

**BEFORE THE ARIZONA POWER PLANT
AND TRANSMISSION LINE SITING COMMITTEE**

IN THE MATTER OF THE APPLICATION
OF TUCSON ELECTRIC POWER, IN
CONFORMANCE WITH THE
REQUIREMENTS OF A.R.S. § 40-360, ET
SEQ., FOR A CERTIFICATE OF
ENVIRONMENTAL COMPATIBILITY
AUTHORIZING THE SANTA RITA
CONNECTION 138 KILOVOLT (KV)
TRANSMISSION LINE PROJECT, WHICH
INCLUDES THE CONSTRUCTION OF A
NEW 138 KV TRANSMISSION LINE
ORIGINATING AT THE EXISTING
SONORAN SUBSTATION (SECTION 2,
TOWNSHIP 16 S, RANGE 14 E), AND
TERMINATING AT THE PLANNED
SANTA RITA SUBSTATION (SECTION 29,
TOWNSHIP 17 S, RANGE 14 E), EACH
LOCATED WITHIN PIMA COUNTY,
ARIZONA.

Docket No. L-00000C-26-0125-00261

Case No. 261

**CERTIFICATE OF
ENVIRONMENTAL
COMPATIBILITY**

A. INTRODUCTION

Pursuant to notice given as provided by law, the Arizona Power Plant and Transmission Line Siting Committee ("Committee") held public hearings in Tucson, Arizona, on May 26, 2026 through May 27, 2026, in conformance with the requirements of the Arizona Revised Statutes ("A.R.S.") § 40-360 *et seq.* for the purpose of receiving evidence and deliberating on the April 17, 2026 Application of Tucson Electric Power Company ("Applicant" or "TEP") for a Certificate of Environmental Compatibility ("Certificate") for the Santa Rita Connection Project ("Project").

The following members and designees of members of the Committee were present at one or more of the hearing days for the evidentiary presentations, public

comment, and/or the deliberations:

Adam Stafford	Chairman, Designee for Arizona Attorney General Kris Mayes
Michael Comstock	Designee of the Chairman, Arizona Corporation Commission (“Commission”)
Laney Meeker	Designee for Director, Arizona Department of Water Resources (“ADWR”)
Roman Fontes	Appointed Member, representing counties
Sal DiCiccio	Appointed Member, representing cities and towns
Margaret “Toby” Little	Appointed Member, representing the general public
Gabby Saucedo Mercer	Appointed Member, representing the general public
Douglas Fant	Appointed Member, representing the general public

The Applicant was represented by Meghan H. Grabel and Elias Ancharski of Osborn Maledon, P.A. and in-house counsel for TEP, Megan C. Hill. No parties requested intervention pursuant to A.R.S. § 40-360.05. One member of the public provided comments in opposition to the Project at the hearing.

At the conclusion of the hearing, the Committee, after considering the (i) Application, (ii) evidence, testimony, and exhibits presented by the Applicant, and (iii) comments of the public, and being advised of the legal requirements of A.R.S. §§ 40-360 through 40-360.13, upon motion duly made and seconded, voted 7 to 0 to grant Applicant, its successors and assigns, this Certificate for the construction of the Project as described below.

B. PROJECT DESCRIPTION

The Project will involve the construction of an approximately 13-to 17-mile 138 kilovolt (“kV”) transmission line to connect TEP’s existing Sonoran Substation in Pima County to TEP’s planned Santa Rita Substation in Santa Cruz County. A map of the final approved Project, including the Project corridor, is included as **Exhibit A**. The

proposed width of the corridor for the Project is up to 1,500 feet wide to allow for routing flexibility. In areas outside of existing rights-of-way (“ROW”), the final ROW for the Project will be no greater than 100 feet wide.

Route and Corridor

Route 1

Route 1 originates at the existing Sonoran Substation in Pima County, where it exits from a substation bay on the south side. The route proceeds west for approximately 0.3 miles to Swan Road. The line extends south on Swan Road and crosses beneath the TEP/Western Area Power Administration (“WAPA”) 230/115 kV line. After crossing the TEP/WAPA 230/115 kV line, the route turns east-southeast and continues parallel to and south of the TEP/WAPA line, as a new single-circuit line built on double-circuit capable structures for approximately 2 miles to Wilmot Road. At Wilmot Road, the line will be co-located on existing double-circuit capable structures owned by UNS Electric, Inc. (“UNSE”) and continue south for approximately 9.6 miles. It will continue on these shared structures as it turns to the southwest for 1.6 miles to Santa Rita Road. At Santa Rita Road, the line will turn to the northwest, co-locating on existing double-circuit structures. Route 1 will continue on the existing double-circuit structures to the northwest, paralleling Santa Rita Road, for approximately 2.5 miles, then turn to the west at the Corto Road alignment where it will continue on the existing structures for approximately 1 mile to the planned Santa Rita Substation. Route 1 will enter the Santa Rita Substation from the Corto Road alignment.

