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17 **BEFORE THE ARIZONA CORPORATION COMMISSION**

18 **COMMISSIONERS**

19 NICK MYERS, Chairman
20 RACHEL WALDEN, Vice Chair
21 LEA MARQUEZ PETERSON
22 KEVIN THOMPSON
23 RENÉ LOPEZ

24 IN RE: TUCSON ELECTRIC POWER
25 COMPANY'S REQUEST TO APPROVE
THIS APPLICATION FOR UNIT 4 OF THE
SPRINGVILLE GENERATING
STATION.

Docket No. L00000C-86-0000-00074

Case No. 74

**APPLICATION TO AMEND
DECISION PURSUANT TO A.R.S. §
40-252 TO APPROVE SGS UNIT 4
REPOWER PROJECT**

26 Salt River Project Agricultural Improvement and Power District (SRP) submits this
27 Application pursuant to A.R.S. § 40-252 to amend the Arizona Corporation Commission's
28 (Commission) decision approving the Certificate of Environmental Compatibility (CEC)

1 for the Springerville Generating Station (SGS) Unit 4 (SGS Unit 4) to authorize the
2 conversion of SGS Unit 4 to natural gas-fired generation (SGS Unit 4 Repower Project).

3 This Application is supported by the declarations of (i) Bill McClellan, Director of
4 Resource Planning and Development for SRP attached as Exhibit 1 (McClellan Decl.); (ii)
5 Hank Hamblin, SRP's representative on the SGS Engineering and Operations Committee,
6 attached as Exhibit 2 (Hamblin Decl.); (iii) Zachary Harbin, Manager of SRP's Air Quality
7 Services together with the Air Quality Modeling Report as Exhibit 3 (Harbin Decl.); (iv)
8 Hayden Fennell, Senior Project Origination Consultant and Project Manager for the SGS
9 Unit 4 Repower Project (Fennell Decl.); and (v) Emily Curci of Kimley-Horn together
10 with the Environmental Narrative Report prepared by Kimley-Horn, attached as Exhibit 5
11 (Curci Decl.).

12 **I. INTRODUCTION**

13 This is the third application submitted to the Commission this year to amend an
14 existing CEC to authorize the conversion of a coal-fired generating unit to natural gas in
15 Apache County, Arizona. Like the prior applications, which the Commission approved on
16 March 4, 2026, the conversion of SGS Unit 4 offers significant emissions reductions, while
17 preserving critical generation capacity and sustaining vital employment and tax benefits
18 for the surrounding communities.

19 On March 18, 1987, the Commission first approved the CEC granted by the Arizona
20 Power Plant and Transmission Line Siting Committee for the construction and operation
21 of SGS Unit 4 in Docket No. L00000C-86-0000-00074 (Decision No. 55477), attached as
22 Exhibit 6. Decision No. 55477 authorized construction of a 350-megawatt (MW) coal-fired
23 steam electric generating unit at SGS identified as Unit 4. In 2002, the Commission
24 amended the CEC (Decision No. 65347), attached as Exhibit 7, and imposed additional
25

1 conditions concerning the authority to construct SGS Unit 4. Tucson Electric Power
2 Company (TEP) transferred the CEC for SGS Unit 4 to SRP in 2007.

3 In November 2025, following SRP Board Approval, SRP announced its plan to
4 convert SGS Unit 4 to natural gas with the transition expected to be completed in 2029.
5 The conversion of SGS Unit 4 to natural gas will rely on the new natural gas pipeline that
6 will be constructed to support the natural gas conversion of the Coronado Generating
7 Station and SGS Units 1 and 2. The decision to convert SGS to natural gas pursues the
8 lowest-cost option to preserve the plant's capacity – enough power to serve more than
9 90,000 homes – that will be critical to meet the peak energy demand of the Valley, which
10 is expected to increase by 50 percent by 2035. The conversion of SGS Unit 4 also helps to
11 retain jobs at SGS which, in turn, supports the economy and residents of the surrounding
12 communities of Apache County.

13 As described below and in the supporting declarations and reports attached to this
14 Application, and as the Commission has already found in approving the conversion of
15 Coronado Generating Station and SGS Units 1 and 2, the SGS Unit 4 Repower Project is
16 in the public interest and should be approved under A.R.S. § 40-252.

17 **II. LOCATION AND OPERATION OF SGS**

18 SGS is a coal-fired steam plant, consisting of four units, located in Apache County,
19 Arizona that is co-owned by SRP, TEP, and Tri-State Generation and Transmission
20 Association, Inc. and operated by TEP. SGS is located approximately 15 miles northeast
21 of Springerville/Eager. The towns of Springerville and Eager are the nearest incorporated
22 residential communities. Upon review of readily available aerial imagery, the nearest
23 residence is located approximately 1.3 miles east of SGS.

24 Since its construction, SGS Unit 4, with a nameplate capacity of 509 volt-amperes,
25 or approximately 458 MW, has provided reliable baseload capacity to the SRP electric grid

1 to maintain reliability for SRP customers, especially during the summer months, when
2 electricity demand is the highest. Upon completion of the SGS Unit 4 Repower Project,
3 SGS Unit 4 will continue to provide a firm reliable resource in SRP's resource portfolio.
4 SRP will not be modifying the nameplate capacity of SGS Unit 4.

5 **III. DECISION TO CONVERT SGS TO NATURAL GAS**

6 SRP is focused on ensuring a secure energy future in Arizona for generations to
7 come while maintaining reliability, affordability, and sustainability. As part of its efforts
8 to meet growing system capacity needs, SRP and its Board of Directors (Board) considered
9 alternative resource options for replacing the capacity from SGS Unit 4 into the 2040s.
10 Alternatives considered included: (1) conversion of SGS to natural gas; (2) replacement of
11 SGS Unit 4 with new frame combustion turbines, or (3) replacement of SGS with long-
12 duration lithium-ion batteries. Ultimately, SRP's Board determined that converting SGS
13 Unit 4 to natural gas was the best option because it would provide a firm resource to support
14 reliability at the lowest cost, while preserving capital and providing a bridge to the mid-
15 2040s when other generating technologies in development may be available for
16 implementation. [McClellan Decl. at ¶5]

17 **IV. BENEFITS OF CONVERSION**

18 The SGS Unit 4 Repower Project provides a number of benefits. Converting SGS
19 Unit 4 to natural gas allows SRP to continue to preserve the plant's capacity while using
20 much of the plant's existing equipment, including steam turbines, boilers, and the plant's
21 existing transmission infrastructure. The SGS Unit 4 Repower Project also leverages the
22 future natural gas pipeline being constructed for Coronado Generating Station Units 1 and
23 2 and SGS Units 1 and 2. Further, the conversion to natural gas will reduce the plant's
24 auxiliary power consumption by eliminating coal handling and coal conditioning
25

1 equipment and reduce the amount of coal ash disposed in the ash landfill by approximately
2 45,000 tons per year. [Hamblin Decl. at ¶7]

3 In accordance with A.R.S. § 48-242, SRP will continue to support the community
4 through voluntary contributions in lieu of property taxes. For tax year 2025, SRP donated
5 \$2.4 million to Round Valley School District, the district in which SGS Unit 4 is located.
6 SRP anticipates making comparable contributions throughout the life of the project.
7 [Fennell Decl. at ¶7]

8 **V. CHANGES NEEDED FOR CONVERSION**

9 There are two basic changes needed to convert SGS Unit 4 from coal to natural gas
10 fired operations: (i) new natural gas lateral and supply; and (ii) conversion of the burners
11 in the boiler.

