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BEFORE THE ARIZONA CORPORATION COMMISSION**COMMISSIONERS**

Arizona Corporation Commission

DOCKETED

ROBERT "BOB" BURNS – Chairman
BOYD DUNN
SANDRA D. KENNEDY
JUSTIN OLSON
LEA MARQUEZ PETERSON

APR 22 2020

DOCKETED BY

DOCKET NO. L-00000C-20-0007-00186**CASE NO. 186****DECISION NO. 77601****ORDER**

IN THE MATTER OF THE APPLICATION OF
TUCSON ELECTRIC POWER COMPANY, IN
CONFORMANCE WITH THE REQUIREMENTS
OF A.R.S. § 40-360, *ET SEQ.*, FOR A
CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AUTHORIZING THE
IRVINGTON TO EAST LOOP 138 KILOVOLT
(kV) TRANSMISSION LINE PROJECT, WHICH
INCLUDES THE CONSTRUCTION OF NEW 138
kV TRANSMISSION LINES ORIGINATING AT
THE IRVINGTON SUBSTATION (SECTION 03,
TOWNSHIP 15, SOUTH, RANGE 14 EAST),
WITH AN INTERCONNECTION AT THE PORT
SUBSTATION (SECTION 18, TOWNSHIP 15
SOUTH, RANGE 15 EAST), AND THE PATRIOT
SUBSTATION (SECTION 31, TOWNSHIP 14
SOUTH, RANGE 15 EAST) AND
TERMINATING AT THE EAST LOOP
SUBSTATION (SECTION 08, TOWNSHIP 14
SOUTH, RANGE 15 EAST), EACH LOCATED
WITHIN PIMA COUNTY, ARIZONA.

Open Meeting
April 14-15, 2020
Phoenix, Arizona

BY THE COMMISSION:

Pursuant to A.R.S. § 40-360, *et seq.*, after due consideration of all relevant matters, the Arizona Corporation Commission ("Commission") finds and concludes that the Certificate of Environmental Compatibility ("CEC") issued by the Arizona Power Plant and Transmission Line Siting Committee ("Siting Committee") is hereby approved as granted by this Order.

The Commission, in reaching its decision, has balanced all relevant matters in the broad public interest, including the need for an adequate, economical, and reliable supply of electric power

1 The Commission further finds and concludes that in balancing the broad public interest in this
2 matter:

3 1. The Project is in the public interest because it aids the state in meeting the need for an
4 adequate, economical, and reliable supply of electric power.

5 2. In balancing the need for the Project with its effect on the environment and ecology of
6 the state, the conditions placed on the CEC effectively minimize its impact on the environment and
7 ecology of the state.

8 3. The conditions placed on the CEC resolve matters concerning the need for the Project
9 and its impact on the environment and ecology of the state raised during the course of proceedings
10 and, as such, serve as the findings on the matters raised.

11 4. In light of these conditions, the balancing in the broad public interest results in favor
12 of granting the CEC.

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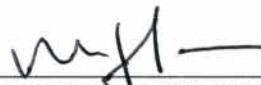
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1 THE CEC ISSUED BY THE SITING COMMITTEE IS
2 INCORPORATED HEREIN AND IS APPROVED BY ORDER OF
3 THE ARIZONA CORPORATION COMMISSION
4

5
6  CHAIRMAN BURNS  COMMISSIONER DUNN  COMMISSIONER KENNEDY
7
8  COMMISSIONER OLSON  COMMISSIONER MARQUEZ PETERSON
9

10 IN WITNESS WHEREOF, I, MATTHEW J. NEUBERT,
11 Executive Director of the Arizona Corporation Commission,
12 have hereunto, set my hand and caused the official seal of this
13 Commission to be affixed at the Capitol, in the City of Phoenix,
14 this 22 day of April, 2020.



15
16 
17 MATTHEW J. NEUBERT
18 EXECUTIVE DIRECTOR

19 DISSENT: _____

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21 DISSENT: _____
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ORIGINAL



0000201103

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

In the matter of the Application of Tucson Electric Power Company, in conformance with the requirements of A.R.S. § 40-360, *et seq.*, for a Certificate of Environmental Compatibility authorizing the Irvington to East Loop 138 kilovolt (kV) Transmission Line Project, which includes the construction of new 138 kV transmission lines originating at the Irvington Substation (Section 03, Township 15 South, Range 14 East), with an interconnection at the Port Substation (Section 18, Township 15 South, Range 15 East) and the Patriot Substation (Section 31, Township 14 South, Range 15 East), and terminating at the East Loop Substation (Section 08, Township 14 South, Range 15 East), each located within Pima County, Arizona.