Route 3

Route 3 originates at the existing Sonoran Substation, exiting from a bay on the south side. The route proceeds west for approximately 0.3 miles to Swan Road. The line will go south on Swan Road and cross beneath the TEP/WAPA 230/115 kV line. After crossing the TEP/WAPA 230/115 kV line, the route proceeds south

1 approximately 700 feet to existing double-circuit capable structures, where it co-locates
2 as a second circuit and extends to the west for approximately 2 miles to Country Club
3 Road. At Country Club Road, the route will co-locate with an existing single-circuit
4 TEP 138 kV line by rebuilding some of the structures to a double-circuit standard and
5 proceed south for approximately 3.5 miles to approximately 750 feet north of the
6 westward turning point of the existing 138 kV line. At this point, the route constructs
7 a new single-circuit line on double-circuit capable structures and turns east for
8 approximately 1,000 feet to cross under a TEP 345 kV line and two Arizona Electric
9 Power Cooperative, Inc. ("AEPCO") transmission lines (230 kV and 345 kV). The
10 route then proceeds south for approximately 1 mile, where it turns west to an existing
11 TEP 138 kV line and will be co-located with that existing line by rebuilding the
12 structures to a double-circuit standard then continuing south for approximately 5.7
13 miles to the Corto Road alignment. The route will turn west for approximately 0.2
14 miles until it reaches the planned Santa Rita Substation site where it will enter from the
15 south.

16 The Committee approves the construction of Routes 1 and 3, subject to the
17 Conditions contained herein. The Applicant will construct only one of the routes
18 depending on which is ultimately selected by the Applicant as best suited for the
19 Project. The map of the final approved routes, including corridor width, is attached as
20 **Exhibit A.**

21 CONDITIONS

22 This Certificate is granted upon the following conditions:

23 1. This authorization to construct the Project, as either Route 1 or Route 3
24 but not both, shall expire ten (10) years from the date this Certificate is approved by the
25 Commission, with or without modification. Construction of the Project shall be
26 complete, such that the Project is in service within this ten-year timeframe. However,
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prior to the expiration of the time period, the Applicant may request that the Commission extend the time limitation.

2. In the event the Project requires an extension of the term of this Certificate prior to completion of construction, the Applicant shall file such time extension request at least one hundred and eighty (180) days prior to the expiration of the Certificate. Within ten (10) days of the filing of the request to extend the term of this Certificate, the Applicant shall use reasonable means to promptly notify the Arizona State Land Department (“ASLD”), Pima County, the City of Tucson, the Town of Sahuarita, and all landowners and residents within a one (1) mile radius of the centerline of the Project, all persons who made public comment at this proceeding who provided a mailing or email address, and all parties to this proceeding. Any person who receives notice of the request to extend the term of the Certificate may request that the Applicant notify them by email of the date, time, and place of the hearing or open meetings during which the Commission will consider the request for extension. The Applicant shall notify such persons of the date and time of the open meeting or hearing as soon as the Applicant is made aware of the open meeting or hearing date.

3. During the development, construction, operation, maintenance, and reclamation of the Project, the Applicant shall comply with all existing applicable air and water pollution control standards and regulations, and with all existing applicable statutes, ordinances, master plans, and regulations of any governmental entity having jurisdiction including, but not limited to, the United States of America, the State of Arizona, Pima County, the City of Tucson, the Town of Sahuarita, and their agencies and subdivisions, including but not limited to the following:

- (a) All applicable land use regulations;
- (b) All applicable zoning stipulations and conditions including, but not limited to, landscaping and dust control requirements;

- 1 (c) All applicable water use, discharge and/or disposal requirements of
2 ADWR and the Arizona Department of Environmental Quality;
3 (d) All applicable noise control standards; and
4 (e) All applicable regulations governing storage and handling of
5 hazardous chemicals and petroleum products.

6 4. The Applicant shall obtain all approvals and permits necessary to
7 construct, operate, and maintain the Project required by any governmental entity having
8 jurisdiction including, but not limited to, the United States of America, the State of
9 Arizona, Pima County, the City of Tucson, the Town of Sahuarita, and their agencies
10 and subdivisions.

11 5. The Applicant shall comply with the Arizona Game and Fish Department
12 ("AGFD") guidelines and recommendations for handling protected animal species,
13 should any be encountered during construction and operation of the Project, and shall
14 consult with AGFD or U.S. Fish and Wildlife Service, as appropriate, on other issues
15 concerning wildlife. The Applicant shall, in consultation with AGFD, follow the
16 environmental protection measures listed in **Exhibit B**.

