Kino to DeMoss-Petrie 138 Kilovolt (kV) Transmission Line Project

CWG Meeting #2

December 19, 2019
6:00-8:00 p.m.

Kino to DeMoss-Petrie Transmission Line Project

Agenda

- Welcome & Introductions
- Role of the CWG Member
- What has occurred since the last meeting (data gathering, draft preliminary link development, stakeholder meeting)
- Response to questions received from CWG members and responses/ or status of responses
- Draft Preliminary Links
  - How to interpret the maps
  - Links considered, but already eliminated by stakeholders/TEP and why
  - Discussion of links still under consideration
  - Discussion of CWG proposed additional links
- UA North Substation Update
- Next CWG Meeting
- Next Steps

Welcome & Introductions

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CWG Member Role

- Represent your neighborhoods and community members.
- Attend and actively participate in the CWG meetings.
- Review information provided & identify key issues.
- Communicate project information to your neighbors and constituents.
- Review and comment on study results.
- Attendance at public open house meetings is encouraged.

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TEP's Line Siting Process

- Identify the need for the Project.
- Identify the Preliminary Study Area.
- Prepare Public Notification Plan/Identify stakeholders.
- Collect baseline data/conduct internal analysis.
- Conduct first round of outreach.
- Identify preliminary links.
- Conduct second round of outreach.
- Identify & analyze opportunities and constraints.
- Conduct follow on Stakeholder & Community Working Group meetings.
- Develop multiple proposed routes.
- Conduct follow on public/stakeholder outreach.
- Conduct impact assessment/engineering & constructability assessment/route comparison.
- Identify alternative routes to carry forward in ACC application for a CEC.
- Prepare and file ACC application.

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- Since the last Stakeholder/CWG/Public Meetings:
  - Collecting other utility location information
  - Collecting future City/County road project information
  - Collecting future land development information
  - Collecting comments, conducting research when necessary, and preparing comment responses
  - Identified DRAFT preliminary links using data collected to date, TEP's existing system data, and field review
  - Conducted a stakeholder meeting with other utilities, City & County officials, and others
  - Revised the Draft preliminary links

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Response to Questions from CWG Members

How are stakeholders/CWG members selected?

- Develop study area boundary w/ buffer
- Identify affected neighborhoods, schools, etc.
- Identify jurisdictions and jurisdictional representatives
- Identify utilities and others that may be impacted.

What is the difference between the stakeholder group and the CWG?

- Stakeholders are technical experts representing other utilities and the jurisdictions that can provide information related to how the project may directly impact their facilities.
- CWG members are the representatives of their neighbors and constituents that can provide a unified position and report back/provide information to those they represent
- In addition, the public are individuals that choose participate in the public open house meetings and choose to participate individually or in addition to the CWG.

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Response to Questions from CWG Members

Can TEP Underground the Lines?

TEP is currently studying the:

- Cost
- Feasibility/impact on the existing TEP system
- Construction parameters and potential impacts on roads/other utilities

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Response to Questions from CWG Members

"The neighborhood would like more details about the design of the poles in order to understand how climate change and the predicted increasingly intense storms will be anticipated in this project."

TEP utilizes and meets National Electric Safety Code (NESC) requirements, taking in to consideration line tension, wind speed and pressure, gravity and temperature.

In 2011, TEP analyzed 50 years of wind data and determined that NESC requirements exceed Tucson's historical wind speeds, validating company standards and design criteria.

TEP determined that we can accommodate up to a 30 mph wind speed increase before the loads begin to exceed the transmission line design criteria for the NESC Light case.

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Response to Questions from CWG Members

"The neighborhood also has concerns about the risk of fires like California is experiencing."

- As transmission operators, TEP is required to follow federal regulatory guidelines and maintain an active vegetation management program in order to minimize potential fire dangers. Throughout the year, we ensure that vegetation does not encroach on transmission line routes.

- Aerial (helicopter) inspections are conducted twice a year with visual evaluation. We also inspect about 20 percent of our transmission lines every year from the ground.

- TEP designs transmission lines to maintain NESC clearances from existing structures, such as homes, street lights, trees, etc.

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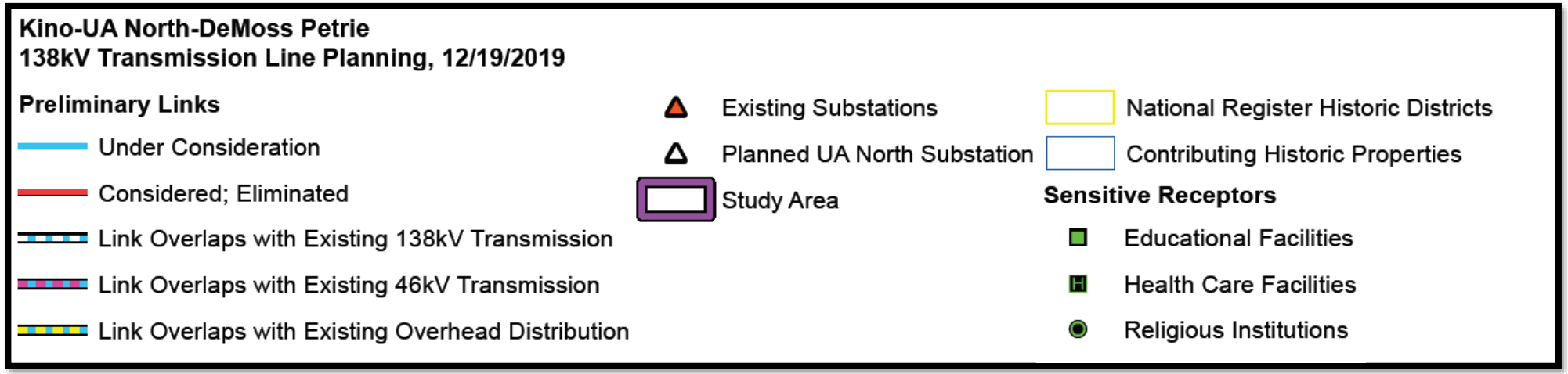
Overview of DRAFT Preliminary Links

Map Interpretation:



Overview of DRAFT Preliminary Links

Links Considered but eliminated:

- Cherry
- Enke
- National Championship

Discussion of Preliminary Links/Other link options

UA North Substation

- Status
- Layout
- GIS uses SF6 Gas:
  - Inert gas
  - Asphyxiant (heavier than air)
  - Green house gas
  - Bi-product of arcing is hazardous, but the equipment contains arc within a hermetically sealed chamber.
  - Monitor gas pressure 24/7

Next Steps

- Continue to incorporate public, CWG, & stakeholder comments into the development of criteria and sensitivity ratings
- Obtain additional data from stakeholders, as needed
- Continue to research/study as needed
- Develop revised preliminary links for CWG and Stakeholder meetings
- Conduct CWG & Stakeholder Meetings #3
- Finalize preliminary links
- Public Meeting #2 – February 2020

Next CWG

- When
- Where
- Topics