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**... JRE THE ARIZONA CORPORATION COMMISSION**

2 **COMMISSIONERS**

3 TOM FORESE - Chairman  
4 BOB BURNS  
5 ANDY TOBIN  
6 BOYD W. DUNN  
7 JUSTIN OLSON

8 IN THE MATTER OF THE JOINT  
9 APPLICATION OF NOGALES  
10 TRANSMISSION, L.L.C. AND UNS  
11 ELECTRIC, INC. ("UNSE") IN  
12 CONFORMANCE WITH THE  
13 REQUIREMENTS OF ARIZONA REVISED  
14 STATUTES §40-360, ET SEQ., FOR  
15 CERTIFICATES OF ENVIRONMENTAL  
16 COMPATIBILITY AUTHORIZING  
17 CONSTRUCTION OF THE NOGALES  
18 INTERCONNECTION PROJECT AND THE  
19 UNSE NOGALES TAP TO KANTOR  
20 UPGRADE PROJECT, INCLUDING AN  
21 APPROXIMATELY 27.5-MILE UPGRADE  
22 OF UNSE'S EXISTING 138-KV  
23 TRANSMISSION LINE FROM A POINT  
24 NEAR THE EXISTING WESTERN AREA  
25 POWER ADMINISTRATION ("WAPA")  
26 NOGALES TAP IN PIMA COUNTY AND  
27 THE EXISTING UNSE KANTOR  
28 SUBSTATION IN SANTA CRUZ COUNTY.  
A NEW APPROXIMATELY THREE-MILE  
138-KV DOUBLE CIRCUIT  
TRANSMISSION LINE IN SANTA CRUZ  
COUNTY FROM A POINT NEAR THE  
EXISTING UNSE VALENCIA SUBSTATION  
TO THE PROPOSED GATEWAY  
SUBSTATION AND ASSOCIATED  
FACILITIES, AND A NEW  
APPROXIMATELY TWO-MILE 230-KV  
TRANSMISSION LINE AND ASSOCIATED  
FACILITIES IN SANTA CRUZ COUNTY TO  
INTERCONNECT THE PROPOSED  
GATEWAY SUBSTATION TO THE  
MEXICAN NATIONAL ELECTRIC  
SYSTEM.

**CASE NO. 00176**

**DOCKET NOs. L-00000CCC-17-0246-00176  
L-00000F-17-0246-00176**

**DECISION NO. \_\_\_\_\_**

Arizona Corporation Commission

**DOCKETED**

NOV 17 2017

DOCKETED BY

26 Open Meeting  
27 November 7, 2017  
28 Phoenix, Arizona

**BY THE COMMISSION:**

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

6 The Commission, in reaching its decision, has balanced all relevant matters in the broad  
7 public interest, including the need for an adequate, economical and reliable supply of electric power  
8 with the desire to minimize the effect thereof on the environment and ecology of this state, and finds  
9 that granting the Project a CEC is in the public interest.

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

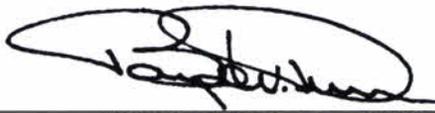
- 12 1. The Project is in the public interest because it aids the state in meeting the need for an  
13 adequate, economical, and reliable supply of electric power.
- 14 2. In balancing the need for the Project with its effect on the environment and ecology of  
15 the state, the conditions placed on the CEC effectively minimize its impact on the  
16 environment and ecology of the state.
- 17 3. The conditions placed on the CEC resolve matters concerning the need for the Project  
18 and its impact on the environment and ecology of the state raised during the course of  
19 proceedings, and as such, serve as the findings on the matters raised.
- 20 4. In light of these conditions, the balancing in the broad public interest results in favor  
21 of granting the CEC.

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

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5 CHAIRMAN FORESE

6 

7 COMMISSIONER DUNN

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9 COMMISSIONER TOBIN

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11 COMMISSIONER OLSON

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13 COMMISSIONER BURNS

14 IN WITNESS WHEREOF, I, TED VOGT, Executive  
15 Director of the Arizona Corporation Commission, have  
16 hereunto, set my hand and caused the official seal of this  
17 Commission to be affixed at the Capitol, in the City of  
18 Phoenix, this 17<sup>th</sup> day of November,  
19 2017.

20 

21 TED VOGT  
22 EXECUTIVE DIRECTOR

23 DISSENT: \_\_\_\_\_

24 DISSENT: \_\_\_\_\_

1 SERVICE LIST FOR: NOGALES TRANSMISSION, LLC AND UNS ELECTRIC, INC.  
2 DOCKET NOS.: L-00000CCC-17-0246-00176 and L-00000F-17-0246-00176

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

In the matter of the Joint Application of Nogales Transmission, L.L.C. and UNS Electric, Inc. (“UNSE”), in conformance with the requirements of Arizona Revised Statutes § 40-360, et seq., for Certificates of Environmental Compatibility authorizing construction of the Nogales Interconnection Project and the UNSE Nogales Tap to Kantor Upgrade Project, including an approximately 27.5-mile upgrade of UNSE’s existing 138-kV transmission line from a point near the existing Western Area Power Administration (“WAPA”) Nogales Tap in Pima County and the existing UNSE Kantor Substation in Santa Cruz County, a new approximately three-mile 138-kV double circuit transmission line in Santa Cruz County from a point near the existing UNSE Valencia Substation to the proposed Gateway Substation and associated facilities, and a new approximately two-mile 230-kV transmission line and associated facilities in Santa Cruz County to interconnect the proposed Gateway Substation to the Mexican National Electric System

Docket Nos.  
L-00000CCC-17-0246-00176  
L-00000F-17-0246-00176  
  
Case No. 176

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**CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY  
FOR UNS ELECTRIC, INC.**

**A. Introduction**

Pursuant to notice given as provided by law, the Arizona Power Plant and Transmission Line Siting Committee (“Committee”) held public hearings on September 5 through September 6, 2017, in Nogales, Arizona, and September 7 through September 8, 2017, in Tucson, Arizona in conformance with the requirements of the Arizona Revised Statute (“A.R.S.”) §§ 40-360 *et seq.* for the purpose of receiving evidence and deliberating on the July 26, 2017 Joint Application of Nogales Transmission, L.L.C. (“Nogales Transmission”) and UNS Electric, Inc. (“UNSE”) (collectively, “Applicants”) for Certificates of Environmental Compatibility (“Certificates”) in the above-captioned case.

