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# MEMORANDUM

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Date: December 5, 2011

To: The Honorable Chairman and Members  
Pima County Board of Supervisors

From: C.H. Huckelberry  
County Administrator 

Re: **Concerns Regarding Tucson Electric Power Company's Application to the Arizona Corporation Commission for a Certificate of Environmental Compatibility for a Transmission Line and Associated Facilities to Serve the Proposed Rosemont Mine**

On November 2, 2011, Tucson Electric Power Company (TEP) submitted an application to the Arizona Corporation Commission (ACC) for a Certificate of Environmental Compatibility to construct a 138kV transmission line and associated facilities to serve the proposed Rosemont Mine. The application includes a preferred route and four alternative routes.

The preferred route is approximately 13 miles long, starting from a location approximately three miles south of Sahuarita Road and 3.5 miles east of Interstate 19, and ending at the proposed mine site (see attached map). The Arizona Power Plant and Transmission Line Siting Committee, which makes recommendations to the ACC, will begin holding hearings on this application in Tucson on December 12, 2011.

Staff from a number of County departments has reviewed the application and have concerns regarding:

1. Impacts to biological resources, including plants and wildlife;
2. Impacts to cultural and archaeological resources;
3. Impacts to scenic views;
4. Uncertainty regarding cost increases to TEP customers; and
5. Uncertainty regarding the need for increased base load generation, associated air quality impacts and associated remediation costs.

Attached are more details regarding these concerns. The Line Siting Committee process allows any person to make a limited appearance by filling a statement in writing with the Director of Utilities for the ACC not less than five days before the date set for the hearing. We intend to transmit these concerns on December 6, 2011 via this limited appearance option.

The Honorable Chairman and Members, Pima County Board of Supervisors  
**Re: Concerns Regarding TEP's Application to the ACC for a Certificate of Environmental  
Compatibility for a Transmission Line and Associated Facilities to Serve the Proposed  
Rosemont Mine**

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In addition, Julia Fonseca, Environmental Planning Manager for the Office of Sustainability and Conservation, has been asked to testify as a witness on behalf of two parties. One party represents Save the Scenic Santa Ritas, Sky Island Alliance, Center for Biological Diversity and Tucson Audubon Society. For this party, Ms. Fonseca would be testifying about the impacts of the proposed mine on air quality, soil productivity and reclamation, and floodplains. The other party is Elizabeth Webb, a resident within proximity of the mine. For Ms. Webb, Ms Fonseca would be testifying on the impacts of the proposed transmission line on biological, cultural and visual resources.

Please let me know if you have any questions or concerns regarding the County's participation in this Line Siting Committee process.

CHH/mjk

**Attachments**

c: Linda Mayro, Director, Sustainability and Conservation Office  
Julia Fonseca, Environmental Planning Manager, Sustainability and Conservation Office  
Nicole Fyffe, Executive Assistant to the County Administrator  
Paula Perrera, Deputy County Attorney

## **Pima County's concerns regarding TEP application to ACC for a Certificate of Environmental Compatibility for a transmission line and associated facilities to serve the proposed Rosemont Mine**

For the most part, Pima County lacks regulatory authority over the project because of statutory exemptions when the use is for mining. Regardless, Pima County has the following areas of concern:

1. Impacts to biological resources, including plants and wildlife; impacts to Conservation Lands System biological core management areas:

The preferred route and the alternatives for the proposed 138kV line would bisect much of the biological core of the Maeveen Marie Behan Conservation Lands System (CLS) that was adopted as part of Pima County's Comprehensive Plan. Biological core management areas are those areas that have high biological values, supporting large populations of vulnerable species, connecting large blocks of contiguous habitat and already protected reserves, and supporting high value potential habitat for five or more priority vulnerable species. In developing the CLS, Pima County worked with all of the land management agencies, the Tohono O'odham Nation, developers, ranchers, scientists, outdoor recreation enthusiasts, environmentalists, and the University of Arizona to balance the needs of future growth with protection of the resource values that make Pima County a great place to live. In addition to establishing the biological value of the Santa Rita piedmont for the Federally Endangered Pima Pineapple Cactus and many other plants and animals, the CLS recognized the value of the Santa Rita Experimental Range as a scientific research area. The preferred route and the alternatives for the proposed 138kV line all bisect the Santa Rita Experimental Range.