12 *a. Natural Gas Supply*

13 A natural gas supply and delivery system to SGS is already planned to support the
14 authorized conversion of SGS Units 1 and 2. [Decision No. 81675 dated March 10, 2026]
15 SGS Unit 4 will utilize the same pipeline for its natural gas supply. The natural gas
16 company will be responsible for the siting and construction of the natural gas pipeline and
17 associated facilities needed to bring natural gas to SGS which is under the jurisdiction of
18 the Federal Energy Regulatory Commission (FERC) and the U.S. Department of
19 Transportation. Conversion of SGS Unit 4 may require additional piping or other
20 infrastructure within the main plant site to deliver natural gas to SGS Unit 4, in addition to
21 SGS Units 1 and 2. [Hamblin Decl. at ¶3] Any additional piping or associated infrastructure
22 necessary to deliver natural gas to SGS Unit 4, beyond what is required for the conversion of
23 SGS Units 1 and 2, is anticipated to be minor in scale and would not result in significant
24 environmental impacts. [Curci Decl. at ¶7]

1 *b. Conversion of Burners*

2 The SGS Unit 4 Repower Project involves conversion of the existing coal-fired
3 burners for SGS Unit 4 which requires replacement of the burners within the boiler. The
4 boiler is expected to have approximately 24 natural gas burners. The burners consist of a
5 gas feed line attached to a nozzle (a/k/a “gas gun”) with an ignition source. The burners
6 are roughly 6 feet in length and 6 inches in diameter. The work to replace the burners will
7 take place inside the boiler building. SRP estimates that it will take approximately 8 weeks
8 to convert the burners for SGS Unit 4. [Hamblin Decl. at ¶4]

9 **VI. CONVERSION MATERIALLY REDUCES EMISSIONS**

10 The SGS Unit 4 Repower Project significantly reduces overall emissions from the
11 plant and does not have an adverse impact on air quality. Nitrogen oxides (NO_x), sulfur
12 dioxide (SO₂) and particulate matter less than 10 microns in aerodynamic diameter (PM₁₀)
13 emissions are expected to be significantly reduced as a direct result of the change in fuel
14 source. In addition, annual emissions of carbon dioxide (CO₂) are expected to be reduced
15 by at least 46.0 percent by the fuel conversion. [Harbin Decl. at ¶7]

16 Table 1 below provides a comparison of SGS Unit 4’s emissions utilizing coal and
17 natural gas. The natural gas emissions are based on a preliminary emissions analysis using
18 three capacity factors. The 47.5 percent capacity factor represents the estimated maximum
19 utilization of the unit, 45.0 percent capacity factor represents the utilization of the unit
20 which results in no increases in annual emissions for all criteria pollutants, and 15.0 percent
21 capacity factor reflects a more likely operating scenario for the electric generating unit
22 following the conversion. [Harbin Decl. at ¶6]

Table 1 – Annual Emissions Comparison at a Various Capacity Factors

Capacity Factor	Actual Coal-Fired Emissions (short tons)¹	Estimated Natural Gas-Fired Emissions (short tons)²	Estimated Natural Gas-Fired Emissions (short tons)²	Estimated Natural Gas-Fired Emissions (short tons)²
44.5%		47.5%	45.0%	15.0%
Pollutant				
PM/PM ₁₀ /PM _{2.5}	72.5	43.8	41.6	13.9
NO _x	618.2	534.9	507.5	169.1
SO ₂	730.7	5.3	5.0	1.7
VOC	45.3	35.1	33.3	11.1
CO	615.6	648.9	615.6	205.1
CO ₂	1,898,959	1,025,763	973,123	324,247

¹ Actual emissions are based on annualized emissions from May 2020 through April 2022.

² Estimated emissions are based on preliminary design information and are subject to change.

Air quality modeling also confirms that operation of SGS Unit 4 as a natural-gas-fired generating plant will not cause or contribute to an exceedance of any National Ambient Air Quality Standard (NAAQS) for carbon monoxide (CO), nitrogen dioxide (NO₂), SO₂, PM₁₀, and particulate matter less than 2.5 microns in aerodynamic diameter (PM_{2.5}). [Harbin Decl. at ¶4]

VII. CONVERSION HAS LIMITED ENVIRONMENTAL IMPACTS

The SGS Unit 4 Repower Project also has little or no impact on existing land use, water use, visual appearance, biological resources, noise, and cultural resources. The SGS Unit 4 Repower Project involves minimal changes to the plant site and has no material adverse environmental impacts.

a. Impact on Land Use

The SGS Unit 4 Repower Project will take place within the existing main plant site at SGS, a heavily disturbed industrial area. The SGS Unit 4 Repower Project is compatible with existing and planned land use and will not alter existing land use. [Curci Decl. at ¶13]

1 ***b. No Impact on Water Use***

2 The conversion to natural gas is not expected to have a material impact on water use
3 at the plant. SGS Unit 4 is expected to use a similar amount of water per megawatt of power
4 generated because the same basic process is used to generate steam to produce electricity.
5 Further, some water savings are expected due to the elimination of coal ash handling,
6 hauling, and dust suppression associated with coal handling and conditioning.
7 Accordingly, the SGS Unit 4 Repower Project does not adversely impact water usage.
8 [Hamblin Decl. at ¶8]

9 ***c. No Visual Impacts***

10 There will be no adverse visual impact from the SGS Unit 4 Repower Project given
11 that the construction activities will take place within the SGS Unit 4 structure. [Curci Decl.
12 at ¶16] Any additional piping or other infrastructure necessary to deliver natural gas to SGS
13 Unit 4, beyond what is required for the conversion of SGS Unit 1 and Unit 2 is anticipated
14 to be minor in scale. [Curci Decl. at ¶7]

15 ***d. No Biological Impacts***

16 The SGS Unit 4 Repower Project will occur on pre-disturbed lands within the
17 industrial complex of the SGS main plant site. Thus, the SGS Unit 4 Repower Project is
18 not expected to adversely impact biological resources. [Curci Decl. at ¶¶19-23]

19 ***e. Reduced Noise***

20 The SGS Unit 4 Repower Project is expected to reduce overall operational noise
21 levels at SGS. Conversion of the boiler to burn natural gas is expected to lead to quieter
22 boiler operations; however, the most significant noise reductions are associated with
23 reduction/elimination of coal conveying and handling equipment. [Curci Decl. at ¶24]

1 *f. No Cultural Resource Impacts*

2 Because the SGS Unit 4 Repower Project will occur on pre-disturbed lands within
3 the industrial complex of the SGS main plant site, the SGS Unit 4 will not impact cultural
4 resources. [Curci Decl. at ¶¶17-18]

5 In sum, the conversion to natural gas will not have any material adverse
6 environmental impacts.

7 **VIII. PUBLIC OUTREACH AND SUPPORT FOR PROJECT**

8 In connection with the decision to convert SGS Unit 4 to natural gas, SRP engaged
9 in a robust public outreach process to ensure that local jurisdictions, relevant agencies,
10 and community residents were provided with project information and the opportunity to
11 relay information or potential concerns. SRP instituted multiple public participation
12 activities, including multiple public meetings, project mailers, a telephone line, an email
13 contact, newspaper and social media advertisements, a dedicated website and agency
14 briefings. [Fennell Decl. at ¶¶9-14]

15 As with the decisions to convert the Coronado Generating Station and SGS Units
16 1 and 2 to natural gas, the conversion of SGS Unit 4 has received overwhelming support
17 from communities most impacted by the conversion. [Fennell Decl. at ¶15]

18 **IX. MINOR CEC AMENDMENTS REQUIRED FOR CONVERSION**

19 Under A.R.S. § 40-252, the Commission has authority to “rescind, alter or amend
20 any order or decision made by it” based on the public interest.

21 Here, SRP is requesting amendment of Decision Nos. 55477 and 65347 to authorize
22 the fuel conversion from coal to natural gas. The requested amendment recognizes that
23 coal-fired operations at SGS Unit 4 will need to continue until the conversion to natural
24 gas is completed.

1 **X. EVIDENTIARY HEARING IS NOT REQUIRED**

2 Under A.R.S. § 40-252, the Commission is authorized to alter or amend a CEC
3 without an evidentiary hearing, and there is a long line of cases in which the Commission
4 has approved amendments without a hearing. Most recently, the Commission approved the
5 conversion of Coronado Generation Station and SGS Units 1 and 2 without an evidentiary
6 hearing. [Decision No. 81676 dated March 10, 2026; Decision No. 81675 dated March 10,
7 2026.] The Commission’s decisions in those cases are supported by a long line of prior
8 decisions approving amendments to existing CECs without an evidentiary hearing.¹

9 The Commission amendment of the SGS Unit 4 CEC without an evidentiary hearing
10 is similarly justified. The SGS Unit 4 Repower Project changes in this case will occur in a
11 disturbed industrial area. In addition, the SGS Unit 4 Repower Project changes are being
12 made to existing infrastructure or involve the addition of facilities compatible with the
13 existing structures such that there is no material visual impact. Notably, the conversion of
14 SGS Unit 4 to natural gas will significantly reduce air emissions overall and eliminate the
15 production of coal ash, a waste disposal product generated from burning coal.