Docket No.
L-00000C-20-0007-00186

Case No. 186

Arizona Corporation Commission

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[Signature]

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A. Introduction

Pursuant to notice given as provided by law, the Arizona Power Plant and Transmission Line Siting Committee ("Committee") held a public hearing on February 24 through February 26, 2020, in Tucson, Arizona, 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 January 15, 2020 Application of Tucson Electric Power Company ("TEP" or "Applicant") for a Certificate of Environmental Compatibility ("Certificate") in the above-captioned case.

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:

///

1	Thomas Chenal	Chairman, Designee for Arizona Attorney General Mark
2		Brnovich
3	Leonard C. Drago	Designee for Director, Arizona Department of Environmental
4		Quality ("ADEQ")
5	John R. Riggins	Designee for Director, Arizona Department of Water Resources
6		("ADWR")
7	Laurie A. Woodall	Designee of the Chairman, Arizona Corporation Commission
8		("Commission")
9	Jack Haenichen	Appointed Member, representing the general public
10		
11	Patricia A. Noland	Appointed Member, representing the general public
12		
13	Mary Hamway	Appointed Member, representing the incorporated cities and
14		towns
15	James A. Palmer	Appointed Member, representing agriculture

16 The Applicant was represented by J. Matthew Derstine, Snell & Wilmer and
17 Megan J. DeCorse of TEP.

18 At the conclusion of the hearings, the Committee, after considering the (i)
19 Application, (ii) evidence, testimony, and exhibits presented by the Applicant, and (iii)
20 comments of the public, and being advised of the legal requirements of A.R.S. §§ 40-360
21 through 40-360.13, upon motion duly made and seconded, voted 8 to 0 to grant TEP, its
22 successors and assigns, this Certificate for construction of the Irvington to East Loop 138
23 kilovolt ("kV") Transmission Line Project ("Project") as described below.

24 **B. Overview of the Project**

25 The Project will be located in the City of Tucson and Pima County, and entails the
26 construction of 12.78 miles of new 138 kV transmission line that will be constructed on a
27 mixture of weathering tubular steel tangent and dead-end monopoles.

28 The Project will enhance TEP's ability to respond to future load growth, provide
contingency support to existing distribution substations, assist Davis-Monthan Air Force
Base ("DMAFB") in fulfilling the Department of Defense ("DOD") directive for
enhancing energy resiliency, and over time allow replacement of part of the existing

1 aging 46 kV system serving the area. The existing electrical infrastructure does not
2 provide sufficient capacity to serve future load growth, and needs to be enhanced to
3 provide DMAFB the resiliency it needs in order to fulfill the DOD directive.

4 5 **C. Project Description and Alignment**

6 The new transmission line will begin at the Irvington 138 kV Substation, located
7 at 3950 E. Irvington Road, Tucson, Arizona, and extend east and north to connect to the
8 East Loop Substation located at 7201 E. 5th Street in Tucson, Arizona. The Project will
9 interconnect to the planned Port and Patriot 138 kV Substations, to be located on 10 acres
10 and 16 acres respectively in Tucson, Arizona. The route will cross private, City of
11 Tucson, Pima County, Arizona State, and DOD owned land as well as City of Tucson
12 and Pima County road rights-of-way. For portions of the Project, TEP's pre-existing 138
13 kV lines (which were constructed prior to CEC requirements in A.R.S. §§ 40-360 through
14 40-360.13) will be co-located and incorporated on the new poles for this Project.

15
16 The corridor for the Project is generally described as:

17
18 From Irvington Substation to the intersection of the southeast corner of Littletown Road
19 and Kolb Road rights-of-way, the corridor width will be 300 ft., centered on the
20 centerline of the proposed transmission line alignment as described in Exhibit A.

21
22 From this point to the north boundary of the right-of-way of East Old Vail Road, the
23 corridor width will extend east from the centerline of Kolb Road 500 ft.