1           The following members and designees of members of the Committee were present at  
 2 one or more of the hearing days for evidentiary presentations, public comment, and/or the  
 3 deliberations:

4	Thomas Chenal	Chairman, Designee for Arizona Attorney General
5		
6	Leonard Drago	Designee for Director, Arizona Department of Environmental Quality
7		
8	John Riggins	Designee for Director, Arizona Department of Water Resources
9		
10	Laurie A. Woodall	Designee of the Chairman, Arizona Corporation Commission (“Commission”)
11	Russell Jones	Appointed Member, representing the general public
12		
13	Jack Haenichen	Appointed Member, representing the general public
14		
15	Patricia A. Noland	Appointed Member, representing the general public
16	Mary Hamway	Appointed Member, representing cities and towns
17		
18	James A. Palmer	Appointed Member, representing agricultural interests
19		

20           The Applicants were represented by James E. Guy and Erin E. Morrissey, Eversheds  
 21 Sutherland (US) LLP, J. Matthew Derstine, Snell & Wilmer, and Marcus Jerden, UNS  
 22 Energy Corp. The following parties were granted intervention pursuant to A.R.S. § 40-  
 23 360.05: Staff of the Commission, represented by Charles Hains and Naomi Davis, Arizona  
 24 Corporation Commission Legal Division; and the Arizona State Land Department (“ASLD”),  
 25 represented by David F. Jacobs, Assistant Attorney General. On August 28, 2017, Marshall  
 26 Magruder filed a Notice of Intent to Become a Party (Intervene) and Initial Comments on the  
 27 CEC Application. Mr. Magruder stated that he would not be able to participate in the hearing  
 28

1 and his request to intervene was not granted. His participation was treated as a limited  
2 appearance under A.R.S. § 4-360.05. The Committee considered his comments during the  
3 hearing.

4 At the conclusion of the hearings, the Committee, after considering the  
5 (i) Application, (ii) evidence, testimony, and exhibits presented by the Applicants and  
6 intervenors, and (iii) comments of the public, and being advised of the legal requirements of  
7 A.R.S. §§ 40-360 through 40-360.13, upon motion duly made and seconded, voted nine (9)  
8 to zero (0) to grant UNSE, its successors and assigns, this Certificate for construction of the  
9 Nogales Tap to Kantor Upgrade Project and the following components of the Nogales  
10 Interconnection Project: (1) the Vail to Valencia 138-kV transmission line and (2) the  
11 Gateway to Valencia 138-kV transmission line (as described below).

#### 12 **B. Overview Project Description**

13 The Nogales Interconnection Project consists of the following three components, all  
14 of which will be located in the City of Nogales in Santa Cruz County: (1) a UNSE 138-kV  
15 Gateway Substation (“UNSE Gateway Substation”) and a Nogales Transmission 230-kV  
16 Gateway Substation (“Nogales Gateway Substation”), which will be the location of High  
17 Voltage Direct Current (“HVDC”) converter equipment, referred to collectively as the  
18 “Gateway Substation;” (2) a new, approximately three-mile double circuit 138-kV  
19 transmission line to be constructed by UNSE—one circuit to extend the existing UNSE Vail  
20 to Valencia line from a point near UNSE’s Valencia Substation to the proposed Gateway  
21 Substation (creating the “Vail to Valencia 138-kV transmission line”) and one circuit to  
22 connect the proposed Gateway Substation to the existing Valencia Substation (creating the  
23 “Gateway to Valencia 138-kV transmission line”); and (3) a new approximately two-mile  
24 single circuit 230-kV transmission line to be built by Nogales Transmission on double-circuit  
25 capable structures that will connect the proposed Gateway Substation to the U.S.-Mexico  
26 border (“Gateway to U.S.-Mexico Border 230-kV transmission line”), where it will  
27 interconnect with the Red Nacional de Transmisión (“RNT”), the state-owned transmission  
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1 grid operated by Centro Nacional de Control de Energía (“CENACE”). The Nogales  
2 Interconnection Project will provide an asynchronous interconnection in the vicinity of  
3 Nogales, Arizona, that will enable bidirectional electricity transfer between the Western  
4 Electricity Coordinating Council (“WECC”) and Mexico, facilitating cross-border  
5 commercial electricity transactions and enhancing transmission grid reliability in southern  
6 Arizona. The Nogales Interconnection Project will provide bidirectional power flow and  
7 voltage support as well as emergency assistance, as needed, for the electric systems both  
8 north and south of the international border.

9 The Nogales Tap to Kantor Upgrade Project will be located in the City of Tucson,  
10 Pima County, and Santa Cruz County and consists of an upgrade of a 27.5-mile segment  
11 between a point near the Western Area Power Association (“WAPA”) Nogales Tap  
12 switchyard in Pima County and UNSE’s Kantor Substation in Santa Cruz County, which will  
13 include (1) replacement of the existing conductor and the existing steel monopoles, and (2)  
14 relocating poles within new and amended right-of way (“ROW”).

15  
16 **C. Approved Nogales Interconnection CEC Route Description and Route Corridor**

17 The route herein approved for the Nogales Interconnection Project (“Nogales  
18 Interconnection CEC Route”) is approximately 5.1 miles in length and crosses land owned by  
19 the City of Nogales, the Arizona Department of Transportation (“ADOT”), and private  
20 owners within the City of Nogales in Santa Cruz County. The Nogales Interconnection CEC  
21 Route will originate at the existing Valencia Substation located at Section 5, Township 24  
22 South, Range 13 East. The Nogales Interconnection CEC Route will follow an existing  
23 UNSE transmission line corridor west for approximately 0.4 mile, using the existing  
24 conductor and poles for about 1,900 feet on an existing 138-kV UNSE line. The Nogales  
25 Interconnection CEC Route will then continue, using double-circuit 138-kV construction,  
26 south and then west, crossing Interstate 19 (“I-19”) and the Mariposa Wash. The Nogales  
27 Interconnection CEC Route will then continue southwest along a property line and on the  
28 north side of the Mariposa Wash to Mariposa Road, then cross Mariposa Road and continue

1 along the south side of the Mariposa Wash for 0.6 mile. The Nogales Interconnection CEC  
2 Route will then head north for 0.75 mile to the proposed Gateway Substation, located at  
3 Section 12, Township 24 South, Range 13 East. At the western end, both circuits will be  
4 connected to the Gateway Substation. At the eastern end, the existing Vail to Valencia line  
5 will be severed and connected to one circuit of this new line, thereby converting the existing  
6 Vail to Valencia transmission line to the new Vail to Gateway transmission line. The second  
7 circuit will connect with the existing portion of the UNSE 138-kV transmission line at an  
8 existing pole 1,900 feet west of the existing Valencia Substation, and travel east along the  
9 north side of W. White Park Drive to the Valencia Substation. This circuit will constitute the  
10 new Gateway to Valencia transmission line. The Gateway to U.S.-Mexico Border 230-kV  
11 transmission line portion of the Nogales Interconnection CEC Route will originate at the  
12 Gateway Substation and follow the same path out of the Gateway Substation as the 138-kV  
13 line for 0.6 mile. The Nogales Interconnection CEC Route will continue southwest on the  
14 north side of the Mariposa Wash and then continue south to the international border to  
15  $31^{\circ}21'37.74''\text{N}$ ,  $110^{\circ}57'58.51''\text{W}$ . At the border, the 230-kV line will connect to a line to be  
16 constructed in Mexico.