17 6. The Applicant shall design the Project's facilities to incorporate
18 reasonable measures to minimize electrocution of and impacts to avian species in
19 accordance with the Applicant's avian protection program. Such measures will be
20 accomplished through incorporation of Avian Power Line Interaction Committee
21 guidelines set forth in the current versions of *Suggested Practices for Avian Protection*
22 *on Power Lines* and *Reducing Avian Collisions with Power Lines* manuals.

23 7. The issuance of a Certificate by the Commission is a state action pursuant
24 to A.R.S. §§ 41-861 through 41-864, also known as the State Historic Preservation Act
25 ("State Act"). The Applicant shall consult with the Arizona State Historic Preservation
26 Office ("SHPO") regarding the Project and its impacts on historic properties.

1 Construction shall not commence until SHPO has had an opportunity to review and
2 comment in accordance with the State Act. The Applicant shall, in cooperation with the
3 landowner, complete a Class III cultural inventory of the portions of the final ROWs
4 that have not been previously surveyed to modern standards. If any historic property
5 will be substantially altered or demolished as a result of the construction or operation
6 of the Project, the Applicant shall take timely steps to make appropriate documentary
7 recordation in accordance with the standards established by SHPO.

8 8. If any archaeological, paleontological, or historical site or a significant
9 cultural object is discovered on state, county, or municipal land during the construction
10 or operation of the Project, the Applicant or its authorized representative shall promptly
11 report the discovery to the Director of the Arizona State Museum ("ASM"), and in
12 consultation with the Director, shall immediately take all reasonable steps to secure and
13 maintain the preservation of the discovery as required by A.R.S. § 41-844.

14 9. If human remains and/or funerary objects are encountered during the
15 course of any ground-disturbing activities related to the construction or operation of the
16 Project, the Applicant shall cease work on the affected area of the Project and notify
17 the Director of the ASM as required by A.R.S. § 41-865 for private land, or as required
18 by A.R.S. § 41-844 for state, county, or municipal lands.

19 10. The Applicant shall comply with the notice and salvage requirements of
20 the Arizona Native Plant Law (A.R.S §§ 3-901 *et seq.*) and shall, to the extent feasible,
21 minimize the destruction of native plants during the construction and operation of the
22 Project.

23 11. The Applicant shall make every reasonable effort to promptly investigate,
24 identify, and correct, on a case-specific basis, all complaints of interference with radio
25 or television signals from operation of the Project addressed in this Certificate and
26 where such interference is caused by the Project take reasonable measures to mitigate
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1 such interference. The Applicant shall maintain written records for a period of five (5)
2 years of all complaints of radio or television interference attributable to operations,
3 together with the corrective action taken in response to each complaint. All complaints
4 shall be recorded and shall include notation on the corrective action taken. Complaints
5 not leading to a specific action or for which there was no resolution shall be noted and
6 explained. Upon request, the written records shall be provided to the Staff of the
7 Commission. In addition, the Project shall be evaluated on a regular basis so that
8 damaged insulators or other line materials that could cause interference are repaired or
9 replaced in a timely manner.

10 12. Within one hundred twenty (120) days of the Commission's decision
11 approving this Certificate, the Applicant shall post signs in or near public ROWs, to the
12 extent authorized by law, reasonably adjacent to the Project giving notice of the Project.
13 Such signage shall be no smaller than a roadway sign. The signs shall advise:

- 14 (a) The future site of the Project;
- 15 (b) A phone number and website for public information regarding the
16 Project; and
- 17 (c) Refer the public to the Docket.

18 Such signs shall be inspected at least once annually and, if necessary, be repaired or
19 replaced, and removed at the completion of construction.

20 The Applicant shall make every reasonable effort to communicate the decision
21 either approving or disapproving the Certificate in digital media.

22 13. At least ninety (90) days before construction commences on the Project,
23 the Applicant shall provide ASLD, Pima County, the City of Tucson, the Town of
24 Sahuarita, and builders and developers who are building upon or developing land within
25 one (1) mile of the of the centerline of the selected route with a written description,
26 including the approximate height and width measurements of all structure types, of the
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1 Project. The written description shall identify the location of the Project and contain a
2 pictorial depiction of the facilities being constructed. The Applicant shall also
3 encourage the developers and builders to include this information in their disclosure
4 statements. Upon approval of this Certificate by the Commission, the Applicant may
5 commence construction of the Project.

6 14. The Applicant shall use non-specular conductor and non-reflective
7 surfaces for the transmission line structures on the Project.

8 15. The Applicant shall be responsible for arranging that all field personnel
9 involved in the Project receive training as to proper ingress, egress, and on-site working
10 protocol for environmentally sensitive areas and activities. Contractors employing such
11 field personnel shall maintain records documenting that the personnel have received
12 such training.