24
25 From this point the corridor width will be 450 ft. on either side of the centerline of the
26 Kolb Road right-of-way and extend north for a distance of 1,350 ft.

27
28 From this point to the Patriot Substation located at the southeast corner of Escalante Road

1 and Kolb Road, the corridor width will be 300 ft. centered on the proposed transmission
2 line alignment as described in Exhibit A.

3
4 From this point east to the intersection of Escalante Road and Pantano Road, the corridor
5 width will be 200 ft., centered on the centerline of the Escalante Road right-of-way.

6
7 From the intersection of Pantano Road and Escalante Road, the corridor width will be
8 175 ft., from the west boundary of the Pantano Road right-of-way and extending 25 ft.
9 beyond the east boundary of Pantano Road right-of-way north to E. 5th Street except as
10 noted below.

11
12 At the intersection of S. Pantano Road and E. Arizona Street, the proposed
13 transmission line, as described in Exhibit A, will change from the existing
14 transmission line alignment to the proposed transmission line alignment on S.
15 Pantano Road, the corridor width will be 140 ft. centered on the centerline of the
16 S. Pantano Road and S. Research Loop road rights-of-way, extending 25 ft.
17 beyond both the east and west boundaries of S. Pantano Road right-of-way and
18 the north and south boundaries of S. Research Loop. This 140 ft. wide corridor
19 will turn east on to S. Research Loop and continue to the existing transmission line
20 alignment.

21
22 From the intersection of E. 5th Street and S. Pantano Road west, the corridor width will
23 be within TEP's existing 50 ft. wide easement to the East Loop Substation parcel as
24 described in Exhibit A.

25
26 A map and legal description of the approved route and corridor is attached as Exhibit A.

27 **CONDITIONS**

28 This Certificate is granted upon the following conditions:

1 1. This authorization to construct the Project shall expire ten (10) years from
2 the date this Certificate is approved by the Commission, with or without modification.
3 Construction of the Project shall be complete, such that the Project is in-service within
4 this ten-year timeframe. However, prior to the expiration of the time period, TEP may
5 request that the Commission extend the time limitation.

6 2. In the event that the Project requires an extension of the term(s) of this
7 Certificate prior to completion of construction, TEP shall file such time extension request
8 at least one hundred eighty (180) days prior to the expiration of the Certificate. TEP shall
9 use reasonable means to promptly notify all cities and towns within a five (5) mile radius
10 of the Project and all landowners and residents within a one (1) mile radius of the Project,
11 all persons who made public comment at this proceeding who provided a mailing or
12 email address, and all parties to this proceeding. The notification provided will include
13 the request and the date, time, and place of the hearing or open meeting during which the
14 Commission will consider the request for extension. Notification shall be no more than
15 three (3) business days after TEP is made aware of the hearing date or the open meeting
16 date.

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

24 a. All applicable land use regulations;

25 b. All applicable zoning stipulations and conditions, including but not limited
26 to landscaping and dust control requirements;

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

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

11 5. TEP shall comply with the Arizona Game and Fish Department ("AGFD")
12 guidelines for handling protected animal species, should any be encountered during
13 construction and operation of the Project, and shall consult with AGFD as necessary on
14 other issues concerning wildlife.

15 6. TEP shall design the Project to incorporate reasonable measures to
16 minimize impacts to avian species. Such measures will be accomplished through
17 compliance with the 2006 standards of the Avian Power Line Interaction Committee, and
18 include the application of the recommended measures to minimize the risk of collision, as
19 described in the 2012 guidelines of the Avian Power Line Interaction Committee.

20 7. The Applicant shall consult with the State Historical Preservation Office
21 ("SHPO"), City of Tucson and Pima County with respect to cultural resources. If any
22 archaeological, paleontological, or historical site or a significant object is discovered on
23 state, county or municipal land during the construction or operation of the Project, the
24 Applicant or its representative in charge shall promptly report the discovery to the
25 Director of the Arizona State Museum ("ASM"), and in consultation with the Director,
26 shall immediately take all reasonable steps to secure and maintain the preservation of the
27 discovery, as required by A.R.S. § 41-844.