16 While SRP recognizes that there are occasions where an evidentiary hearing may
17 be necessary for the Commission to fully consider and evaluate a proposed amendment,
18 one is not necessary here. Additionally, the undisputed emission benefits resulting from
19 conversion combined with no adverse environmental impacts supports granting this
20 Application without the need for an evidentiary hearing.

21
22

¹ See, e.g., Decision No. 77761 (Oct. 2, 2020) (authorizing construction of a new substation, two 0.15-mile
23 segments of double-circuit 230kV transmission lines, and two new monopole structures in a developing
24 area of Goodyear with a residential housing development without one half mile); Decision No. 76795 (Aug.
25 15, 2018) (authorizing double-circuit structures for a one-mile portion of a previously approved single-
circuit transmission line in a developed residential area); Decision No. 74206 (Dec. 3, 2013) (amending an
existing CEC to relocate 1,500 feet of the approved corridor and allow a different type of structure than
was approved in the original CEC).

1 **XI. CONCLUSION**

2 As is well known by this Commission, SRP – and all similarly situated utilities –
3 need to maintain the operation of reliable generation assets and to employ innovative ways
4 to support and strengthen energy resources in the State. The modification of SGS Unit 4 to
5 accommodate a change in fuel source, as proposed herein, is essential to SRP’s continued
6 operation of SGS Unit 4 and SRP’s ability to safely and reliably serve its customers. The
7 conversion of SGS Unit 4 maintains a critical generation resource while reducing emissions
8 and having no adverse environmental impacts.

9 Based on the foregoing facts, SRP respectfully requests the Commission amend
10 Decision Nos. 55477 and 65347 to approve the SGS Unit 4 Repower Project as request in
11 this Application.

12 RESPECTFULLY SUBMITTED this 1st day of May, 2026.

13 SNELL & WILMER L.L.P.

14 By /s/ Matthew Derstine

15 Matthew Derstine (Bar No. 011448)
16 One East Washington Street, Suite 2700
Phoenix, Arizona 85004

17 and

18 Maribeth Klein (Bar No. 023943)
19 Alysha Y. Gilbert (Bar No. 035639)
20 SALT RIVER PROJECT
21 AGRICULTURAL
22 IMPROVEMENT & POWER DISTRICT
23 P. O. Box 52025, PAB381
24 Phoenix, AZ 85072-2025
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1 **Copy e-filed this 1st day of May, 2026, with:**

2 <https://efiling.azcc.gov>

3 Arizona Corporation Commission
4 1200 West Washington Street
5 Phoenix, AZ 85007

6 **Copies emailed this 1st day of May, 2026:**

7 Arizona Corporation Commission
8 Office of General Counsel
9 Utilities Division
10 1200 West Washington Street
11 Phoenix, AZ 85007

12 **Copy of the foregoing mailed this 1st**
13 **day of May, 2026 to:**

14 Arizona Center for Law in the Public Interest
15 352 East Camelback Road, Suite 200
16 Phoenix, AZ 85012

17 **By:** /s/ Michele Maser

EXHIBIT "1"

1 (2) replace SGS Unit 4 with new frame combustion turbines, or (3) replacement of SGS
2 Unit 4 with long-duration lithium-ion batteries. Ultimately, SRP's Board determined that
3 converting SGS Unit 4 to natural gas (the SGS Unit 4 Repower Project) was the best option
4 because it would provide a firm resource to support reliability at the lowest cost, preserving
5 capital and supporting affordability while providing a bridge to the mid-2040s when other
6 generating technologies in development may be available for implementation. It also helps
7 mitigate supply chain, permitting, and development risk in the early 2030s. Finally, timing
8 the conversion of SGS Unit 4 with SGS Units 1 and 2 allows SRP to leverage a single
9 pipeline lateral.

10 6. Upon completion of the SGS Unit 4 Repower Project, SGS Unit 4 will
11 continue to be a firm resource that provides reliability during system peaks when capacity
12 is critical.

13 **Total Project Cost**

14 7. The cost of the SGS Unit 4 Repower Project is \$724 million through 2049.
15 This cost includes the direct costs to convert and operate SGS Unit 4. In comparison,
16 replacing SGS Unit 4 with new frame combustion turbines would cost \$769 million over
17 the same period. Replacement of SGS Unit 4 with long-duration lithium-ion batteries
18 would cost approximately \$1.55 billion and would not provide the firm capacity available
19 in all hours of the day offered by the natural gas alternatives.
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I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 05/01/2026



William J McClellan
Director, Resource Planning, Acquisition &
Development
Salt River Project Agricultural Improvement
and Power District

EXHIBIT "2"

1 and 2. The majority of this work can be completed without an outage and is expected to take place before SRP begins converting the coal-fired burners.

4. Conversion of the existing coal-fired burners to burn natural gas requires replacement of the burners within the boiler. The existing coal-fired burners will be modified and retrofitted for gas firing. The boiler is expected to have approximately twenty-four (24) natural gas burners. The burners consist of a gas feed line attached to a nozzle (a/k/a “gas gun”) with an ignition source.¹ The burner is roughly six (6) feet in length and six (6) inches in diameter. The work to replace the burner will take place inside the boiler building.

5. To complete the conversion, SRP plans to temporarily shut down SGS Unit 4 beginning in the 3rd quarter of 2029 to replace the coal-fired burners with the natural gas-fired burners. SGS Unit 4 is planned to be fully offline for approximately 8 weeks and is anticipated to be commercially operational, fueled by natural gas, in December 2029.

6. Equipment associated with coal-fired operations that is no longer needed following the conversion to gas will be removed as necessary or abandoned in place.

7. The conversion to natural gas will reduce plant auxiliary power consumption by eliminating coal handling and coal conditioning equipment. The conversion to natural gas will also reduce the amount of coal ash disposed in the ash landfill by approximately 45,000 tons per year.

¹ The existing oil igniters and all equipment associated with the oil igniters will be removed and replaced with a direct-spark ignition system within the gas gun.

1 **Water Usage is Expected to Remain the Same or Decrease Following the Conversion**

2 8. Conversion of SGS Unit 4 to natural gas is expected to use a similar amount
3 of water per megawatt because the same basic process is used to generate steam to produce
4 electricity. Some water savings are expected as a result of eliminating the need for dust
5 suppression associated with the coal handling and conditioning as well as sootblowing.
6 Currently the average yearly water usage is 3,140 acre-feet.

7 I declare under penalty of perjury that the foregoing is true and correct to the best
8 of my knowledge and belief.

9 Dated: 05/01/2026



10 Hank Hamblin
11 Director of Coronado Generating Station
12 Salt River Project Agricultural
13 Improvement and Power
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EXHIBIT "3"

1 Standard (NAAQS) for the pollutants modeled. A significant impact analysis was
2 conducted to quantify the net impacts of the Project.

3 5. The significant impact analysis assesses whether the SGS Unit 4 Repower
4 Project will have a significant or meaningful impact on air quality based on a quantitative
5 threshold (referred to as the significant impact levels (SILs) or “significance levels”)
6 established by the U.S. Environmental Protection Agency and adopted by the Arizona
7 Department of Environmental Quality (ADEQ) in Arizona Administrative Code (A.A.C.)
8 R18-2-401(27). For the significant impact analysis, only the changes due to the SGS Unit
9 4 Repower Project were modeled (i.e. the boiler conversion). The analysis did not take into
10 account emissions reductions associated with elimination of the coal handling and
11 conveyance systems. The maximum modeled pollutant concentrations associated with
12 conversion of the boilers were compared to the SILs in A.A.C. R18-2-401(27). All
13 pollutants and averaging periods were below the SILs.

14 6. SRP also performed a preliminary emissions analysis (actual-to-projected-
15 actual (ATPA)) for the SGS Unit 4 Repower Project using three capacity factors 47.5, 45,
16 and 15 percent for the electric generating unit. The 47.5 percent capacity factor represents
17 the estimated maximum utilization of the unit based on the major modification threshold
18 for air permitting purposes, 45.0 percent capacity factor represents the utilization of the
19 unit which results in no increases in annual emissions for all criteria pollutants, and 15.0
20 percent capacity factor reflects a more likely operating scenario for the electric generating
21 unit following the conversion. Using historical annualized emissions from May 2020
22 through April 2022, SRP estimated (projected) the emissions from the Unit 4 boiler
23 following conversion at each capacity factor as set forth below in Table 1. For additional
24 reference, the average capacity factor of Unit 4 over the last five calendar years (2021-
25 2025) was 45.9 percent.