17 The approved ROW width for the Nogales Interconnection CEC Route in this  
18 Certificate is 150 feet. The ROW will be located within a 1,000-foot corridor (500 feet on  
19 either side of the centerline as described in **Exhibit A** attached hereto), except for areas in  
20 which the corridor includes Coronado National Forest (“CNF”) land, in which case the  
21 corridor will extend up to and abut CNF land.

22 **D. Approved Nogales Tap to Kantor CEC Route Description and Route Corridor**

23 The route herein approved for the Nogales Tap to Kantor Upgrade Project (“Nogales  
24 Tap to Kantor CEC Route”) is approximately 27.5 miles in length and crosses land owned by  
25 ASLD, and private owners within the City of Tucson, Pima County, and Santa Cruz County.  
26 The Nogales Tap to Kantor CEC Route will originate in Pima County 320 feet south of the  
27 Nogales Tap on the west side of Wilmot Road at existing pole no. VLKA-5-2, and cross  
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1 Wilmot Road to the east where it will continue south for 9.5 miles along existing and  
2 amended ROW. The Nogales Tap to Kantor CEC Route will continue south to a point where  
3 the existing transmission line corridor turns southwest and continues diagonally for 18 miles  
4 to the Kantor Substation, located in Santa Cruz County at Section 8, Township 20 South,  
5 Range 13 East.

6 The approved ROW width for the Nogales Tap to Kantor CEC Route in this  
7 Certificate is 100 feet. The ROW will be located within a 1,000-foot corridor (500 feet on  
8 either side of the centerline as described and shown in **Exhibit B** attached hereto).

### 9 CONDITIONS

10  
11 This Certificate is granted upon the following conditions, enforceable against UNSE  
12 as they relate to (a) the Nogales Tap to Kantor Upgrade Project; and (b) the following  
13 components of the Nogales Interconnection Project: (1) the Vail to Valencia 138-kV  
14 transmission line and (2) the Gateway to Valencia 138-kV transmission line (as described  
15 above). For purposes of this Certificate, the Nogales Interconnection CEC Route and  
16 Nogales Tap to Kantor CEC Route are referred to collectively as “the CEC Route.”

17 1. UNSE shall comply with all existing applicable statutes, ordinances, master  
18 plans, and regulations of any governmental entity having jurisdiction, including, but not  
19 limited to, the United States of America, the State of Arizona, Santa Cruz County, Pima  
20 County, the City of Nogales, and the City of Tucson.

21 2. UNSE shall obtain all approvals and permits required by any government  
22 entity having jurisdiction, including, but not limited to, the United States of America, the  
23 State of Arizona, Santa Cruz County, Pima County, the City of Nogales, and the City of  
24 Tucson.

25 3. UNSE shall comply with the notice and salvage requirements of the Arizona  
26 Native Plant Law (A.R.S. §§ 3-901, et. seq.) and shall, to the extent feasible, minimize the  
27 destruction of native plants during the CEC Route construction.

28

1           4.       UNSE shall comply with the Arizona Game and Fish Department (“AGFD”)  
2 guidelines for handling protected animal species, should any be encountered during  
3 construction, and shall consult with AGFD as necessary on other issues concerning wildlife.  
4 In addition, in order to avoid, minimize, and mitigate impacts from the projects, UNSE shall  
5 follow the measures outlined in the August 23, 2017 letter from AGFD to the Chairman of  
6 the Committee (attached hereto as **Exhibit C**).

7           5.       UNSE shall design the transmission line for the CEC Route to incorporate  
8 reasonable measures to minimize impacts to raptors, cranes, and waterfowl. Such design will  
9 be accomplished through compliance with an Avian Protection Plan (“APP”), or an  
10 equivalent plan. The APP or equivalent plan shall, at a minimum, include the 2006 standards  
11 of the Avian Power Line Interaction Committee, and address the application of  
12 recommended measures to minimize the risk of collision, as described in the 2012 guidelines  
13 of the Avian Power Line Interaction Committee. The APP or equivalent plan shall become  
14 part of, and be incorporated into, this Certificate.

15           6.       UNSE shall make every reasonable effort to promptly investigate, on a case-  
16 specific basis, all complaints of interference with radio or television signals from operation of  
17 the transmission line(s) addressed in this Certificate and where such interference is caused by  
18 the line(s) take reasonable measures to mitigate such interference. UNSE shall maintain  
19 written records for a period of five (5) years of all complaints of radio or television  
20 interference attributable to operations, together with the corrective action taken in response to  
21 each complaint. All complaints shall be recorded to include notation on the corrective action  
22 taken. Complaints not leading to a specific action or for which there was no resolution shall  
23 be noted and explained. Upon request, the written records shall be provided to the Staff of  
24 the Commission. UNSE shall respond to complaints and implement appropriate mitigation  
25 measures. In addition, the transmission line(s) shall be evaluated on a regular basis so that  
26 damaged insulators or other line materials that could cause interference are repaired or  
27 replaced in a timely manner.

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1           7. UNSE shall consult with the State Historic Preservation Office (“SHPO”)  
2 with respect to cultural resources. If any archaeological, paleontological, or historical site or  
3 a significant object that is at least 50 years old is discovered on state, county, or municipal  
4 land during the construction of the CEC Route, UNSE or its representative in charge shall  
5 promptly report the discovery to the Director of the Arizona State Museum (“ASM”), and, in  
6 consultation with the Director, shall immediately take all reasonable steps to secure and  
7 maintain the preservation of the discovery, pursuant to A.R.S. § 41-844.

8           8. If human remains and/or funerary objects are encountered on private land  
9 during the course of any ground-disturbing activities related to the construction of the CEC  
10 Route, UNSE shall cease work on the affected area of the applicable route and notify the  
11 Director of the ASM as required by A.R.S. § 41-865.

12           9. Before construction of the Nogales Interconnection CEC Route may  
13 commence, UNSE shall file with the Commission’s Docket Control a copy of a granted  
14 Presidential Permit, or equivalent, including any amendments to any of such documents  
15 subsequent to the granting of this Certificate. Notification of such filing with Docket Control  
16 shall be made to the Board of Supervisors for Santa Cruz County, the City of Nogales,  
17 ASLD, SHPO, AGFD, all parties to this Docket, and all parties who made a limited  
18 appearance in this Docket. UNSE shall comply with the provisions of the Presidential  
19 Permit, or equivalent, as applicable to the Nogales Interconnection CEC Route.

