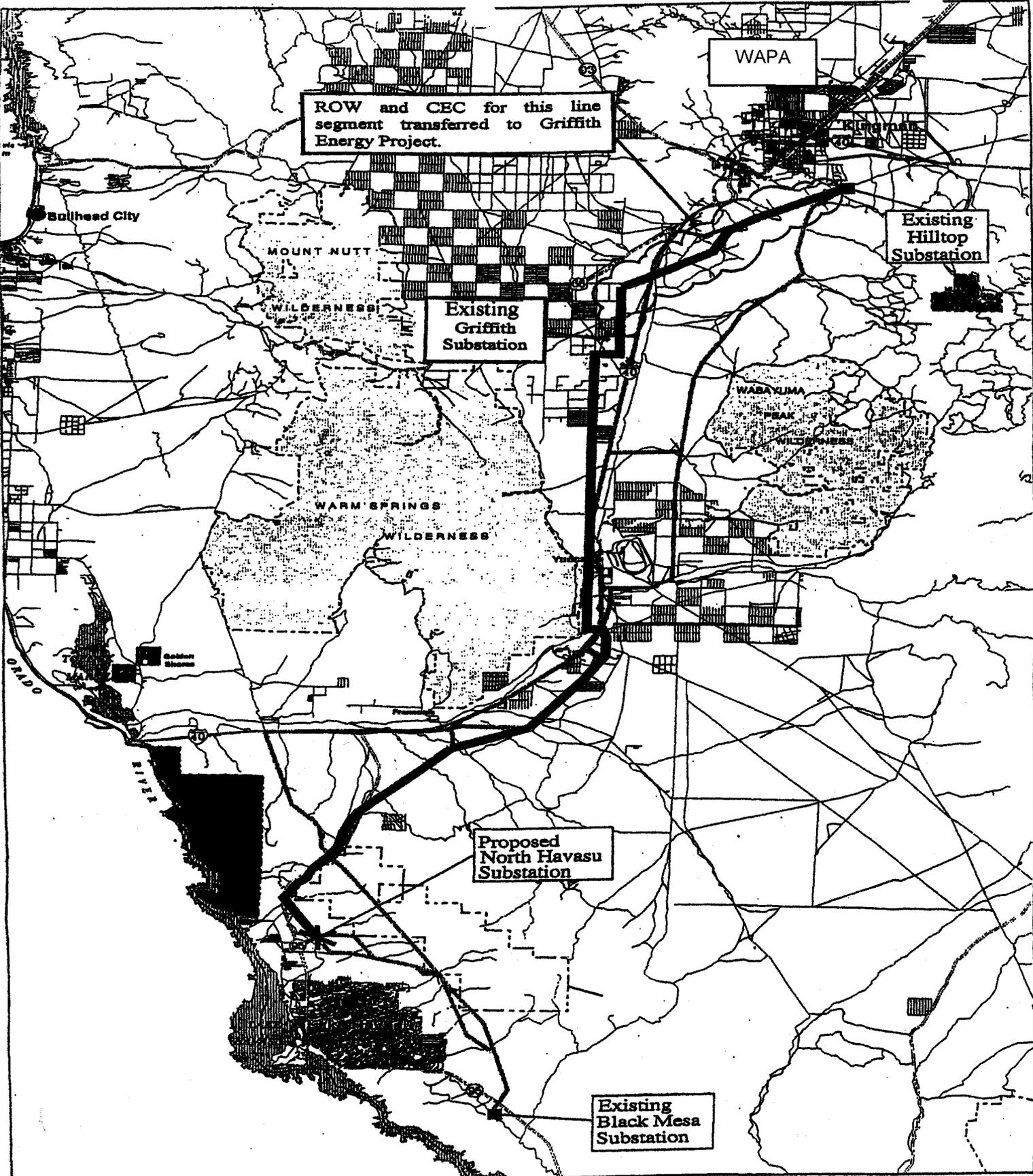
PEAK

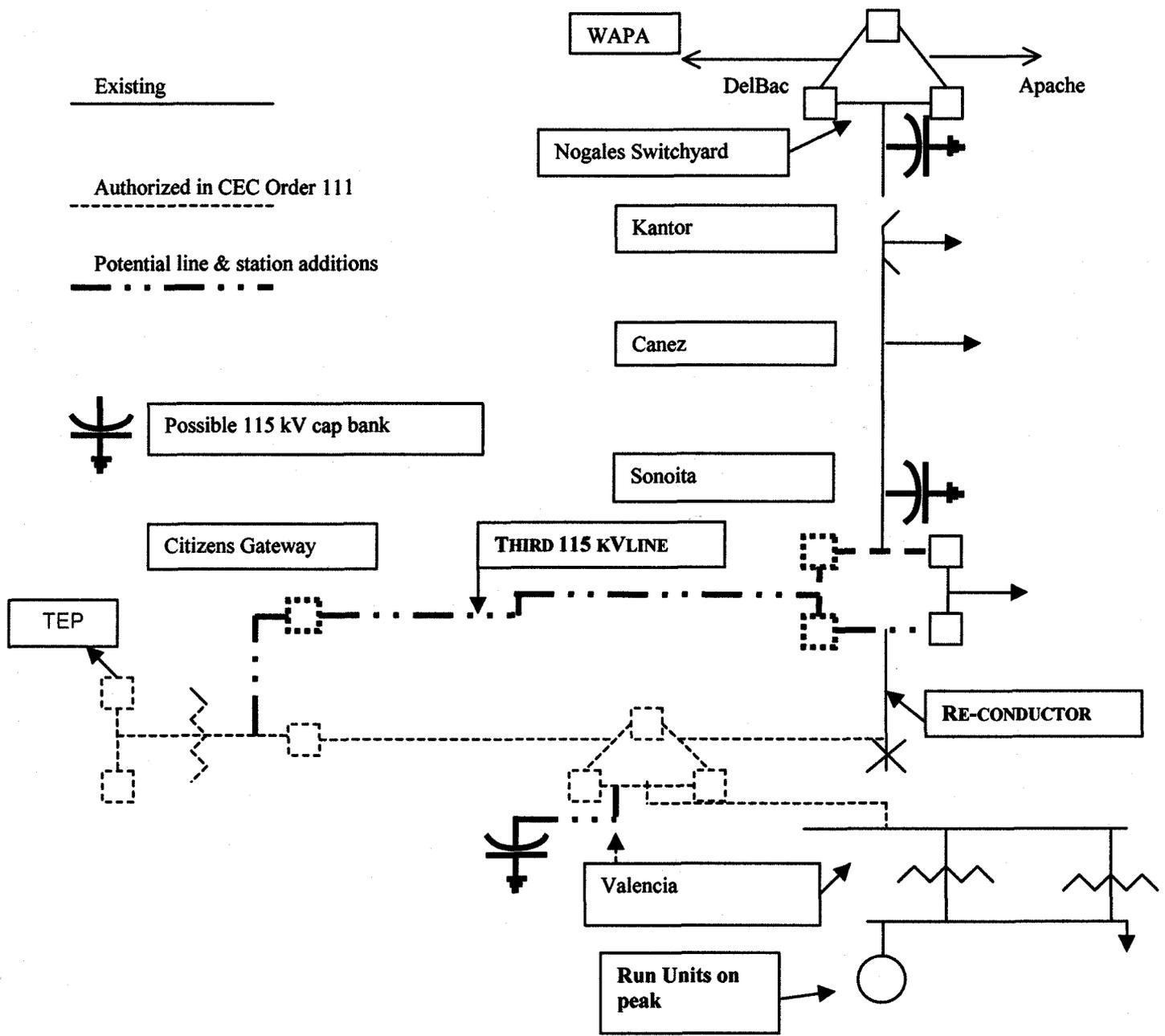
WILDERNESS

Proposed North Havasu Substation

Existing Black Mesa Substation

Attachment 2