Table 1 – Annual Emissions Comparison at a Various Capacity Factors

	Actual Coal-Fired Emissions (short tons)¹	Estimated Natural Gas-Fired Emissions (short tons)²	Estimated Natural Gas-Fired Emissions (short tons)²	Estimated Natural Gas-Fired Emissions (short tons)²
Capacity Factor	44.5%	47.5%	45.0%	15.0%
Pollutant				
PM/PM ₁₀ /PM _{2.5}	72.5	43.8	41.6	13.9
NO _x	618.2	534.9	507.5	169.1
SO ₂	730.7	5.3	5.0	1.7
VOC	45.3	35.1	33.3	11.1
CO	615.6	648.9	615.6	205.1
CO ₂	1,898,959	1,025,763	973,123	324,247

¹ Actual emissions are based on annualized emissions from May 2020 through April 2022.

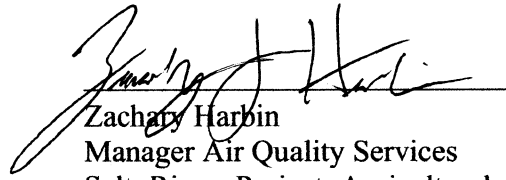
² Estimated emissions are based on preliminary design information and are subject to change.

7. Overall, the SGS Unit 4 Repower Project does not adversely impact air quality. The conversion of SGS Unit 4 from coal-fired to natural-gas-fired generation will not cause or contribute to a violation of a NAAQS, and the conversion to natural gas significantly reduces overall air emissions from the plant. In particular, NO_x, SO₂, and PM₁₀ emissions will reduce significantly as a direct result of the change in fuel source. In addition, annual CO₂ emissions are expected to decrease by at least 46 percent (based on a 47.5 percent capacity factor).

8. Tucson Electric Power, on behalf of SRP, plans to submit a Significant Permit Revision application for the SGS Title V operating permit to ADEQ in 2026. The process for revising the Title V permit will include a public process pursuant to A.A.C. R18-2-320.

1 I declare under penalty of perjury that the foregoing is true and correct to the best
2 of my knowledge and belief.

3 Dated: 05/01/2026



Zachary Harbin
Manager Air Quality Services
Salt River Project Agricultural Improvement and
Power District

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APPENDIX A

**AIR DISPERSION MODELING REPORT
FOR THE UNIT 4 REPOWER PROJECT
AT THE SPRINGVILLE GENERATING STATION**



Delivering water and power™

**Prepared for:
Salt River Project
P.O. Box 52025, M/S: PAB359
Phoenix, Arizona 85072-2025**

**Prepared by:
RTP Environmental Associates, Inc.
304A West Millbrook Road
Raleigh, North Carolina 27609**

April 2026

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1.0 INTRODUCTION

This document presents the methodology and results of the air quality dispersion modeling analysis conducted for a project at the Springerville Generating Station (“SGS”) in Apache County, Arizona. As discussed in greater detail in Section 2 herein, the Project involves converting the primary fuel source for Unit 4 at SGS, which is owned by Salt River Project Agricultural Improvement and Power District (“SRP”) and operated by Tucson Electric Power, from coal to natural gas (the “SGS Unit 4 Repower Project” or “Project”).

SRP has elected to perform dispersion modeling as part of their application to amend the Certificate of Environmental Compatibility (“CEC”) for Unit 4. The analysis was conducted to characterize, for each pollutant for which there is a National Ambient Air Quality Standard (“NAAQS”), the effects on ambient air quality that will result from the Project.

The modeling analysis conforms with the modeling procedures outlined in the U.S. Environmental Protection Agency’s (“USEPA”) Guideline on Air Quality Models¹ (“Guideline” or “Appendix W”), the Arizona Department of Environmental Quality (“ADEQ”) Air Quality Modeling Guidelines for Arizona Air Quality Permits², and associated modeling policy and guidance.

2.0 PROJECT DESCRIPTION

SGS currently consists of four coal-fired electric utility steam generating units (Units 1 through 4) and ancillary equipment. SRP owns only Unit 4; no other units at SGS are involved in SRP's Project.

The Project involves making physical changes to the Unit 4 boiler in order to convert this unit into a natural gas-fired unit.

The modeling analysis allows for a comparison of the maximum pollutant concentrations in ambient air due to emissions from Unit 4 while burning natural gas (i.e., the post-Project scenario) to the maximum pollutant concentrations in ambient air due to emissions from Unit 4 while burning coal (i.e., the pre-Project scenario). Emissions from ancillary equipment, such as ash handling equipment associated with coal firing at Unit 4, were omitted from the modeling analysis. This omission is conservative, as it understates the emissions reductions and associated air quality benefits resulting from the Project.

3.0 SITE DESCRIPTION

SGS is located approximately 15 miles northeast of the Town of Springerville, in Apache County, Arizona (Township 11 North, Range 30 East). The approximate Universal Transverse Mercator (“UTM”) coordinates of the facility are 668,745 meters east and 3,798,883 meters north (UTM Zone 12, North American Datum 83 (“NAD83”)). The facility is approximately 2,100 meters (6,900 feet) above mean sea level. Figure 1 shows the general location of the facility. Figure 2 shows the specific location of the facility on a U.S. Geological Survey (“USGS”) topographic map.

Apache County is classified as attainment or unclassified for all criteria pollutants as codified at 40 CFR 81.303.