13 16. The Applicant shall follow the most current Western Electricity
14 Coordinating Council ("WECC") and North American Electric Reliability Corporation
15 ("NERC") planning standards, as approved by the Federal Energy Regulatory
16 Commission ("FERC"), National Electrical Safety Code ("NESC") standards, and
17 Federal Aviation Administration ("FAA") regulations.

18 17. The Applicant shall participate in good faith in state and regional
19 transmission study forums to coordinate transmission expansion plans related to the
20 Project and to resolve transmission constraints in a timely manner.

21 18. When Project facilities are located parallel to and within one hundred
22 (100) feet of any existing natural gas or hazardous pipeline, the Applicant shall:

- 23 A. Ensure grounding and cathodic protection studies are performed to show
24 that the Project's location parallel to and within one hundred (100) feet
25 of such pipeline results in no material adverse impacts to the pipeline or
26 to public safety when both the pipeline and the Project are in operation.

1 The Applicant shall take appropriate steps to ensure that any material
2 adverse impacts are mitigated. The Applicant shall provide to Staff of the
3 Commission, and file with Docket Control, a copy of the studies
4 performed and additional mitigation, if any, that was implemented as part
5 of its annual compliance-certification letter; and

- 6 B. Ensure that studies are performed simulating an outage of the Project that
7 may be caused by the collocation of the Project parallel to and within one
8 hundred (100) feet of the existing natural gas or hazardous liquid pipeline.
9 The studies should either: (i) show that such simulated outage does not
10 result in customer outages, or (ii) include operating plans to minimize any
11 resulting customer outages. The Applicant shall provide a copy of the
12 study results to Staff of the Commission and file them with Docket
13 Control as part of the Applicant's annual compliance certification letter.

14 19. The designation of the transmission line corridor in this Certificate, as
15 shown in **Exhibit A**, does not authorize ROWs greater than 100 feet wide for the Project
16 nor does it grant the Applicant exclusive rights within the corridor outside of the final
17 designated transmission ROWs. The maximum height of the structures shall not exceed
18 150 feet.

19 20. The Applicant shall submit a compliance certification letter annually,
20 identifying whether Route 1 or Route 3 will be constructed and progress made with
21 respect to and current status of each condition contained in this Certificate. The letter
22 shall be submitted to Commission's Docket Control commencing on June 1, 2027.
23 Attached to each certification letter shall be documentation explaining how compliance
24 with each condition was achieved. Copies of each letter, along with the corresponding
25 documentation, shall be submitted to the Arizona Attorney General's Office. With
26 respect to the Project, the requirement for the compliance letter shall expire on the date
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1 the Project is placed into operation. Notification of such filing with Docket Control
2 shall be made to ASLD, Pima County, the City of Tucson, the Town of Sahuarita, all
3 parties to this Docket, and all parties who made a limited appearance in this Docket.

4 21. The Applicant shall provide a copy of this Certificate to ASLD, Pima
5 County, the City of Tucson, and the Town of Sahuarita.

6 22. Any transfer or assignment of this Certificate shall require the assignee
7 or successor to assume, in writing, all responsibilities of the Applicant listed in this
8 Certificate and its conditions as required by A.R.S. § 40-360.08(A) and R14-7-113(F)
9 of the Arizona Administrative Code.

10 23. In the event the Applicant, its assignee, or successor, seeks to modify the
11 Certificate terms at the Commission, it shall provide copies of such request to ASLD,
12 Pima County, the City of Tucson, the Town of Sahuarita, all parties to this Docket, and
13 all parties who made a limited appearance in this Docket.

14 24. The Certificate Conditions shall be binding on the Applicant, its
15 successors, assignee(s) and transferees, and any affiliates, agents, or lessees of the
16 Applicant who have a contractual relationship with the Applicant concerning the
17 construction, operation, maintenance or reclamation of the Project. The Applicant shall
18 provide in any agreement(s) or lease(s) pertaining to the Project that the contracting
19 parties and/or lessee(s) shall be responsible for compliance with the Conditions set forth
20 herein, and the Applicant's responsibilities with respect to compliance with such
21 Conditions shall not cease or be abated by reason of the fact that the Applicant is not in
22 control of or responsible for operation and maintenance of the Project facilities.

23 **FINDINGS OF FACT AND CONCLUSIONS OF LAW**

24 This Certificate incorporates the following Findings of Fact and Conclusions of
25 Law:

26 The Project aids the State and the Southwest Region of the United States in
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meeting the need for an adequate, economical, and reliable supply of electric power.

1. When constructed in compliance with the conditions imposed in this Certificate, the Project aids the State, preserving a safe and reliable electric transmission system.

2. During the course of the hearing, the Committee considered evidence on the environmental compatibility of the Project as required by A.R.S. § 40-360 *et seq.*

3. The Project and the conditions placed on the Project in this Certificate effectively minimize the impact of the Project on the environment and ecology of the State.