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1 8. TEP shall comply with the notice and salvage requirements of the Arizona
2 Native Plant Law (A.R.S. §§ 3-901 *et seq.*) and shall, to the extent feasible, minimize the
3 destruction of native plants during construction and operation of the Project.

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

17 10. If human remains and/or funerary objects are encountered on private land
18 during the course of any ground-disturbing activities related to the construction or
19 maintenance of the Project, TEP shall cease work on the affected area of the Project and
20 notify the Director of the ASM as required by A.R.S. § 41-865.

21 11. Within one hundred twenty (120) days of the Commission's decision
22 approving this Certificate, TEP shall post signs in or near public rights-of-way, to the
23 extent authorized by law, reasonably adjacent to the Project giving notice of the Project.
24 Such signage shall be no smaller than a roadway sign. The signs shall advise:

25 a. Future site of a TEP power line; and

26 b. A phone number and website for public information regarding the
27 Project.

28 ///

1 c. Refer the Public to the Docket Control Website:

2 <https://edocket.azcc.gov/Docket/DocketDetailSearch?docketId=24042>

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

5 12. At least ninety (90) days before construction commences on the Project,
6 TEP shall provide cities and towns within five (5) miles of the Project, Pima County and
7 known builders and developers who are building upon or developing land within one (1)
8 mile of the Project with a written description, including height and width measurements
9 of all structure types, of the Project. The written description shall identify the location of
10 the Project and contain a pictorial depiction of the facilities being constructed. TEP shall
11 also encourage the developers and builders to include this information in their disclosure
12 statements.

13 13. TEP shall use non-specular conductors for the new circuit and non-
14 reflective surfaces for the transmission line structures on the Project.

15 14. TEP shall be responsible for arranging that all field personnel involved in
16 the Project receive training as to proper ingress, egress, and on-site working protocol for
17 construction and maintenance activities. Contractors employing such field personnel shall
18 maintain records documenting that the personnel have received such training.

19 15. TEP shall follow the most current Western Electricity Coordinating
20 Council ("WECC") and North American Electric Reliability Corporation ("NERC")
21 planning standards, as approved by the Federal Energy Regulatory Commission
22 ("FERC"), National Electrical Safety Code ("NESC") construction standards, and
23 Federal Aviation Administration ("FAA") regulations.

24 16. TEP shall participate in good faith in state and regional transmission study
25 forums to coordinate transmission expansion plans related to the Project and to resolve
26 transmission constraints in a timely manner.

27 17. When Project facilities are located parallel to and within one-hundred (100)
28 feet of any existing natural gas or hazardous liquid pipeline, TEP shall:

- 1 a. Ensure grounding and cathodic protection studies are performed to show
2 that the Project's location parallel to and within one-hundred (100) feet
3 of such pipeline results in no material adverse impacts to the pipeline or
4 to public safety when both the pipeline and the Project are in operation.
5 TEP shall take appropriate steps to ensure that any material adverse
6 impacts are mitigated. TEP shall provide to the Commission Staff and
7 file with Docket Control, a copy of the studies performed and additional
8 mitigation, if any, that was implemented as part of its annual
9 compliance certification letter; and
- 10 b. Ensure that studies are performed simulating an outage of the Project
11 that may be caused by the collocation of the Project parallel to and
12 within one-hundred (100) feet of the existing natural gas or hazardous
13 liquid pipeline. The studies should either: i) show that such simulated
14 outage does not result in customer outages; or ii) include operating plans
15 to minimize any resulting customer outages. TEP shall provide a copy
16 of the study results to the Commission Staff and file them with Docket
17 Control as part of its annual compliance certification letter.

18 18. TEP shall submit a compliance certification letter annually, identifying
19 progress made with respect to each condition contained in this Certificate, including
20 which conditions have been met. The letter shall be submitted to Commission's Docket
21 Control commencing on February 15, 2021. Attached to each certification letter shall be
22 documentation explaining how compliance with each condition was achieved. Copies of
23 each letter, along with the corresponding documentation, shall be submitted to the
24 Arizona Attorney General's Office. With respect to the Project, the requirement for the
25 compliance letter shall expire on the date the Project is placed into operation. Notification
26 of such filing with Docket Control shall be made to the Board of Supervisors for Pima
27 County, the City of Tucson, all parties to this Docket, and all parties who made a limited
28 appearance in this Docket.