Potential 115 kV Additions to increase Santa Cruz Load Serving Capability

Attachment 3

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ARIZONA ELECTRIC DIVISION

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2002-2011

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LINE ROUTES**

Nogales, Arizona

Legend

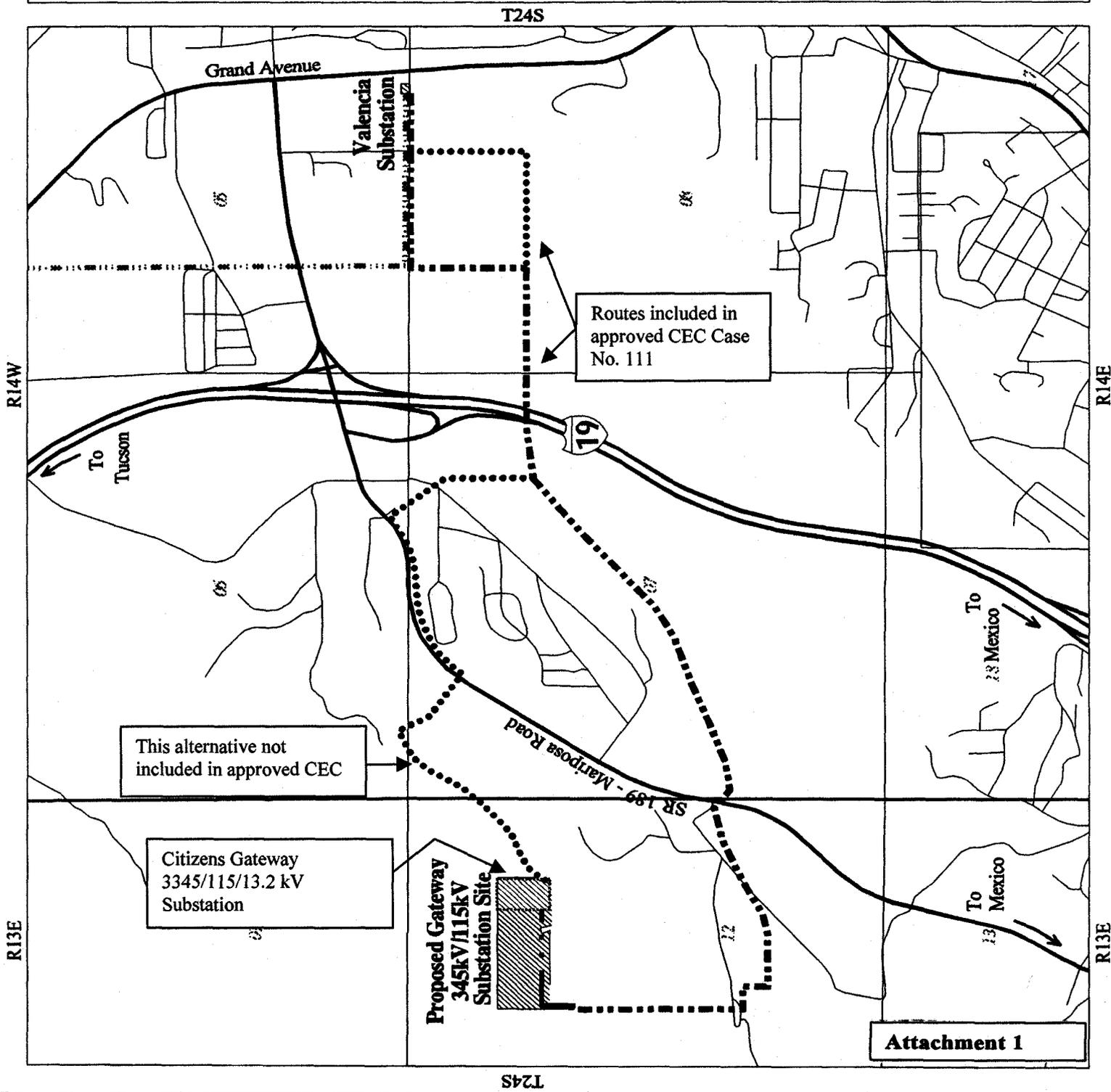
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Citizens Utilities