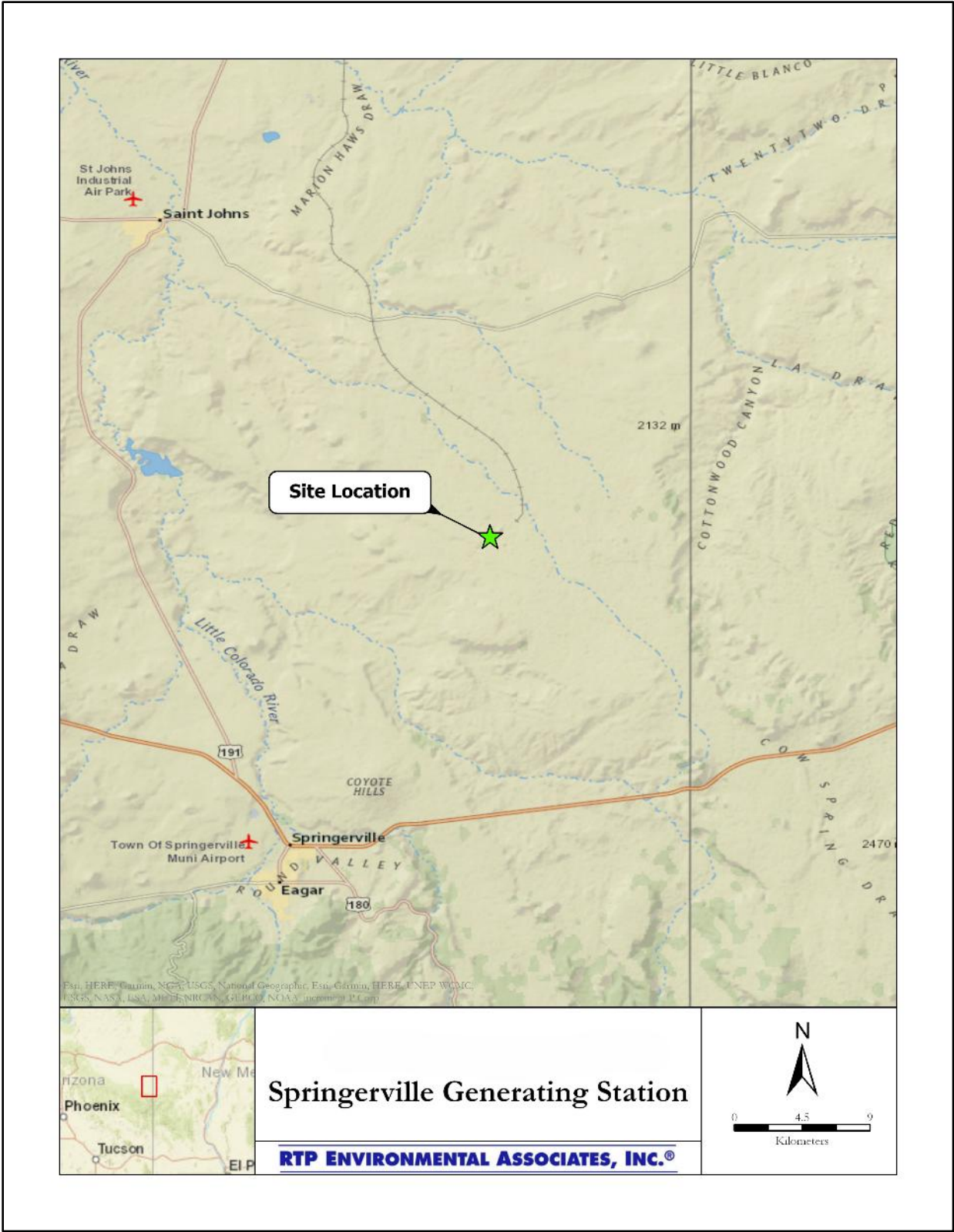


Figure 1. General Location of SGS

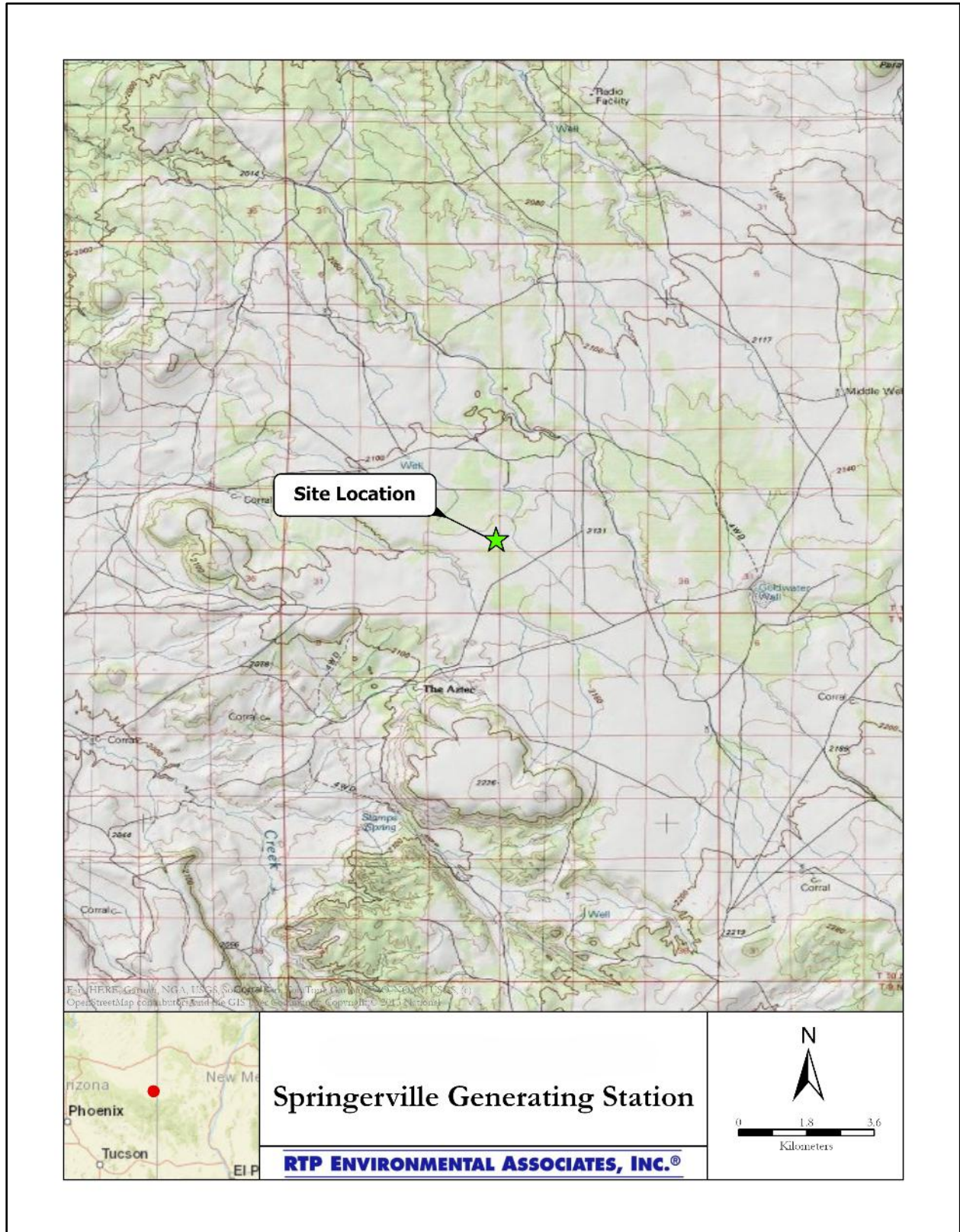


Figure 2. Specific Location of SGS

4.0 MODEL SELECTION AND MODEL INPUT

4.1 Model Selection

The latest version of the AMS/EPA Regulatory Model (AERMOD, Version 24142) was used for conducting the dispersion modeling analysis. AERMOD is a Gaussian plume dispersion model that is based on planetary boundary layer principles for characterizing atmospheric stability. The model evaluates the non-Gaussian vertical behavior of plumes during convective conditions with the probability density function and the superposition of several Gaussian plumes. AERMOD is a modeling system with three components: AERMAP is the terrain preprocessor program, AERMET is the meteorological data preprocessor, and AERMOD includes the dispersion modeling algorithms.

AERMOD is the required model for calculating ambient concentrations near the SGS facility based on the model's ability to incorporate multiple sources and source types. The model can also account for convective updrafts and downdrafts and meteorological data throughout the plume depth. The model also provides parameters required for use with up-to-date planetary boundary layer parameterization. The model has the ability to incorporate building wake effects and to calculate concentrations within the cavity recirculation zone. All model options were selected as recommended in the USEPA Guideline on Air Quality Models.

Providence Oris's BEEST Graphical User Interface ("GUI") was used to run AERMOD. The GUI uses an unaltered version of the AERMOD code. Therefore, a model equivalency evaluation pursuant to Section 3.2 of 40 CFR 51, Appendix W was not warranted.

4.2 Model Control Options and Land Use

AERMOD was run in the regulatory default mode with the default rural dispersion coefficients. This is supported by the Land Use Procedure consistent with subsection

7.2.1.1(b) of the Guideline and Section 5.1 of the AERMOD Implementation Guide. The USGS 2024 National Land Cover Data (“NLCD”) within 3km of the site were converted to Auer 1978 land use types and evaluated (Figure 3 and Table 1). It was determined that the land use in the vicinity of the site is comprised predominantly of shrub/scrub; with 5.4% defined as urban (NLCD categories 23 and 24). The area surrounding the facility was therefore determined to be rural as defined by Auer (i.e., less than 50% of the area is classified as urban).

Table 1. Land-Use Classification

2019 NLCD Classification		Area (Acres)	Percentage of Total Area	Auer Land-Use Classification		Rural or Urban
11	Open Water	132	1.9%	A5	Water surfaces	Rural
12	Perennial Ice/Snow	0.0	0.0%	A5	Water surfaces	Rural
21	Developed, Open Space	28	0.4%	A1	Metropolitan Natural	Rural
22	Developed, Low Intensity	277	4.0%	R1	Common Residential	Rural
23	Developed, Medium Intensity	329	4.7%	I1, I2, C1, R2, R3	Industrial/Commercial/Compact Residential	Urban
24	Developed, High Intensity	49	0.7%	I1, I2, C1, R2, R3	Industrial/Commercial/Compact Residential	Urban
31	Barren Land	1	0.0%	A3	Undeveloped (Grasses/Shrub)	Rural
41	Deciduous Forest	0	0.0%	A4	Undeveloped (Wooded)	Rural
42	Evergreen Forest	1	0.0%	A4	Undeveloped (Wooded)	Rural
43	Mixed Forest	0	0.0%	A4	Undeveloped (Wooded)	Rural
52	Shrub/Scrub	6,166	88.3%	A3	Undeveloped (Grasses/Shrub)	Rural
71	Grassland/Herbaceous	1	0.0%	A3	Undeveloped (Grasses/Shrub)	Rural
81	Pasture/Hay	0	0.0%	A2	Agricultural	Rural
82	Cultivated Crops	0	0.0%	A2	Agricultural	Rural
90	Woody Wetlands	0	0.0%	A4	Undeveloped (Wooded)	Rural
95	Emergent Herbaceous Wetlands	0	0.0%	A3	Undeveloped (Grasses/Shrub)	Rural