19. TEP shall provide a copy of this Certificate to the Board of Supervisors for Pima County and the City of Tucson.

20. Any transfer or assignment of this Certificate shall require the assignee or successor to assume, in writing, all responsibilities of TEP listed in this Certificate and its conditions as required by A.R.S. § 40-360.08(A) and R14-3-213(F) of the Arizona Administrative Code.

21. In the event TEP, its assignee, or successor, seeks to modify the Certificate terms at the Commission, it shall provide copies of such request to the Board of Supervisors for Pima County, the City of Tucson, all parties to this Docket, and all parties who made a limited appearance in this Docket.

22. TEP shall continue to use reasonable efforts to discuss and negotiate in good faith with private landowners, on whose property the Project corridor is located, the specific location for the Project's right-of-way and placement of poles.

23. Any such right-of-way agreement shall, where practicable and after consultation with the landowner, require TEP, at a minimum to:

- a. Use existing roads, where available, for construction and access;
- b. Minimize impacts to wildlife;
- c. Minimize vegetation disturbance outside the Project right-of-way, particularly in drainage channels and along stream banks; and
- d. Revegetate native areas following construction disturbances unless revegetation is waived by the landowner.

24. TEP shall publish a copy of this Certificate and the attachments on TEP's Project website within 10 days of receipt of approval of the Commission.

25. The Certificate Conditions shall be binding on TEP's successors, assignee(s) and transferees and any affiliates, agents, or lessees of TEP who have a contractual relationship with TEP concerning the construction, operation, maintenance or reclamation of the Project. TEP shall provide in any agreement(s) or lease(s) pertaining to the Project that the contracting parties and/or lessee(s) shall be responsible for

1 compliance with the Conditions set forth herein, and TEP's responsibilities with respect
 2 to compliance with such Conditions shall not cease or be abated by reason of the fact that
 3 TEP is not in control of or responsible for operation and maintenance of the Project
 4 facilities.

5 FINDINGS OF FACT AND CONCLUSIONS OF LAW

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

7 1. The Applicant made reasonable efforts to work with landowners and
 8 minimize the impact of the facilities.

9 2. The Project aids TEP in meeting the need for an adequate, economical, and
 10 reliable supply of electric power for its customers.

11 3. The Project aids TEP in preserving a safe and reliable electric transmission
 12 system.

13 4. The conditions placed on the Project in this Certificate effectively minimize
 14 the Project's impact on the environment and ecology of the State.

15 5. The conditions placed on the Project in this Certificate resolve matters
 16 concerning balancing the need for the Project with the Project's impact on the
 17 environment and ecology of the state arising during the course of the proceedings, and as
 18 such, serve as findings and conclusions on such matters.

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

23 DATED this 3rd day of March, 2020.

24
 25 THE ARIZONA POWER PLANT AND
 26 TRANSMISSION LINE SITING COMMITTEE

27
 28 By: 

Thomas K. Chenal, Chairman

Decision No. 77601

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EXHIBIT A

EXHIBIT 'A'
TRANSMISSION LINE CORRIDOR FOR IRVINGTON
TO EAST LOOP 138kV TRANSMISSION LINE
LEGAL DESCRIPTION

A strip of land 300.00 feet in width except where noted, within Pima County, Arizona, the centerline of which is centered on the transmission line alignment and the road right-of-way alignment except where noted and is described as follows:

commencing from a Pima County DOT – City of Tucson DOT Geodetic Control Point, 'IC17', having a grid coordinate of (X) 1017063.075, (Y) 421987.325, of the Arizona State Plane Coordinate System, 1983, Central Zone, from which a point near Irvington Substation having a grid coordinate of (X) 1014860.263, (Y) 421716.515, of said Central Zone bears South 82 degrees 59 minutes 29 seconds West, 2219.40 feet, and being the **point of beginning**;

thence South 56 degrees 27 minutes 29 seconds East, 595.71 feet;

thence South 52 degrees 18 minutes 10 seconds East, 514.77 feet;

thence South 36 degrees 29 minutes 30 seconds West, 340.47 feet;

thence South 57 degrees 48 minutes 23 seconds East, 536.26 feet;