4. The conditions placed on the Project of this Certificate resolve matters concerning balancing the need for the Project with its impact on the environment and ecology of the state arising during the course of the proceedings, and, as such, serve as finding and conclusions on such matters.

5. The Project is in the public interest because the Project's contribution to meeting the need for an adequate, economical, and reliable supply of electric power outweighs the minimized impact of the Project on the environment and ecology of the State.

6. The Project substation is not jurisdictional because the definition of a "transmission line" under A.R.S. § 40-360(10) only includes "new switchyards to be used therewith," not substations.

DATED this 3rd day of June, 2026.

THE ARIZONA POWER PLANT AND
TRANSMISSION LINE SITING COMMITTEE

By: 
Adam Stafford, Chairman

CERTIFICATION OF MAILING

ORIGINAL of the foregoing e-filed this 3rd day of June, 2026. with:

Utilities Division - Docket Control

Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007

COPIES of the above emailed this 3rd day of June, 2026.:

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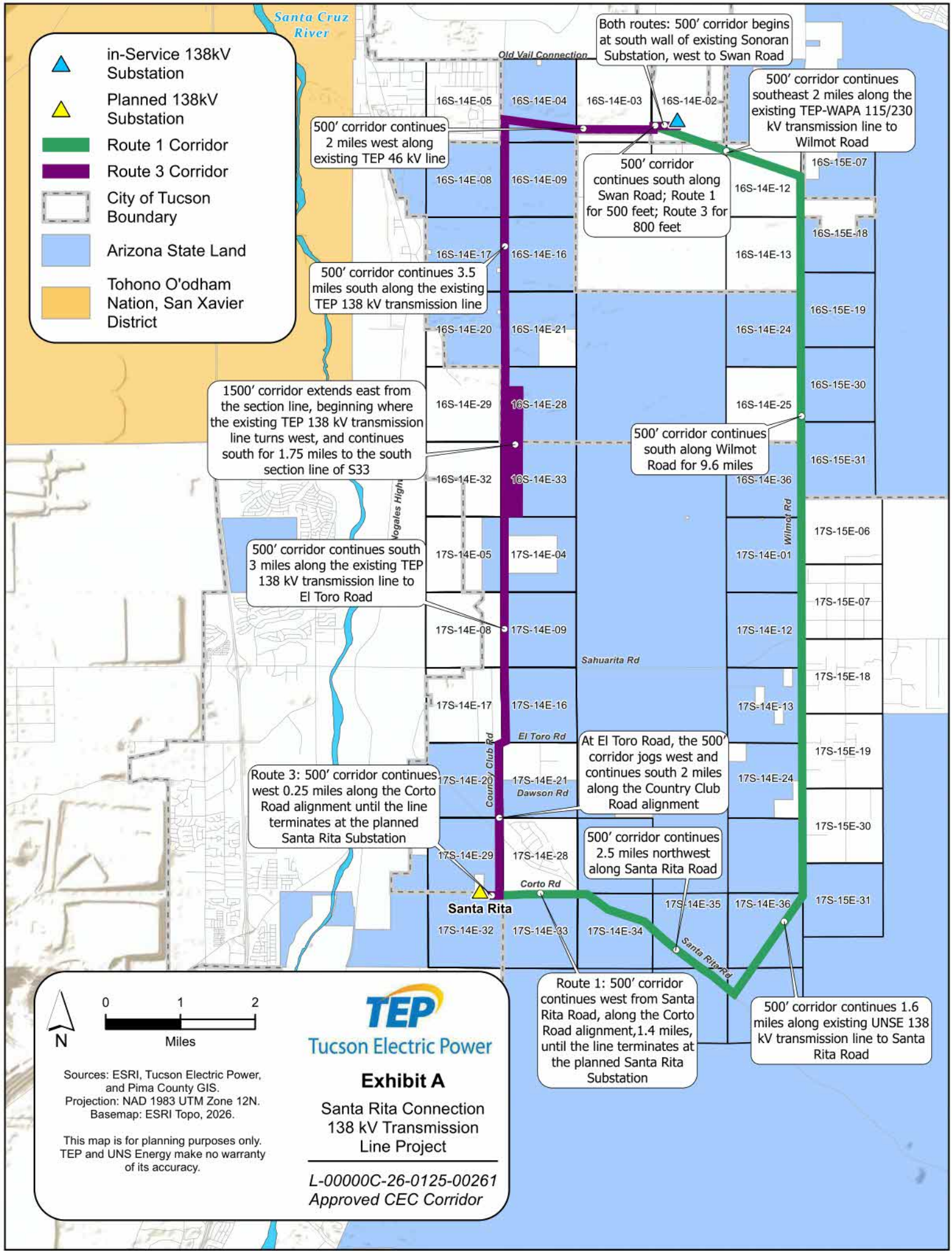
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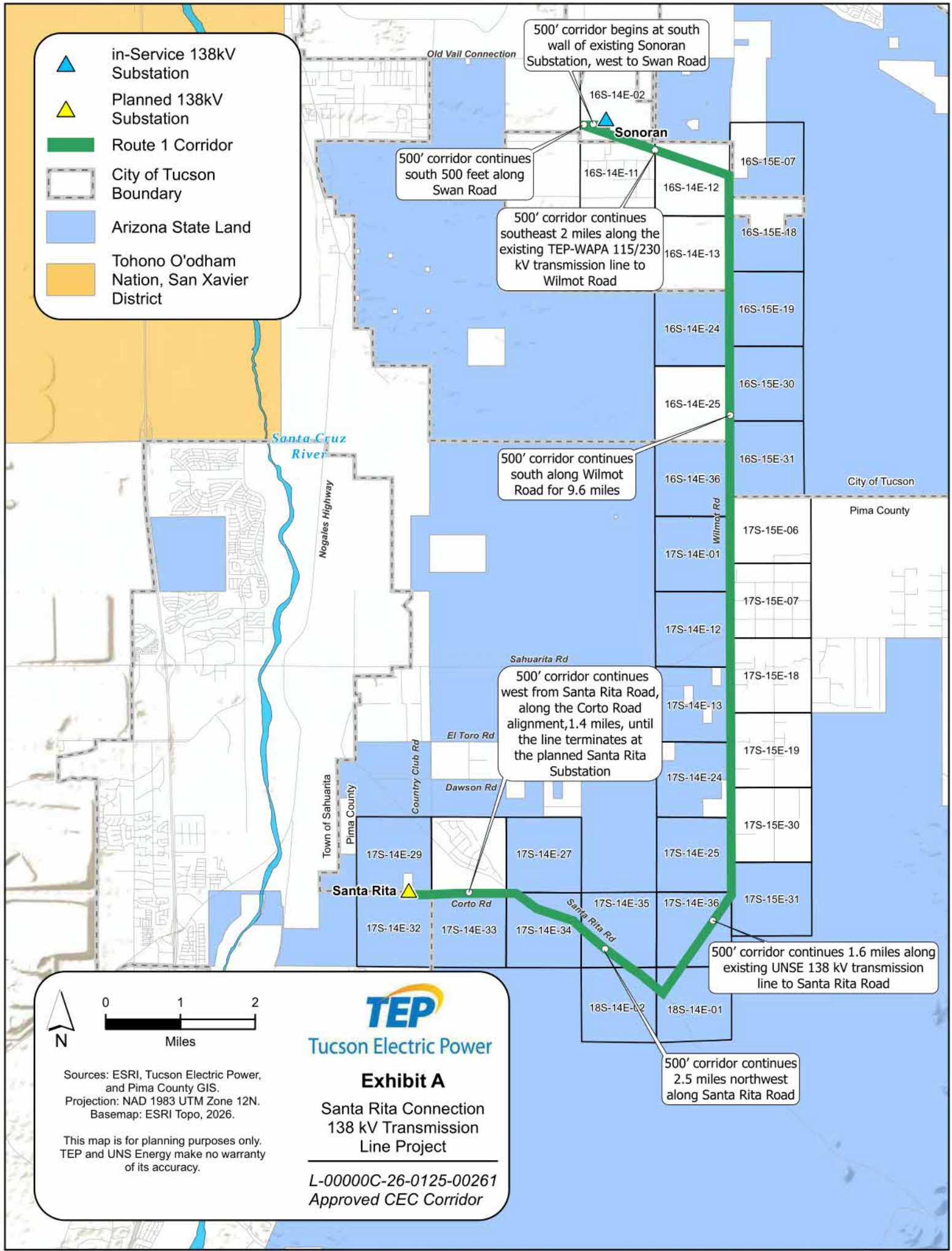
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CEC 261

EXHIBIT A





Sources: ESRI, Tucson Electric Power, and Pima County GIS.
Projection: NAD 1983 UTM Zone 12N.
Basemap: ESRI Topo, 2026.