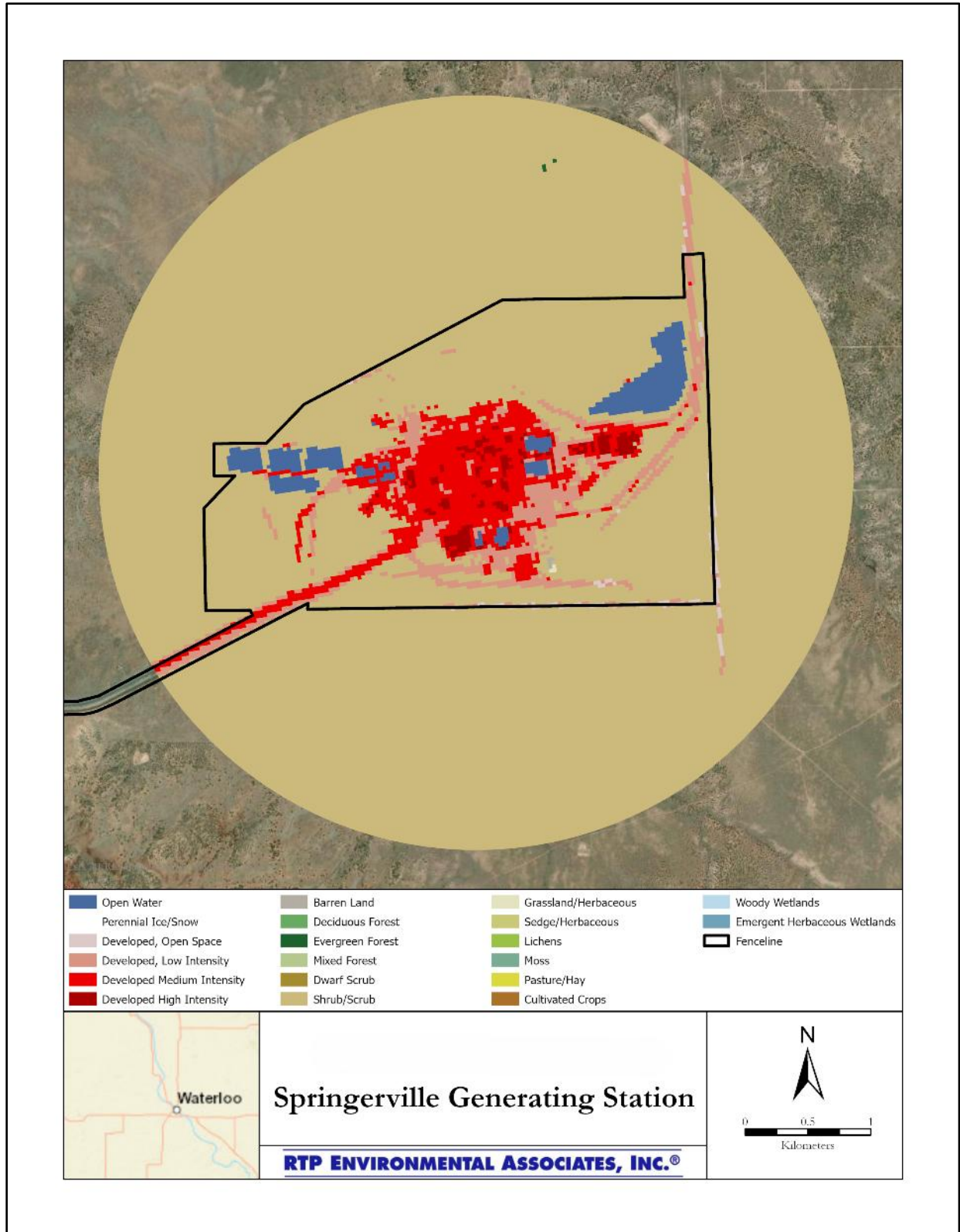


Figure 3. Land Use within Three Kilometers of SGS

4.3 Source Data

Source Characterization

The only modeled emission source at the site, Unit 4, vents to a vertically orientated stack with a well defined, unobstructed opening, and was modeled as a point source.

The source location was based upon a NAD83, UTM Zone 12 projection.

Good Engineering Practice Stack Height Analysis

A Good Engineering Practice (“GEP”) stack height evaluation was conducted to determine appropriate building dimensions to include in the model and to calculate the GEP formula stack height used to justify stack height credit for stacks in excess of 65m. Procedures used were in accordance with those described in the USEPA Guidelines for Determination of Good Engineering Practice Stack Height (Technical Support Document for the Stack Height Regulations-Revised)³. GEP formula stack height, as defined in A.A.C. R18-2-332(C)(2)(a), is expressed as $H_g = 2.5 \times H$, where H_g is the GEP stack height and H is the building height. Building/structure locations were determined from a facility plot plan. The structure locations and heights were input to the USEPA’s Building Profile Input Program (BPIP-PRIME, Version 04274) computer program to calculate the direction-specific building dimensions needed for AERMOD. All structures that are located near a stack were included in the BPIP runs.

4.4 Receptor Data

Modeled receptors were placed in all areas considered as "ambient air" pursuant to A.A.C. R18-2-101(14). Ambient air is defined as that portion of the atmosphere, external to buildings, to which the general public has access. A fenceline was used as the ambient air boundary in the analysis and is shown in Figure 4. The fenceline begins at the guard shack where fences run along each side of the access road. This joins the fence around the main facility. A fence also runs along the ash landfill. The receptor grid consists of the following:

1. Receptors spaced along the fenceline at 25m intervals,

2. A fine grid of receptors with 100m spacing extending to 3km from the fenceline,
3. A medium grid of receptors with 500m spacing extending from 3km to 5km,
4. A coarse grid of receptors with 1,000m spacing extending from 5 to 10km,
5. A very coarse grid of receptors with 2,500m spacing extending from 10 to 25km,
6. A very coarse grid of receptors with 5,000m spacing extending from 25 to 50km.

SGS is located in eastern Arizona. Terrain within 10km of the plant site is complex. Receptor elevations and hill height scale factors were calculated with AERMAP (24142). The elevation data consisted of one arc second National Elevation Data (“NED”) obtained from the USGS. Locations were based upon a NAD83, UTM Zone 12 projection. The near-field receptor grid is presented in Figure 4.