20           10. UNSE shall construct, operate and maintain all facilities, improvements and  
21 structures in the Nogales Interconnection CEC Route in conformity with all terms,  
22 conditions, and stipulations set forth in a Presidential Permit if a Presidential Permit is issued  
23 to Nogales Transmission for the Nogales Interconnection Project.

24           11. Within one hundred twenty (120) days of the Commission’s decision  
25 approving this Certificate, UNSE shall post signs in or near public ROW giving notice of the  
26 Nogales Interconnection CEC Route to the extent authorized by law. UNSE shall place such  
27 signs in prominent locations at reasonable intervals so that the public is notified along the full  
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1 length of the Nogales Interconnection CEC Route until the transmission structures are  
2 constructed. To the extent practicable, within forty-five (45) days of securing easements or  
3 ROW for the Nogales Interconnection CEC Route, UNSE shall erect and maintain signs  
4 providing public notice that the property is the site of a future transmission line or substation.  
5 Such signage shall be no smaller than a roadway sign. The signs shall advise:

- 6 a. That the site has been approved for the construction of Nogales  
7 Interconnection CEC Route facilities;
- 8 b. The expected date of completion of the Nogales Interconnection CEC  
9 Route facilities;
- 10 c. A phone number for public information regarding the Nogales  
11 Interconnection Project;
- 12 d. The name of the Nogales Interconnection Project,
- 13 e. UNSE's name; and
- 14 f. The website for the Nogales Interconnection Project.

15 12. Within one hundred twenty (120) days of the Commission's decision  
16 approving this Certificate, UNSE shall post signs in or near public ROW giving notice of the  
17 Nogales Tap to Kantor CEC Route to the extent authorized by law. UNSE shall place such  
18 signs in prominent locations at reasonable intervals so that the public is notified along the full  
19 length of the Nogales Tap to Kantor CEC Route until the transmission structures are  
20 constructed. To the extent practicable, within forty-five (45) days of securing easements or  
21 ROW for the Nogales Tap to Kantor CEC Route, UNSE shall erect and maintain signs  
22 providing public notice that the property is the site of a future transmission line or substation.  
23 Such Signage shall be no smaller than a roadway sign. The signs shall advise:

- 24 a. That the site has been approved for the construction of Nogales Tap to  
25 Kantor CEC Route facilities;
- 26 b. The expected date of completion of the Nogales Tap to Kantor CEC Route  
27 facilities;

- c. A phone number for public information regarding the Nogales Tap to Kantor Upgrade Project;
- d. The name of the Nogales Tap to Kantor Upgrade Project,
- e. UNSE's name; and
- f. The website for the Nogales Tap to Kantor Upgrade Project.

13. Within one hundred twenty (120) days of the Commission's decision granting this Certificate, UNSE shall make good faith efforts to commence discussions with private landowners on whose property the CEC Route is located to identify the specific location for the ROW and alternatives for placement of poles. A copy of this Certificate shall be provided to such private landowners, and a description of the good faith efforts and discussions shall be included in the annual compliance-certification letter.

14. UNSE shall pursue reasonable efforts to work with private landowners on whose property the CEC Route will be located to mitigate the impacts of the location, construction, and operation of the applicable project on private land and negotiate such ROW agreements in good faith. Such ROW agreements shall, where practicable and after consultation with the landowner, require UNSE, at a minimum, to (a) use existing roads for construction and access, (b) minimize impacts to wildlife, (c) minimize vegetation disturbance outside of the CEC Route ROW, particularly in drainage channels and along stream banks, and (d) revegetate native areas following construction disturbance unless revegetation is waived by the landowner.

15. At least ninety (90) days, but not more than three hundred sixty-five (365) days before construction commences on the Nogales Interconnection CEC Route, UNSE shall provide cities and towns within five (5) miles of the Nogales Interconnection CEC Route and known homebuilders and developers who are building upon or developing land within one (1) mile of the centerline of the Nogales Interconnection CEC Route with a written description, including height and width measurements of all structure types, of the

1 Nogales Interconnection Project. The written description shall identify the location of the  
2 Nogales Interconnection CEC Route and contain a depiction of the structures.

3 16. At least ninety (90) days, but not more than three hundred sixty-five (365)  
4 days before construction commences on the Nogales Tap to Kantor CEC Route, UNSE shall  
5 provide cities and towns within five (5) miles of the Nogales Tap to Kantor CEC Route and  
6 known homebuilders and developers who are building upon or developing land within one  
7 (1) mile of the centerline of the Nogales Tap to Kantor CEC Route with a written description,  
8 including height and width measurements of all structure types, of the Nogales Tap to Kantor  
9 Project. The written description shall identify the location of the Nogales Tap to Kantor CEC  
10 Route and contain a depiction of the structures.

11 17. UNSE shall use non-specular conductor and non-reflective surfaces for the  
12 transmission line structures on the CEC Route.

13 18. UNSE shall be responsible for arranging that all field personnel involved in  
14 the CEC Route receive training as to proper ingress, egress, and on-site working protocol for  
15 environmentally sensitive areas and activities. Contractors employing such field personnel  
16 shall maintain records documenting that the personnel have received such training.

17 19. UNSE shall follow the most current Western Electricity Coordinating Council  
18 (“WECC”) and North American Electric Reliability Corporation (“NERC”) planning  
19 standards, as approved by the Federal Energy Regulatory Commission (“FERC”), and  
20 National Electrical Safety Code (“NESC”) construction standards and Federal Aviation  
21 Administration (“FAA”) regulations concerning safe, efficient use, and preservation of  
22 navigable airspace near transmission facilities.

23 20. UNSE shall participate in good faith in state and regional transmission study  
24 forums to coordinate transmission expansion plans related to the CEC Route and to resolve  
25 transmission constraints in a timely manner.

26 21. When CEC Route facilities are located parallel to and within 100 feet of any  
27 existing natural gas or hazardous pipeline, UNSE shall:  
28

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

18 22. UNSE shall file notice with Docket Control that a copy of any CEC Route-  
19 related transmission service agreement was provided to Commission Staff within sixty (60)  
20 days after such agreement was filed with FERC.

21 23. UNSE shall provide the Commission Staff with copies of the transmission  
22 interconnection agreement(s) it ultimately enters into with any transmission provider(s) in  
23 Arizona with whom it is interconnecting within thirty (30) days of execution of such  
24 agreement(s), with the summary thereof filed at Docket Control, prior to construction of such  
25 facilities.