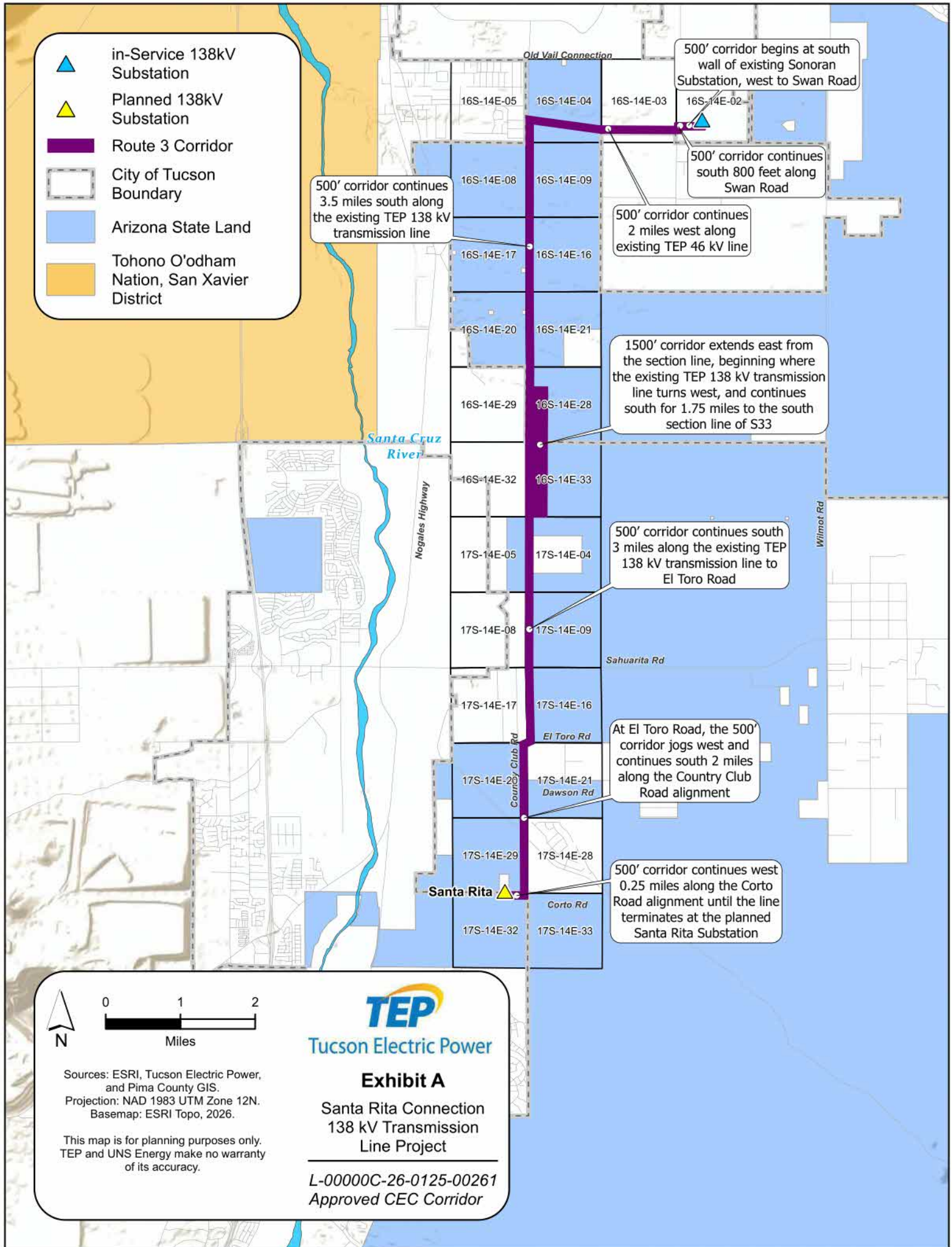
This map is for planning purposes only.
TEP and UNS Energy make no warranty of its accuracy.



Exhibit A

Santa Rita Connection 138 kV Transmission Line Project

L-00000C-26-0125-00261
Approved CEC Corridor



Sources: ESRI, Tucson Electric Power, and Pima County GIS.
Projection: NAD 1983 UTM Zone 12N.
Basemap: ESRI Topo, 2026.