Pima County also has concerns regarding the biological assessments that were conducted for the project. Indirect impacts from construction and development of access roads were ignored. For example, construction activities will lead to increased noise, erosion, sedimentation, and increased predation (i.e. by raptors that perch on the structures) and maintenance activities will result in long-term impacts to species and their habitats. The information concerning several species is incorrect. Staff disagrees with the assessment of impacts, or lack thereof, to certain species.

2. Impacts to cultural and archaeological resources:

The preferred route and the alternatives for the proposed 138kV line would impact high archeological sensitivity zones, as defined by Pima County's Sonoran Desert Conservation Plan.

Several cultural resources surveys were conducted for the proposed TEP Preferred and Alternative Routes, resulting in detailed information about significant prehistoric and historic sites within or in the vicinity of the TEP project, but only summary information was presented for review by the ACC Line Siting Committee. Over all, the summary cultural resources information provided for the Committee is inadequate and presents incomplete information on the cultural and historic resources within or in the vicinity of the TEP Preferred and Alternative Routes. The summary nature of the information and the lack of supporting archaeological data results in unsupported assertions about the cultural

resources and minimizing the impacts on them. The ACC Line Siting Committee cannot adequately evaluate the resources or impacts based on the submitted information.

In 2004, Pima County voters approved funding for the conservation of the Helvetia Townsite in order to protect the historic values of the area. This important historic resource will be negatively impacted by the proposed transmission line. The cultural resources section of the TEP application discounts impacts to the historic Helvetia Cemetery located on the north side of Santa Rita Road with the unsupported assertion that it is “in use” and, therefore, does not qualify as a historic property. A cemetery can be considered “in use” if burials have occurred within 50 years. There is no effort to support the “in use” assertion by documenting the history of grave use and internment at Helvetia Cemetery.

Although the treatment of individual sites as specific historic resources follows Section 106 compliance procedures, it also ignores assessing larger-scale impacts on historical and cultural landscapes (also part of the Section 106 process, as discussed in the guidance document, entitled *Native American Traditional Cultural Landscapes Action Plan*, issued by the Advisory Council on Historic Presentation on November 23, 2011). The State-owned Santa Rita Experimental Range is crossed by the proposed routes. In operation for more than a century, the Experimental Range constitutes a significant historical landscape with extensive cultural and historical resources that have only been partially recorded. Although there is no official designation as a National Register-eligible property, the significance of the Experimental Range as a historical landscape should be recognized and the effects from construction should be assessed at the landscape scale. It is important that prehistoric and historic Native American resources be considered from the landscape perspective, with attention given to direct, indirect and cumulative negative effects on sites and other historic properties, which interact in concert with the natural environment to create integrated Traditional Cultural Landscapes.

3. Visual impacts:

Box Canyon Road is designated in Pima County code as a Scenic Major Route. Santa Rita Road is designated as a Scenic Route. Although high voltage transmission lines are statutorily exempt from County regulation, Pima County does have concerns regarding impacts to the scenic values in the area that would be impacted by the proposed transmission lines.

Scenic routes were designated in Pima County by the following criteria listed in the Chapter and section 18.77.040F Zoning Code:

*The determination of scenic route status shall be based on exceptional scenic quality that helps define the community's character. The scenic resources may be unique and significant views of mountains, vegetation, architecture, site design, or geologic formations.*

Santa Rita Road and Box Canyon Roads have been designated as scenic routes affirming that they contain those qualities. The purpose and intent statement of the Code concerning scenic routes is to:

*...preserve and enhance the visual resources of the natural and built environment from and along scenic routes in order to:*

- 1. Protect property values and the character of neighborhoods;*
- 2. Protect and enhance the unique character of a community, including vegetation, architecture and geology;*
- 3. Protect and enhance the unique character of tourism; and*
- 4. Protect natural resources.*

The TEP application describes the types of scenic impacts as the removal of vegetation for access roads and roads needed for construction; removal of vegetation on steep, visible slopes; and the introduction of new transmission lines and poles. The 138 kV transmission line is proposed to be located within a 100 foot wide right of way which itself will be located within a 500 foot wide corridor. The potential exists for complete disturbance of those 500 feet during construction and installation of the line. While the corridor will likely be re-vegetated, it will take many years to recover and the scars left from the disturbance will persist for many decades. The change in elevation from the point of origin at the Toro switchyard to the foot of the Santa Rita Mountains over a virtually unobstructed view is approximately 1300 feet (approximately 2700 to 4,000 feet). The lines then cross the Santa Rita Mountains at an even higher elevation. The utility towers that will carry the lines will be up to 150 feet tall.