26 24. UNSE shall submit a compliance certification letter annually, identifying  
27 progress made with respect to each condition contained in this Certificate, including which  
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1 conditions have been met. Each letter shall be submitted to Commission's Docket Control  
2 commencing on March 1, 2019. Attached to each certification letter shall be documentation  
3 explaining how compliance with each condition was achieved. Copies of each letter, along  
4 with the corresponding documentation, shall be submitted to the Arizona Attorney General  
5 and the Governor's Office. With respect to the Nogales Interconnection CEC Route, the  
6 requirement for the compliance certification letter shall expire on the date the Nogales  
7 Interconnection CEC Route is placed into operation. With respect to the Nogales Tap to  
8 Kantor CEC Route, the requirement for the compliance certification letter shall expire on the  
9 date the Nogales Tap to Kantor CEC Route is placed into operation. Notification of such  
10 filing with Docket Control shall be made to the Board of Supervisors of Santa Cruz County,  
11 Board of Supervisors of Pima County, City of Nogales, City of Tucson, ASLD, SHPO,  
12 AGFD, all parties to this Docket, and all parties who made a limited appearance in this  
13 Docket.

14       25. UNSE shall provide a copy of this Certificate to the Board of Supervisors of  
15 Santa Cruz County, Board of Supervisors of Pima County, City of Nogales, City of Tucson,  
16 ASLD, SHPO, and AGFD.

17       26. This authorization to construct the CEC Route shall expire 10 years from the  
18 date this Certificate is approved by the Commission, with or without modification.  
19 Construction of the line shall be complete, such that the line is in service within the  
20 applicable timeframe. However, prior to the expiration of the time period, UNSE may  
21 request that the Commission extend the time limitation(s).

22       27. In the event that the Nogales Interconnection CEC Route or Nogales Tap to  
23 Kantor CEC Route requires an extension of the term(s) of this Certificate prior to completion  
24 of construction, UNSE shall file such a time extension request at least one hundred eighty  
25 (180) days prior to the expiration date of the Certificate. UNSE shall use reasonable means  
26 to promptly notify all cities and towns within five (5) miles of the route for which UNSE  
27 requests a time extension and all landowners and residents within one (1) mile of the  
28

1 centerline of the route for which UNSE requests a time extension, all persons who made  
2 public comment at this proceeding who provided a mailing or email address, and all parties  
3 to this proceeding of the request and the date, time, and place of the hearing or open meeting  
4 during which the Commission will consider the request for extension. Notification shall be  
5 no more than three (3) business days after UNSE is made aware of the hearing date or the  
6 open meeting date.

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

11 29. In the event UNSE, its assignee, or successor, seeks to modify the Certificate  
12 terms at the Commission, it shall provide copies of such request to the Board of Supervisors  
13 of Santa Cruz County, Board of Supervisors of Pima County, City of Nogales, City of  
14 Tucson, ASLD, SHPO, AGFD, all parties to this Docket, and all parties who made a limited  
15 appearance in this Docket.

16 30. The Certificate Conditions shall be binding on UNSE's successors, assigns  
17 and transferees and any affiliates, agents, or lessees of UNSE who have a contractual  
18 relationship with UNSE concerning the construction, operation, or maintenance of the CEC  
19 Route. UNSE shall provide in any agreement(s) or lease(s) pertaining to the Nogales  
20 Interconnection Project and Nogales Tap to Kantor Upgrade Project that the contracting  
21 parties and/or lessee(s) shall be responsible for compliance with the Conditions set forth  
22 herein, and UNSE's responsibilities with respect to compliance with such Conditions shall  
23 not cease or be abated by reason of the fact that UNSE is not in control of or responsible for  
24 operation and maintenance of the project facilities.

**FINDINGS OF FACT AND CONCLUSIONS OF LAW**

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

1. The Nogales Interconnection Project and Nogales Tap to Kantor Upgrade Project aid the state and the southwest region in meeting the need for an adequate, economical, and reliable supply of electric power.

2. The Nogales Interconnection Project and Nogales Tap to Kantor Upgrade Project aid the state in preserving a safe and reliable electric transmission system.

3. The Nogales Interconnection Project and Nogales Tap to Kantor Upgrade Project and the conditions placed on the Nogales Interconnection Project and Nogales Tap to Kantor Upgrade Project in this Certificate effectively minimize the impact of the Nogales Interconnection Project and Nogales Tap to Kantor Upgrade Project on the environment and ecology of the state.

4. The conditions placed on the Nogales Interconnection Project and Nogales Tap to Kantor Upgrade Project in this Certificate resolve matters concerning balancing the need for the Nogales Interconnection Project and Nogales Tap to Kantor Upgrade Project with their impact on the environment and ecology of the state arising during the course of the proceedings, and, as such, serve as findings and conclusions on such matters.

5. The Nogales Interconnection Project and Nogales Tap to Kantor Upgrade Project are in the public interest because the Nogales Interconnection Project and Nogales Tap to Kantor Upgrade Project's contribution to meeting the need for an adequate, economical, and reliable supply of electric power outweighs the minimized impact of the Nogales Interconnection Project and Nogales Tap to Kantor Upgrade Project on the environment and ecology of the state.

DATED this 22 day of September 2017.

THE ARIZONA POWER PLANT AND  
TRANSMISSION LINE SITING COMMITTEE

By:   
Thomas K. Chenal, Chairman

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**EXHIBIT A****NOGALES INTERCONNECTION PROJECT – ALTERNATIVE 3**

A strip of land within Santa Cruz County, Arizona, the centerline of which is described as follows:

beginning at a point near Valencia Substation and having a grid coordinate of (X)1,007,311.257, (Y)133,448.922, of the Arizona State Plane Coordinate System, 1983, Central Zone, from which City of Nogales GIS Database Control Survey point BA04-288, having a grid coordinate of (X)1,007,746.450, (Y)133,380.290, of said Central Zone bears South 81 degrees 02 minutes 17 seconds East, 440.57 feet;

thence South 89 degrees 49 minutes 59 seconds West, 451.87 feet to a point having a grid coordinate of (X)1,006,859.388, (Y)133,447.606, of said Central Zone;

thence South 84 degrees 43 minutes 31 seconds West, 470.25 feet to a point having a grid coordinate of (X)1,006,391.127, (Y)133,404.376, of said Central Zone;

thence South 89 degrees 15 minutes 33 seconds West, 1091.41 feet to a point having a grid coordinate of (X)1,005,299.812, (Y)133,390.265, of said Central Zone;

thence South 77 degrees 19 minutes 47 seconds West, 1237.88 feet to a point having a grid coordinate of (X)1,004,092.072, (Y)133,118.747, of said Central Zone;