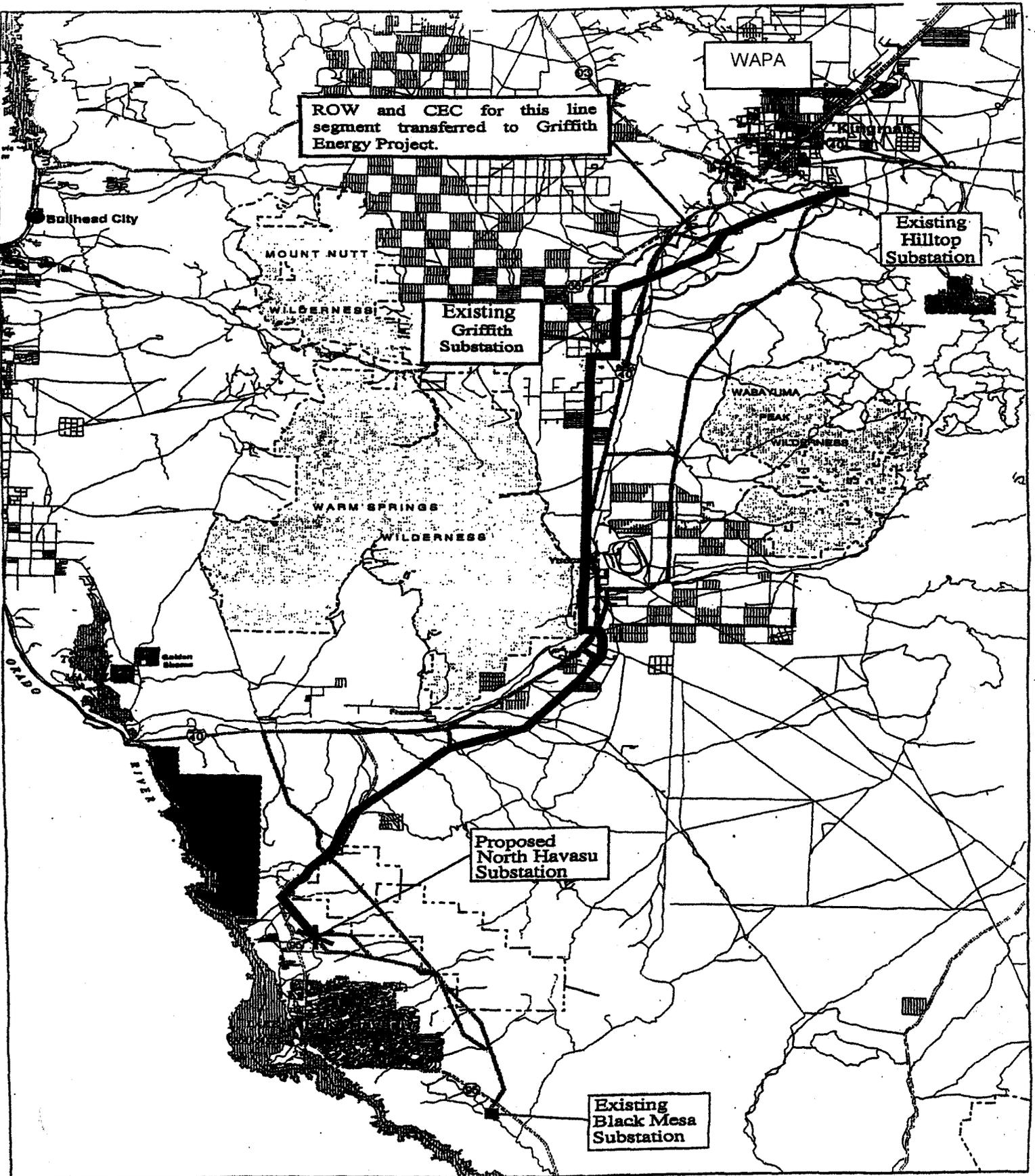


Scale in Feet

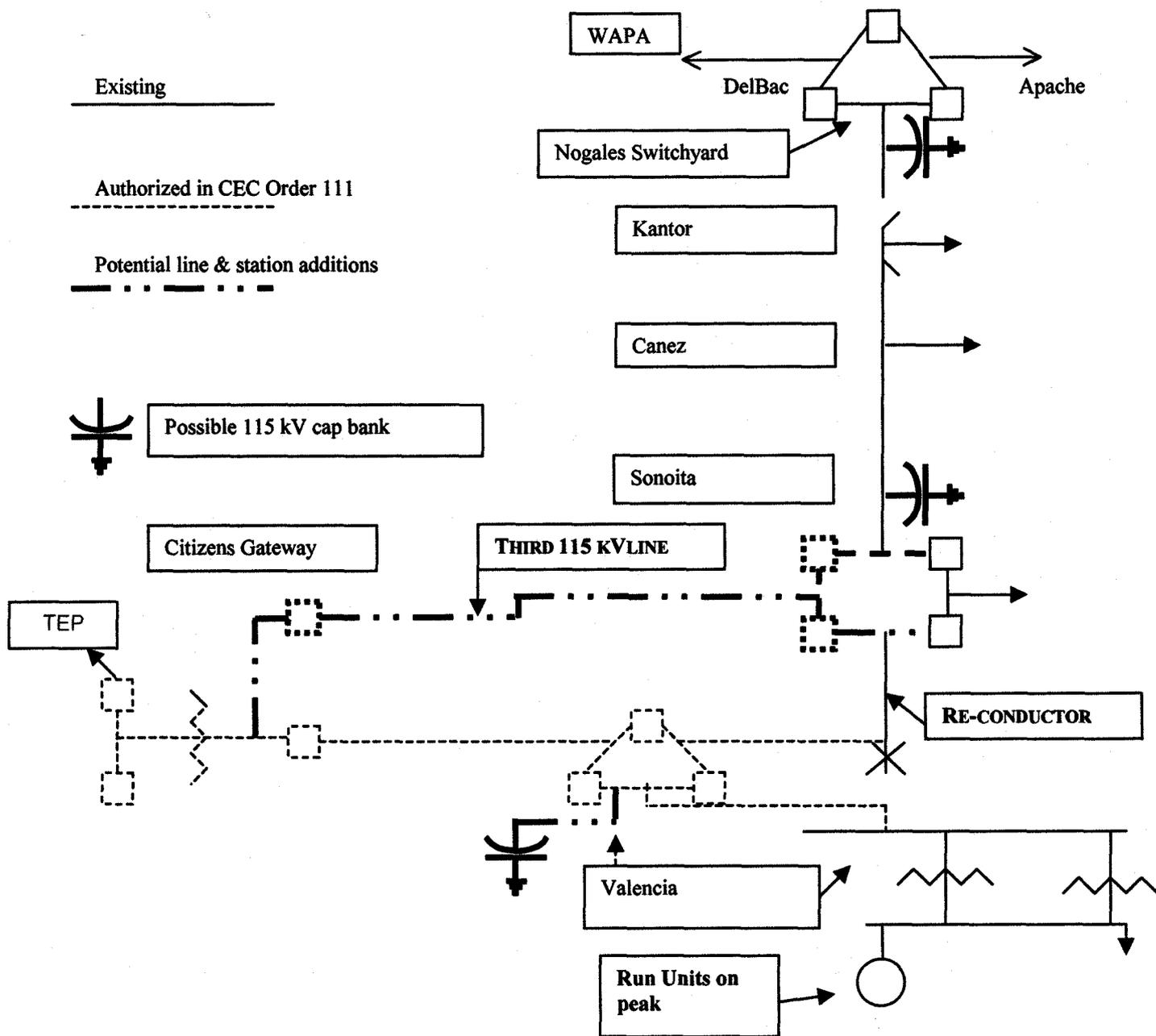
Draft Working Document
November 11, 2004



Attachment 1



Attachment 2



Potential 115 kV Additions to increase Santa Cruz Load Serving Capability

Attachment 3