thence South 57 degrees 10 minutes 26 seconds East, 596.56 feet;

thence South 51 degrees 01 minutes 26 seconds East, 579.50 feet;

thence South 55 degrees 18 minutes 19 seconds East, 650.00 feet;

thence South 52 degrees 26 minutes 26 seconds East, 700.00 feet;

thence South 55 degrees 09 minutes 43 seconds East, 700.00 feet;

thence South 57 degrees 14 minutes 14 seconds East, 2600.00 feet;

thence South 54 degrees 07 minutes 39 seconds East, 520.00 feet;

thence South 48 degrees 13 minutes 17 seconds East, 350.00 feet;

thence South 53 degrees 38 minutes 32 seconds East, 350.00 feet;

thence South 57 degrees 05 minutes 09 seconds East, 4182.17 feet;

thence North 89 degrees 08 minutes 56 seconds East, 2300.00 feet;

thence South 88 degrees 32 minutes 20 seconds East, 1442.39 feet;

thence South 76 degrees 05 minutes 16 seconds East, 492.88 feet;

thence South 89 degrees 09 minutes 41 seconds East, 1005.53 feet to a point near Port Substation;

thence South 89 degrees 09 minutes 44 seconds East, 2187.07 feet;

thence North 89 degrees 17 minutes 28 seconds East, 343.04 feet to the **terminus** of said centerline and the **beginning** of a strip of land **500.00 feet** in width, the corridor width will extend east 500.00 feet from the described centerline being the centerline of Kolb Road right of way;

thence North 00 degrees 17 minutes 30 seconds West, 1355.19 feet along said 500.00 foot corridor and being the centerline of Kolb Road right of way to the **terminus** of said centerline being the north boundary of the right of way of East Old Vail Road and the **beginning** of a strip of land **900.00 feet** in width which will extend 450.00 feet either side of the centerline of Kolb Road right of way as described as follows;

thence North 00 degrees 22 minutes 35 seconds West, 1324.05 feet to the **terminus** said 900.00 foot corridor and the **beginning** of a strip of land **300.00 feet** in width centered of the proposed transmission line as described in Exhibit A and described as follows;

thence North 00 degrees 27 minutes 12 seconds West, 586.54 feet along centerline of Kolb Road right of way and in which the west side of the 300.00 foot corridor will be 62.55 feet east of said centerline right of way;

thence North 00 degrees 27 minutes 12 seconds West, 1379.86 feet along centerline of Kolb Road right of way and in which the west side of the 300.00 foot corridor will be 97.42 feet east of said centerline right of way;

thence North 00 degrees 27 minutes 12 seconds West, 471.74 feet along centerline of Kolb Road right of way and in which the west side of the 300.00 foot corridor will be 16.83 feet west of said centerline right of way;

thence North 00 degrees 08 minutes 43 seconds West, 3381.82 feet along centerline of Kolb Road right of way and in which the west side of the 300.00 foot corridor will be 18.44 feet west of said centerline right of way;

thence North 00 degrees 08 minutes 43 seconds West, 1031.32 feet along centerline of Kolb Road right of way and in which the west side of the 300.00 foot corridor will be 51.91 feet west of said centerline right of way;

thence North 05 degrees 23 minutes 40 seconds West, 1086.79 feet along centerline of Kolb Road right of way and in which the west side of the 300.00 foot corridor will be 37.19 feet west of said centerline right of way;

thence North 00 degrees 48 minutes 47 seconds West, 3170.16 feet along centerline of Kolb Road right of way and in which the west side of the 300.00 foot corridor will be 56.24 feet west of said centerline right of way;

thence North 00 degrees 51 minutes 36 seconds West, 237.87 feet along centerline of Kolb Road right of way and in which the east side of the 300.00 foot corridor will be 51.64 feet east of said centerline right of way;

thence North 00 degrees 51 minutes 36 seconds West, 2091.40 feet to a point near Patriot Substation and being along the centerline of Kolb Road right of way and in which the east side of the 300.00 foot corridor will be 60.78 feet east of said centerline right of way and being the **terminus** of said centerline and the **beginning** of a strip of land **200.00 foot** in width centered on the centerline of the Escalante Road right of way and described as follows;