thence North 87 degrees 38 minutes 07 seconds West, 263.60 feet to a point having a grid coordinate of (X)1,003,828.701, (Y)133,129.623, of said Central Zone;

thence South 09 degrees 25 minutes 23 seconds West, 1107.45 feet to a point having a grid coordinate of (X)1,003,647.386, (Y)132,037.114, of said Central Zone;

thence North 85 degrees 17 minutes 25 seconds West, 1111.46 feet to a point having a grid coordinate of (X)1,002,539.679, (Y)132,128.375, of said Central Zone;

thence South 49 degrees 41 minutes 10 seconds West, 2400.46 feet to a point having a grid coordinate of (X)1,000,709.304, (Y)130,575.341, of said Central Zone;

thence South 73 degrees 33 minutes 05 seconds West, 2240.81 feet to a point having a grid coordinate of (X)998,560.204, (Y)129,940.845, of said Central Zone;

thence South 21 degrees 18 minutes 03 seconds West, 620.88 feet to a point having a grid coordinate of (X)998,334.662, (Y)129,362.383, of said Central Zone;

thence South 61 degrees 59 minutes 15 seconds West, 1004.22 feet to a point having a grid coordinate of (X)997,448.088, (Y)128,890.735, of said Central Zone;

thence South 76 degrees 20 minutes 23 seconds West, 1610.07 feet to a point having a grid coordinate of (X)995,883.565, (Y)128,510.490, of said Central Zone;

thence North 00 degrees 42 minutes 06 seconds West, 562.20 feet to a point having a grid coordinate of (X)995,876.680, (Y)129,072.650, of said Central Zone, and hereinafter known as 'Point A';

**EXHIBIT A**

thence North 00 degrees 42 minutes 06 seconds West, 3266.16 feet to a point having a grid coordinate of (X)995,836.683, (Y)132,338.561, of said Central Zone;

thence North 89 degrees 15 minutes 17 seconds East, 499.93 feet to the terminus of said centerline near Gateway Substation, said terminus having a grid coordinate of (X)996,336.570, (Y)132,345.064, of said Central Zone and;

beginning at the aforesaid 'Point A', having a grid coordinate of (X)995,876.680, (Y)129,072.650, of said Central Zone;

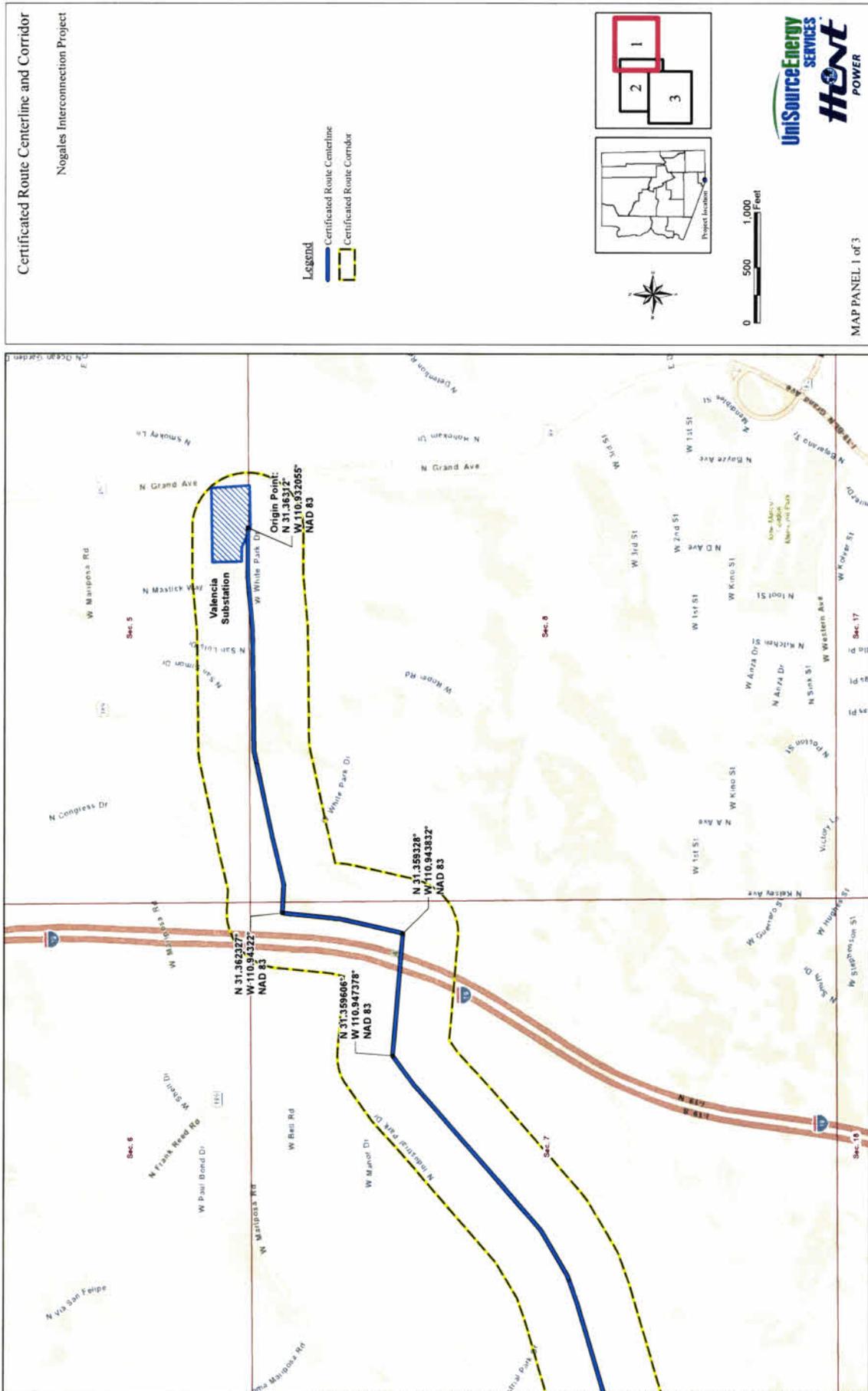
thence South 70 degrees 23 minutes 34 seconds West, 1496.90 feet to a point having a grid coordinate of (X)994,466.573, (Y)128,570.335, of said Central Zone;

thence South 76 degrees 20 minutes 17 seconds West, 1100.61 feet to a point having a grid coordinate of (X)993,397.104, (Y)128,310.379, of said Central Zone;

thence South 00 degrees 52 minutes 28 seconds East, 6037.78 feet to the terminus of said centerline near the United States/Mexico international border, said terminus having a grid coordinate of (X)993,489.250, (Y)122,273.304, of said Central Zone, from which City of Nogales GIS Database Control Survey point AY03-371, having a grid coordinate of (X)993,411.279, (Y)122,737.883, of said Central Zone bears North 09 degrees 31 minutes 38 seconds West, 471.08 feet.