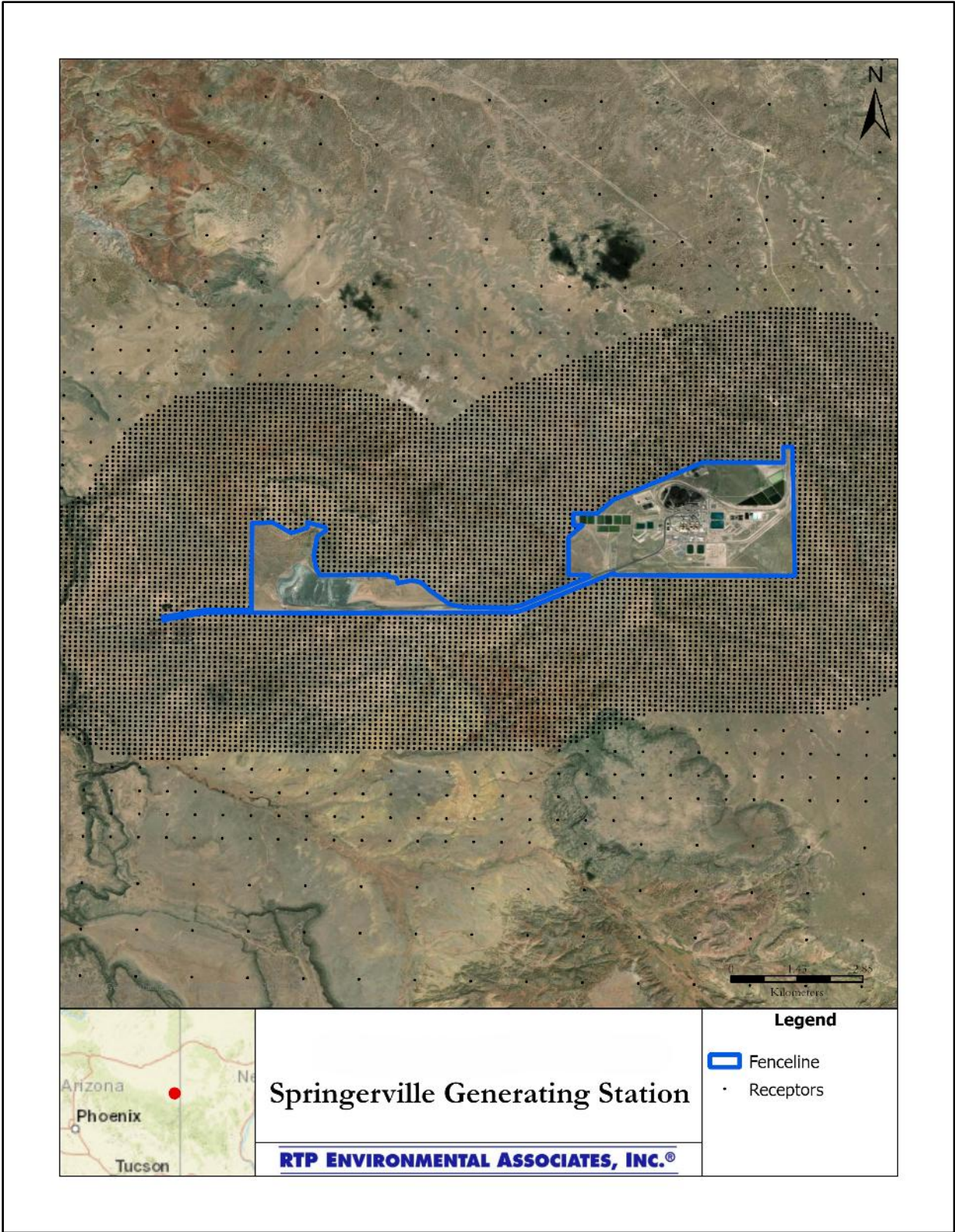


Figure 4. Near-field Receptor Grid

4.5 Meteorological Data

The 2017-2021, 5-year sequential hourly surface meteorological data collected at the St. Johns Industrial Air Park (KSJN, WBAN 93027) and upper air data from Albuquerque, New Mexico (KABQ, WBAN 23050) were used in the analysis. Data from both of these meteorological stations were processed by ADEQ using AERMET version 24142^a. ADEQ used the surface friction velocity adjustment (adj u^*) in processing the data.

As stated in Appendix W Section 8.4.1.b., the meteorological data should be selected on the basis of “spatial and climatological (temporal) representativeness as well as the ability of the individual parameters selected to characterize the transport and dispersion conditions in the area of concern.” This section further lists the following criteria that can be used to justify the representativeness:

- Spatial proximity of the meteorological site to the facility;
- Complexity of the terrain;
- Exposure of the meteorological monitoring site; and
- Period of time during which the data are collected.

St. Johns Industrial Air Park (only 30km distant) and Show Low Regional Airport (78km distant) are the only National Weather Service (“NWS”) surface meteorological stations within 100km of SGS (Table 2 and Figure 5). The complexity of the terrain is similar between St. Johns Industrial Air Park and SGS, while Show Low Regional Airport is much closer to the White Mountains and the Mogollon Rim. SGS is located in a rural area, while St. Johns Industrial Air Park and Show Low Regional Airport are both located near small cities.

ADEQ has processed the latest complete five years of data for St. Johns Industrial Air Park. The Show Low Regional Airport meteorological record is not as complete as St. Johns and has more missing and calm hours. Therefore, the data from St. Johns

^a Meteorological data was obtained on April 1, 2026.

Industrial Air Park is deemed to be the most representative meteorological data. The 2017-2021 wind rose is provided in Figure 6.

Table 2. Surface Meteorological Stations

Surface Station	Elevation (ft)	Distance from SGS (km)
SGS	2,130	--
St. Johns Industrial Air Park	1,747	30
Show Low Regional Airport	1,960	78
Winslow-Lindbergh Regional Airport	1,492	163
Safford Regional Airport	967	168
Flagstaff Pulliam Airport	2,137	247
Phoenix Sky Harbor International Airport	343	280
Tucson International Airport	777	294
Prescott Municipal Airport	1,528	301
Page Municipal Airport	1,310	356
Nogales International Airport	1,194	358



Figure 5. Location of Meteorological Stations

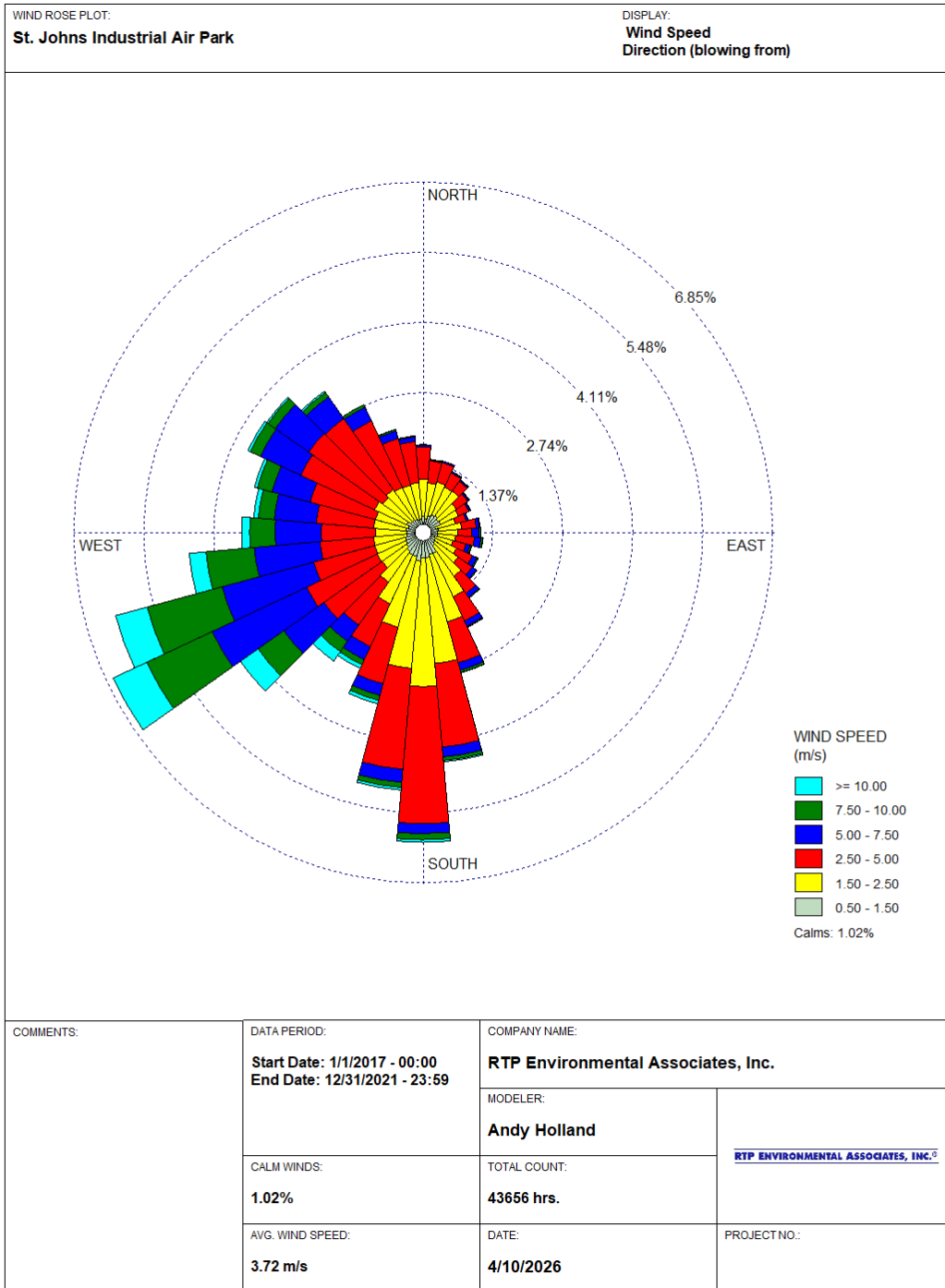


Figure 6. 2017-2021 Wind Rose

5.0 MODELING METHODOLOGY AND RESULTS

5.1 Modeled Pollutants

Emissions of carbon monoxide (“CO”), nitrogen dioxide (“NO₂”), sulfur dioxide (“SO₂”), particulate matter (“PM”) with a diameter less than or equal to 10 micrograms (“PM₁₀”), and PM with a diameter less than or equal to 2.5 micrograms (“PM_{2.5}”) were included in the analysis.