thence North 89 degrees 42 minutes 47 seconds East, 2642.50 feet along centerline Escalante Road right of way;

thence North 89 degrees 36 minutes 10 seconds East, 2644.68 feet along centerline Escalante Road right of way and being the **terminus** of said centerline and the **beginning** of a strip of land **175.00 feet** in width from the west boundary of the Pantano Road right of way and extending 25.00 feet beyond the east boundary of Pantano Road right of way the centerline of said Pantano Road right of way described as follows;

thence North 00 degrees 35 minutes 38 seconds West, 5303.92 feet along the centerline of Pantano Road right of way;

thence North 00 degrees 31 minutes 10 seconds West, 1594.70 feet to the beginning of a curve concave to the southwest and having a radius of 800.00 feet and being the **terminus** of said centerline and beginning of strip of land **140.00 feet** in width centered on the centerline of the S. Pantano Road and S. Research Loop Road right of ways, extending 25.00 feet beyond both the east and west boundaries of S. Pantano road right of way and the north and south boundaries of Research Loop the centerline of which is described as follows;

thence northwesterly 567.14 feet along said curve through a central angle of 40 degrees 37 minutes 06 seconds;

thence North 41 degrees 08 minutes 16 seconds West, 711.95 feet;

thence North 23 degrees 26 minutes 21 seconds East, 66.01 feet to the beginning of a curve concave to the south and having a radius of 150.00 feet;

thence easterly 131.08 feet along said curve through a central angle of 50 degrees 04 minutes 08 seconds to the beginning of a reverse curve concave to the north and having a radius of 787.94 feet;

thence easterly 126.60 feet along said curve through a central angle of 09 degrees 12 minutes 21 seconds;

thence North 89 degrees 38 minutes 50 seconds East, 424.37 feet to the *terminus* of said centerline and the beginning of strip of land **175.00 feet** in width the centerline of which is described as follows;

thence North 00 degrees 50 minutes 38 seconds West, 1419.37 feet;

thence North 08 degrees 38 minutes 37 seconds East, 662.27 feet;

thence North 19 degrees 02 minutes 31 seconds West, 516.75 feet to the centerline of Pantano Road right of way;

thence North 00 degrees 34 minutes 28 seconds East, 5287.29 feet along the centerline of Pantano Road right of way;

thence North 00 degrees 34 minutes 08 seconds West, 2685.12 feet along the centerline of Pantano Road right of way to *terminus* of said centerline and beginning of a strip of land **50.00 feet** in width and to be within TEP's existing 50.00 foot wide easement to the East Loop Substation parcel as described in Exhibit 'A' the centerline of which is described as follows;

thence South 89 degrees 17 minutes 05 seconds West, 607.91 feet;

thence North 89 degrees 59 minutes 14 seconds West, 668.40 feet;

thence South 89 degrees 14 minutes 53 seconds West, 1343.58 feet;

thence North 82 degrees 43 minutes 45 seconds West, 598.04 feet;