Said centerline is 5.0 miles in length, more or less.

**EXHIBIT A**



Nogales Transmission, L.L.C. and UNS Electric, Inc. Nogales Interconnection Project. Application for a Certificate of Environmental Compatibility





**EXHIBIT B****NOGALES TAP TO KANTOR UPGRADE PROJECT**

A strip of land within Pima County and Santa Cruz County, Arizona, the centerline of which is described as follows:

beginning at a point near Nogales Tap Substation and having a grid coordinate of (X)1,027,631.489, (Y)384,349.820, of the Arizona State Plane Coordinate System, 1983, Central Zone, from which National Geodetic Survey point 'PUMP', having a grid coordinate of (X)1,044,368.140, (Y)394,875.010, of said Central Zone bears North 57 degrees 50 minutes 07 seconds East, 19,771.07 feet;

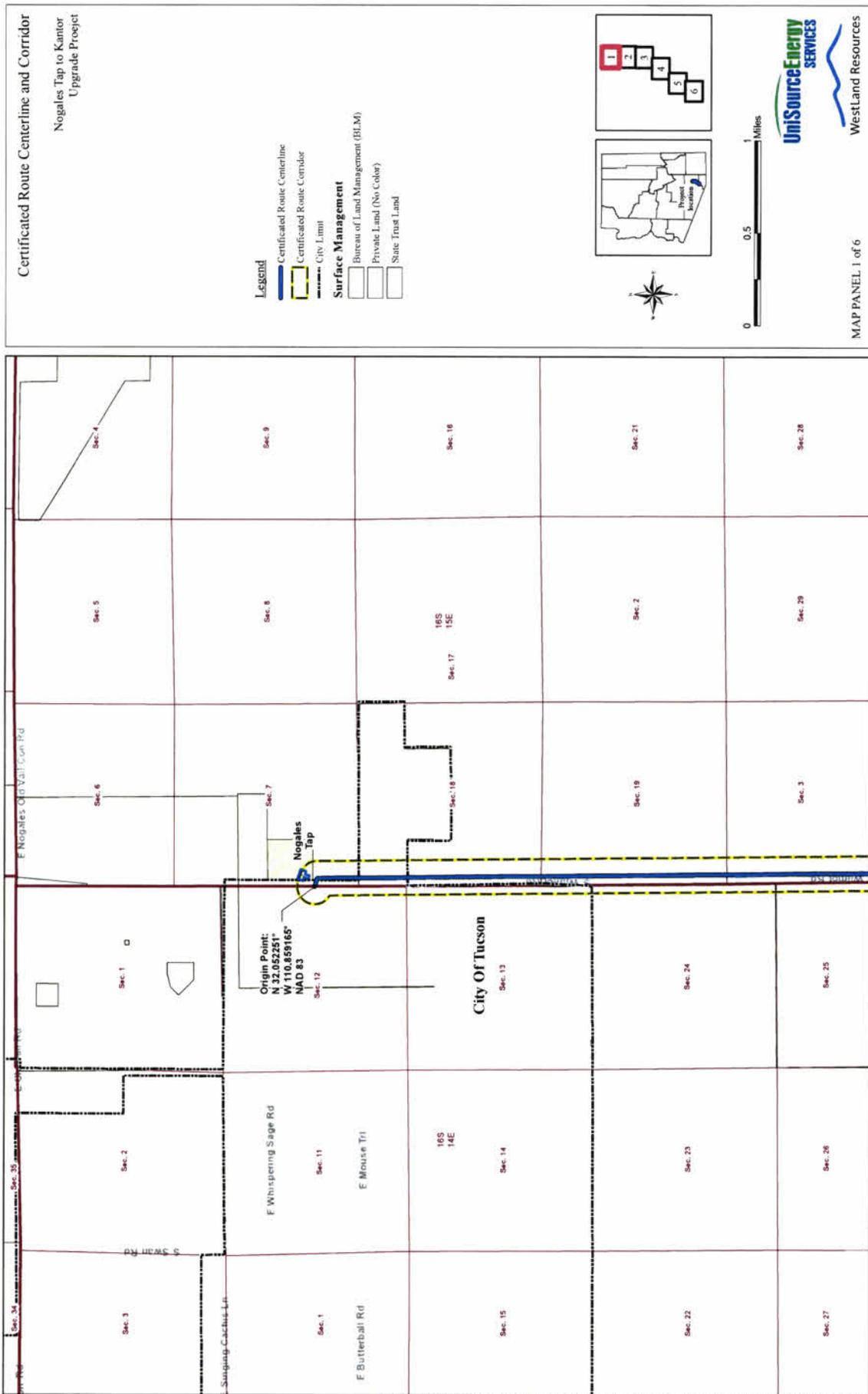
thence South 55 degrees 44 minutes 31 seconds East, 240.00 feet to a point having a grid coordinate of (X)1,027,829.852, (Y)384,214.720, of said Central Zone;

thence South 00 degrees 37 minutes 56 seconds East, 50,208.39 feet to a point having a grid coordinate of (X)1,028,383.785, (Y)334,009.388, of said Central Zone;

thence South 34 degrees 21 minutes 30 seconds West, 96,235.12 feet to the terminus of said centerline near Kantor Substation, said terminus having a grid coordinate of (X)974,071.941, (Y)254,564.936, of said Central Zone, from which National Geodetic Survey point 'SOP', having a grid coordinate of (X)965,323.030, (Y)238,197.410, of said Central Zone bears South 28 degrees 07 minutes 33 seconds West, 18,559.08 feet.

Said centerline is 27.8 miles in length, more or less.