The TEP application concludes that, for the preferred route, moderate to high impacts to high valued scenery are anticipated. Travelers along Santa Rita Road would be moderately impacted for approximately 7 miles. Viewers near Link 140, which crosses the ridge line of the Santa Rita Mountains at Lopez Pass, would have moderate to high impacts.

Every one of the four items that the scenic route ordinance is intended to protect will be affected:

1. Properties that derive value from scenic views will now have views of a large swath of cleared utility corridor containing tall towers;
  2. Community character will not be protected or enhanced, but will decline due to the disturbance and disruption caused by the utility line;
  3. Travelers to this area of Pima County will be negatively affected; and
  4. Natural resources, including plants and wildlife, will be negatively affected.
4. Uncertainty regarding impacts to service costs for existing TEP customers:  
Presently mines in Arizona receive rates that are about half that charged to other customers in the TEP territory effectively shifting 50 percent of the common system costs to other TEP customers. How will this impact service costs or rates for existing TEP customers? Transmission lines are expensive. Recovery of the fixed "common" infrastructure costs are typically recovered as part of the base rates charged to each customer class. However, mines do not pay their fair share of those fixed costs; they are shifted to other customer classes.
  5. Uncertainty regarding the potential for the project to accelerate the need for increased base load generation, the air quality impacts from increased base load

generation, and the potential to exceed standards requiring costly remediation measures impacting everyone in Pima County:

It is our understanding that if this transmission line is approved, the proposed Rosemont Mine would be one of TEP's largest customers, accounting for upwards of 10 percent of TEP's total load. It is unclear to us if this would accelerate the need for increased base load generation and if so, where this increased base load generation would occur. Pima County is on the verge of exceeding the ozone standards. If increased base load generation would occur in Pima County or in the vicinity of the Pima County airshed, violations of air quality standards could occur. If violations of these standards occur, the remedies required by U.S. Department of Environmental Protection Agency could have expensive socioeconomic impacts. Reductions in emissions would have to occur by all sectors. Failure to develop a plan that reduces emissions could result in Federal sanctions requiring 2:1 emission reductions and/or a loss of federal funding for transportation projects.

# Rosemont 138kV Transmission Line Project

## Preferred and Alternative Routes Jurisdiction and Ownership Exhibit A-1

### Legend

#### Alternative Routes

- Preferred Route (Links - 20, 25, 60, 100, 105, 155, 140)
- Alternative Route 1 (Links - 20, 25, 60, 100, 130, 135, 95, 140)
- Alternative Route 2 (Links - 30, 110, 120, 105, 155, 140)
- Alternative Route 3 (Links - 30, 110, 120, 130, 135, 95, 140)
- Alternative Route 4 (Links - 30, 110, 150, 160, 190, 210)

Note: The alternative routes shown on the map are a graphical representation

#### Land Ownership

- Bureau of Land Management
- U.S. Forest Service
- Arizona State Land Department
- Unincorporated Pima County

#### Planning Jurisdictions

- Town of Sahuarita Incorporated Area

#### Rosemont Copper Company

- Rosemont Private Lands
- Mining Claim
- Rosemont Mine Plan of Operations Area

#### Project Features

- Substation or Switchyard Site
- Breaker Site
- Proposed Water Pipeline Alignment
- Project Study Area Boundary
- Link Identifier
- Reference Centerline of Alternative
- Milepost Identifier
- Link Node

#### General Reference Features

- Santa Rita Experimental Range Boundary
- U.S. Forest Service Boundary
- Bureau of Land Management Boundary
- Township Boundary
- Section Boundary
- 345kV Transmission Line
- 230kV Transmission Line
- 138kV Transmission Line
- 115kV Transmission Line
- 46kV Transmission Line
- Interstate
- Highway
- Secondary Road
- Railroad
- Arizona Trail - Existing
- Arizona Trail - Conceptual
- River/Wash

#### Vicinity Map



Sources: StreetMap USA 2011; TEP 2011; University of Arizona, Santa Rita Experimental Range 2011; EPG 2011



Contour interval = 20 ft.

November 2011