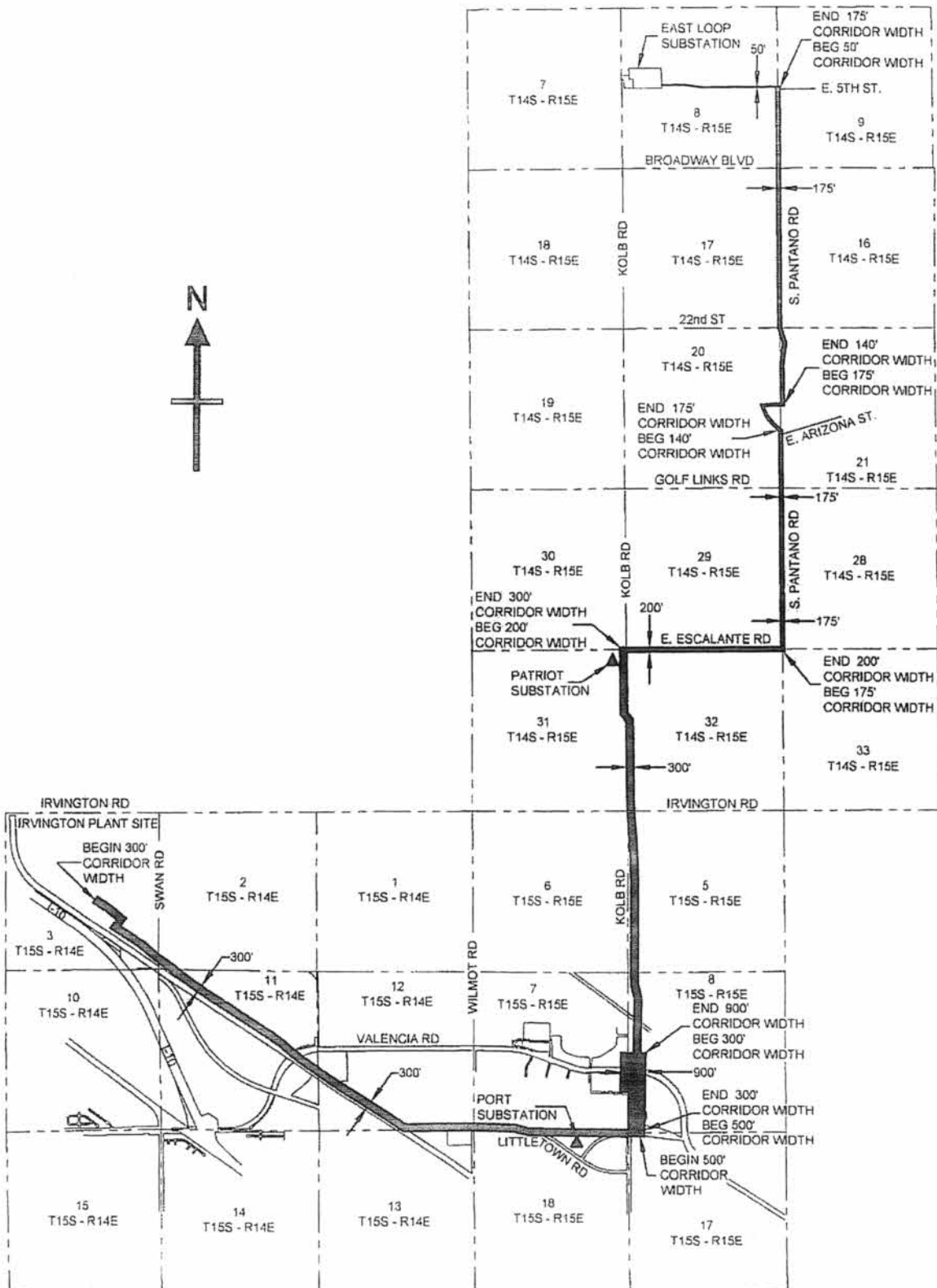
thence South 89 degrees 33 minutes 47 seconds West, 955.18 feet;

thence North 49 degrees 57 minutes 45 seconds West, 295.56 feet to the *terminus* of said centerline near East Loop Substation, said terminus having a grid coordinate of (X)1033531.610 (Y) 448758.280, of said Central Zone, from which a Pima County DOT – City of Tucson DOT

Geodetic Control Point 'FG05', having a grid coordinate of (X) 1032620.774, (Y) 448453.156, of said Central Zone bears South 71 degrees 28 minutes 46 seconds West, 960.59 feet.

All distances are grid.

Said centerline is 12.6 miles in length, more or less.



P.C.N. _____
 W.O.N. _____
 SCALE 1" = 5000'
 DFT B.K.B. DATE 02 - 2020
 CKR _____ DATE _____
 EDD _____ DATE _____
 SUP _____ DATE _____
 ENG _____ DATE _____



EXHIBIT 'A'
 TRANSMISSION LINE CORRIDOR FOR IRVINGTON TO
 EAST LOOP 138KV TRANSMISSION LINE
 CASE NO. 186

WITHIN
 SECTIONS 8, 9, 16, 17, 20, 21, 28, 29, 30, 31, 32, & 33, T. 14 S. - R. 15 E.
 SECTIONS 5, 6, 7, 8, 17, & 18, T. 15 S. - R. 15 E.
 SECTIONS 2, 3, 11, 12, & 13, T. 15 S. - R. 14 E.
 PIMA COUNTY, ARIZONA

T R S Q

STA. # CODE TYPE

SHEET 6 OF 6

Decision No. 77601