**EXHIBIT B**



UNIS Electric, Inc. Nogales Tap to Kantor Upgrade Project, Application for a Certificate of Environmental Compatibility





**EXHIBIT B**



UNS Electric, Inc. Nogales Tap to Kantor Upgrade Project, Application for a Certificate of Environmental Compatibility





**EXHIBIT C**

**EXHIBIT UNS-11A – Wildlife & Vegetation Mitigation Measures (AGFD)**

**EXHIBIT C**

THE STATE OF ARIZONA  
**GAME AND FISH DEPARTMENT**

5000 W. CAREFREE HIGHWAY  
 PHOENIX, AZ 85086-5000  
 (602) 942-3000 • WWW.AZGFD.GOV

REGION V, 555 N. GREASEWOOD ROAD, TUCSON, AZ 85745

**GOVERNOR**

DOUGLAS A. DUCEY

**COMMISSIONERS**

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KURT R. DAVIS, PHOENIX

EDWARD "PAT" MADDEN, FLAGSTAFF

**DIRECTOR**

TY E. GRAY

**DEPUTY DIRECTOR**

TOM P. FINLEY



August 23, 2017

Thomas K. Chenal  
 Chairman Arizona Power Plant and Transmission Line Siting Committee  
 25 South 15<sup>th</sup> Avenue  
 Phoenix, Arizona 85007

Docket Control  
 Arizona Corporation Commission  
 1200 W Washington Street  
 Phoenix, Arizona 85007

Re: Comments re the Joint Application of the Nogales Transmission, L.L.C. and UNS Electric, Inc. for Certificates of Environmental Compatibility Nogales Interconnection Project & Nogales Tap to Kantor Upgrade Project,  
 Docket Nos. L-00000CCC-17-0246-00176 and L-00000F-17-0246-00176 Case 176

Dear Chairman:

The Arizona Game and Fish Department (Department) has reviewed the joint application of Nogales Transmission, L.L.C. and UNS Electric, Inc. for a Certificate of Environmental Compatibility (CEC) for the Nogales Interconnection and Nogales Tap to Kantor Upgrade Projects. As the state agency responsible for the conservation, enhancement, and restoration of Arizona's diverse wildlife resources and habitats, the Department's objective is to identify especially sensitive and unique habitats and work with project proponents to avoid and minimize negative impacts, and when possible enhance and/or improve habitat conditions. We submit this letter for your consideration during the upcoming Line Siting hearings.

Department staff met with representatives of UNS Electric (UNSE) and Hunt Power (parent company of Nogales Transmission, L.L.C.) on August 18, 2017 to discuss wildlife and habitat issues germane to the CEC application. During the course of our conversation, we agreed upon the following measures to avoid, minimize, and mitigate impacts from the projects:

Revegetation

As landowners/managers allow, revegetation of temporary impact areas will include a combination of soil preparation, seeding, harrowing, and monitoring.

**EXHIBIT C**

Chairman Thomas K. Chenal

August 23, 2017

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- Seeding just prior to, or during, the summer monsoon season to ensure greatest germination and revegetation success. An acceptable seeding period could extend from mid-June to mid-November.
- To best mimic the natural condition, ensure restoration seed mixes include a diversity of annual and perennial plants that represent both the spring and late summer/monsoon/fall growing seasons.
- Where landowner/manager does not allow seeding, shallow harrowing of temporary disturbance areas (i.e., pad and tensioning/pulling sites) will be completed following the conclusion of construction. This technique creates micro-depressions which serve to collect rain water and wind-dispersed seed from adjacent vegetation and promotes natural revegetation from the existing seedbank.
- As the project moves forward, we agreed to continue discussion of opportunities for experimental treatments to restore temporary construction areas, as well as the vacated right-of-way if the Preferred Alternative Route of the NT-Kantor Upgrade is selected.

#### Invasive/Noxious Weeds

The Department, UNSE, and Hunt Power recognize the importance of minimizing the potential introduction or spread of invasive species during project activities. UNSE and Hunt have committed to several measures to accomplish effective weed management:

- All earthmoving and hauling equipment will be washed prior to entering the construction site
- Equipment will be inspected and any attached plant/vegetation and soil/mud debris will be removed prior to leaving the site.
- A Reclamation, Vegetation, and Monitoring Plan will be developed which will, in part, address noxious and invasive weed control goals and measures. UNSE and Hunt have agreed to invite the Department to participate in the development and/or review of this plan.

#### Plant Salvage

- The Department supports the UNSE/Hunt plan to coordinate cactus salvage with the Tucson Cactus and Succulent Society's Cactus Rescue Crew.
- At our suggestion, UNSE has contacted the U.S. Fish and Wildlife Service for Pima Pineapple Cactus (PPC) salvage/transplant guidance for any plants that cannot be avoided.
- The Department also encourages UNSE/Hunt to consider salvage, when feasible, of other non-cacti native plant species.

#### Wildlife

Measures that should be employed to minimize impacts to wildlife are varied. At the Department's request, UNSE/Hunt agreed to:

- Conduct avian surveys to determine bird species that may be utilizing the area and develop a plan to avoid disturbance during the nesting season.
- Limit project activities during the breeding season for birds, generally May through late August, depending on species in the local area (raptors breed in early February through May)

**EXHIBIT C**

Chairman Thomas K. Chenal

August 23, 2017

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- Ensure habitat disturbance (i.e., vegetation clearing) and construction are initiated prior to nesting season, and continue without interruption throughout, if construction must occur during the bird breeding season. This prevents birds from establishing nests in the area during a construction hiatus only to abandon those nests when construction resumes.

We also reminded UNSE/Hunt that in addition to federal protection via the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act, the State of Arizona prohibits the take of any bird species through A.R.S. Title 17. Game and Fish §17-236. A.

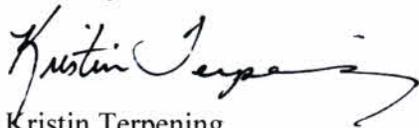
For other wildlife in general, we recommended the following impact avoidance measures:

- Establish a construction area speed limit not to exceed 15 miles per hour to avoid vehicle/wildlife collisions (slow vehicle speeds should allow even very small animals to move out of harm's way).
- The construction biological monitor will ensure all construction personnel are informed and in compliance with all applicable environmental regulations
- UNSE/Hunt have agreed to work with the Department to develop a process for reporting sightings of Arizona Species of Greatest Conservation Need (SGCN)

The Department has produced a number of wildlife-friendly guidelines available at <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/> and can provide additional expertise to UNSE/Hunt and to the Arizona Power Plant and Transmission Line Siting Committee in regard to wildlife connectivity, habitat management, and mitigation strategies.

We appreciate your consideration of our comments as you and your Committee conduct hearings for these two joint CEC applications. For any questions regarding this letter, please contact me at 520-388-4447 or [kterpening@azgfd.gov](mailto:kterpening@azgfd.gov).

Sincerely,



Kristin Terpening

Habitat, Evaluation, and Lands Specialist, Region V

cc: Andy M. Kvesic, Chief Counsel and Director, Legal Division ACC  
Charles H. Hains, Attorney, Legal Division ACC  
Naomi E. Davis, Attorney, Legal Division ACC  
Elijah Abinah, Director, Utilities Division ACC  
Ed Beck, UNS Electric (via email)  
Renee Darling, UNS Electric (via email)  
Gabriela Canales, Hunt Power (via email)  
Laura Canaca, Project Evaluation Program Supervisor, AGFD (via email)