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Exhibit A

Santa Rita Connection 138 kV Transmission Line Project

L-00000C-26-0125-00261
Approved CEC Corridor

EXHIBIT B

SANTA RITA CONNECTION PROJECT CEC 261

EXHIBIT B – PROPOSED ENVIRONMENTAL PROTECTION MEASURES

Standard EPMs

- Minimize vegetation clearing and ground disturbance, especially within riparian areas and ephemeral washes.
- Provide construction period monitors in areas where pre-construction surveys indicate a presence of sensitive species.
- Follow TEP established raptor protection protocols, as well as guidelines published by the Edison Electric Institute and the Avian Power Line Interaction Committee (APLIC) (Suggested Practices for Avian Protection on Power Lines: State of the Art in 2024, and Reducing Bird Collisions with Power Lines: State of the Art in 2012). Follow APLIC guidelines for power line design to reduce the likelihood of bird electrocution.
- Inspect and wash all construction equipment before entering or leaving the site to prevent the spread of invasive, non-native species.
- Follow standard Best Management Practices (BMPs) to prevent contamination of downstream waters from stormwater exiting the site.
- Implement a stormwater pollution prevention plan (SWPPP) as required.
- Implement a spill prevention, control, and countermeasures plan (SPCCP) as required.
- Implement worker environmental awareness training to inform site personnel on the appearance of protected species and their legal protections.
- Clear the construction site of project or construction-related trash each day.
- Restore disturbed areas to pre-construction or native condition following completion of project activities, by planting seeds or native vegetation of species that represent the natural surrounding landscape.
- If native plants listed under the ANPL are proposed for removal, a Notice of Intent to Clear Land should be submitted to the AZDA prior to commencing ground disturbance.
- If other wildlife are encountered during construction activities, move them out of harm's way, no more than 0.25 mile outside the project boundary, and within similar habitat.
- Trenching or digging of large holes should be close together to minimize the amount of open holes at any given time. If not back-filled immediately, escape ramps should be conducted at least every 300 feet. Trenches and holes that have been left open should be inspected to remove animals prior to back-filling.
- If any areas are to be fenced, refer to the AZGFD Wildlife Compatible Fencing Guidelines to ensure wildlife movement is not restricted.
- If listed species are identified during construction, activities should stop work at that location, and notification made to TEP and appropriate federal or state wildlife agencies.

Cactus Ferruginous Pygmy-Owl

- The Arizona Game and Fish Department (AZGFD) recommends conducting pre-construction surveys to determine species presence and inform conservation measures.
- If CFPO is present, avoid construction in suitable or occupied habitat during CFPO breeding season (June 15 to August 15).
- If nests are located, establish disturbance-free buffers 0.25 to 0.5 miles from the nests.

SANTA RITA CONNECTION PROJECT CEC 261
EXHIBIT B – PROPOSED ENVIRONMENTAL PROTECTION MEASURES

- Avoid or minimize clearance of riparian vegetation.

Western Burrowing Owl

- In addition to standard EPMs for protection of migratory birds, the AZGFD recommends conducting occupancy surveys within suitable habitat to inform conservation measures. The surveys should be conducted by a surveyor who is certified by the AZGFD or has similar training and qualification.

Migratory Bird Species

To avoid impacts to migratory birds and/or their nests, the following measures are recommended during the general migratory bird breeding season of March 1 to August 31:

- Conduct preconstruction surveys for migratory bird and raptor nests (by a qualified biologist) within 10 days of construction activities, vegetation clearance, or ground disturbance commencing.
- Conduct additional nest surveys in areas that had no disturbance for 10 days or more.
- Establish avoidance buffers around active nests. No construction activities should occur within the buffer until cleared by a qualified biologist.
- Avoid conducting vegetation clearance of thinning near active nests.
- Identify nesting and foraging areas, and flag to avoid disturbance, with buffers appropriate for expected species.
- Minimize disturbance to riparian zones, dense vegetation, and areas rich in saguaros.

Sonoran Desert Tortoise

The following measures are recommended to avoid impacts to the Sonoran desert tortoise.

- Survey by a qualified biologist for burrows, shelters, and individual tortoises.
- Train site personnel on the appearance of the species and their legal protections.
- Ensure personnel who might handle tortoises have received training on AZGFD Desert Tortoise Handling Guidelines (Rubke, 2024) (Appendix C) to minimize or eliminate any potential impacts to desert tortoise.
- While work is being conducted within suitable Sonoran desert tortoise habitat, construction crews should refer to the Sonoran Desert Tortoise Conservation Guidelines for general handling guidelines and recommended avoidance, minimization, and mitigation measures if the species is detected.
- If construction activities are scheduled to occur during active periods, pre-construction surveys and construction monitoring are recommended (AIDTT, 2008).

Monarch Butterfly

The USFWS recommended the following measures to protect the Monarch butterfly:

- Keep vegetation removal to a minimum.
- To encourage creation of habitat for the Monarch butterfly, when revegetating, refer to the USFWS Nationwide Monarch Butterfly Candidate Conservation Agreement with Assurances.

Pima Pineapple Cactus

The USFWS has established standard measures to avoid or minimize impacts to the PPC:

- Conduct pre-construction surveys in suitable habitat to identify individual plants and inform conservation measures. Follow current survey protocols.
- Establish 10- to 50-foot-wide buffers around identified PPCs to avoid impacting individual PPCs and their surrounding habitat during construction and ground-disturbing activities. These buffered areas should be flagged or fenced.
- Restrict construction during wet seasons to avoid excessive soil compaction.
- Minimize soil disturbance in suitable habitat (e.g., limit grading, vehicle travel, equipment laydowns, trenching).
- Implement appropriate erosion and sediment control measures to protect habitat from runoff.
- Restore disturbed habitat with native seed and/or plantings.
- Educate site personnel on species' appearance and legal protections. Prohibit plant collection and/or removal.