5.2 Load Analysis

A load analysis was performed for natural gas-firing in Unit 4 to determine the worst-case stack parameters. Two load scenarios were used in the analysis, a full load scenario (100% of maximum continuous rated load) and a mid load scenario (44% of maximum continuous rated load). The stack exit temperatures and stack exit velocities for each load scenario were used in the analysis along with emission rates normalized to the full load’s emission rates. The stack parameters and emission rates used in the load analysis are shown in Table 3.

Table 3. Load Analysis Stack Parameters and Emissions

Source ID	Release Type	Source Description	Easting (m)	Northing (m)	Base Elevation (ft)	Stack Height (ft)	Temperature (°F)	Exit Velocity (ft/sec)	Stack Diameter (ft)	Emission Rate (lb/hr)
NGMAX	DEFAULT	Nat Gas Max Load	668639.31	3799003.05	6973.33	500.0	400.9	62.2	20.0	1.00
NGMID	DEFAULT	Nat Gas 44% Load	668639.31	3799003.05	6973.33	500.0	398.7	30.7	20.0	0.44

The results of the load analysis are shown in Table 4. The full load resulted in the maximum modeled impacts for all averaging periods. Therefore, the stack parameters and emission rates for that case were used in all subsequent analyses.

Table 4. Load Analysis Results

Load Level	Averaging Period	Maximum Modeled Concentration ($\mu\text{g}/\text{m}^3$)
Max	1-hour	0.0495
Mid		0.0288
Max	3-hour	0.0268
Mid		0.0177
Max	8-hour	0.0177
Mid		0.0118
Max	24-hour	0.0069
Mid		0.0048
Max	Annual	0.0015
Mid		0.0009

5.3 Significant Impact Analysis

In the significant impacts analysis, only the changes due to the Project were modeled. Normally this would entail modeling the change in emissions. However, in this case, the source stack parameters (e.g. exit temperature and exit velocity) are changing as well due to the change in fuel being burned. The change in stack parameters can have an impact on the plume; therefore, for all pollutants except NO₂, Unit 4 was modeled with its pre-Project stack parameters and negative pre-Project actual emission rates along with its post-Project stack parameters and positive post-Project emission rates.

In 2014 EPA published a clarification memo regarding NO₂ modeling⁴. The memo states that: "... all three tiers of NO₂ modeling are classified as screening techniques, and as such, negative emission rates should not be used to account for emission reductions when conducting dispersion modeling to determine net ambient impacts associated with emission changes for comparison to the SILs." Therefore, for NO₂ only, the model was run separately for each fuel type.

Unit 4's pre-Project actual coal-fired heat input and actual emissions of NO₂ and SO₂ were obtained from Clean Air Markets Program Data ("CAMPD")². Pre-Project actual CO emissions were obtained from a continuous emissions monitoring system ("CEMS").

² [Clean Air Markets Program Data \(CAMPD\) | US EPA](#)

Actual emissions of PM₁₀ and PM_{2.5} were calculated using an emission factor determined from stack test data and heat input in MMBtu/hr from CAMPD. Pre-Project stack exit temperature and exit flow rate came from 2018 stack testing.

Unit 4's post-Project potential heat input, percentage of excess air, stack exit temperature, and emission factors for annual NO₂ and 8-hour average CO are based on project preliminary engineering design information. Potential emissions of PM₁₀, PM_{2.5}, and SO₂ were calculated using the heat input and emission factors from AP-42. Potential emissions of 1-hour NO₂ were conservatively assumed to be double the annual rate. Potential hourly CO emissions were conservatively assumed to be double the 8-hour rate. Post-Project exit flow rate was calculated using the heat input, percentage of excess air, exit temperature, and constants from EPA Method 19.

For all other sources at SGS (e.g. Units 1-3, ash handling, lime handling, coal preparation plant, etc.), emission rates are either not changing due to the Project or will have a decrease in emissions. To be conservative, emissions from these sources were assumed to remain at pre-Project levels and were not included in the significant impact analysis.

Modeled stack parameters used in the significant impact analysis are shown in Table 5, while the emission rates are shown in Table 6.

Table 5. Significant Impact Analysis Stack Parameters

Source ID	Release Type	Source Description	Easting (m)	Northing (m)	Base Elevation (ft)	Stack Height (ft)	Temperature (°F)	Exit Velocity (ft/sec)	Stack Diameter (ft)
UNIT4_C	DEFAULT	Unit 4 - Coal	668639.31	3799003.05	6973.33	500.0	206.0	76.6	20.0
UNIT4_NG	DEFAULT	Unit 4 - Natural Gas - Max Load	668639.31	3799003.05	6973.33	500.0	400.9	62.2	20.0

Table 6. Significant Impact Analysis Emission Rates

Source ID	Emission Rate (lb/hr)											
	CO 1-hour	CO 8-hour	NO ₂ 1-hr	NO ₂ Annual	SO ₂ 1-hr	SO ₂ 3-hr	SO ₂ 24-hr	SO ₂ Annual	PM ₁₀ 24-hr	PM ₁₀ Annual	PM _{2.5} 24-hr	PM _{2.5} Annual
UNIT4_C	-9574.10	-4463.66	2917.55	181.35	-7050.60	-5385.33	-2188.00	-206.33	-57.51	-35.25	-57.51	-35.25
UNIT4_NG	623.00	311.50	514.72	257.36	2.48	2.48	2.48	2.48	31.44	31.44	31.44	31.44

Maximum modeled concentrations of CO, SO₂, PM₁₀, and PM_{2.5} were compared to the significant impact levels (“SILs”), as defined in 40 CFR 51.165 and A.A.C. R18-2-401(27).

Net ambient impacts associated with the changes between the pre-Project and post-Project NO₂ emissions were calculated using output plot files from AERMOD. For 1-hour NO₂, the output plot files contain the five-year average of the maximum daily 1-hour modeled concentration at each receptor for each fuel scenario. The pre-Project concentrations were subtracted from the post-Project concentrations, and the maximum difference was compared to the SIL. For annual NO₂, the output plot files contain the annual average modeled concentration for each year at each receptor for each fuel scenario. The pre-Project concentrations were subtracted from the post-Project concentrations, and the maximum difference was compared to the SIL.

The PSD Class II SILs and modeled concentrations are shown in Table 7. As shown, maximum modeled impacts for all pollutants and averaging periods are less than their respective SILs. Therefore, no further modeling was necessary.

Table 7. Class II Significant Impact Analysis Results

Pollutant	Averaging Time	Maximum Modeled Impact ($\mu\text{g}/\text{m}^3$)	Class II Significant Impact Levels ($\mu\text{g}/\text{m}^3$)
CO	1-hour	0.02	2,000
	8-hour	0.00	500
NO ₂	1-hour	-6.33	7.5
	Annual	0.10	1
SO ₂	1-hour	0.00	7.8
	3-hour	0.00	25
	24-hour	0.00	5
	Annual	0.00	1
PM ₁₀	24-hour	0.0007	5
	Annual	0.00	1
PM _{2.5}	24-hour	0.0003	1.2
	Annual	0.00	0.13

5.4 Ozone SIL Analysis

In April 2019, EPA released a guidance document for ozone and fine particulate matter permit modeling⁵ which addressed a demonstration tool for ozone under the PSD program. A clarification memorandum to this guidance was released by EPA in April 2024⁶. The Modeled Emission Rates for Precursors (“MERPs”) approach described in the above guidance and clarification memorandum was used to estimate the ozone contribution from the difference in NO₂ and VOC emissions between the coal-firing and natural gas-firing cases.

The EPA performed modeling to estimate maximum ozone concentrations at hypothetical sources across the country at multiple stack heights and emission rates. By selecting a nearby representative hypothetical source with a similar stack height and emission rate it is possible to estimate the ozone concentration due to a project using the equation below.

$$\text{Project Ozone Impact (ppb)} = \text{Project emission rate (tpy)} \times \frac{\text{Modeled impact from hypothetical source (ppb)}}{\text{Modeled emission rate from hypothetical source (tpy)}}$$

To be conservative, the highest concentration from all hypothetical sources in Arizona and New Mexico with release heights of 90 meters and hypothetical emissions of 500 tons per year were used. The Project emissions were calculated as the sum of the

future annual natural gas-firing emissions, based on the highly conservative assumption of an annual capacity factor of 88.5%,³ minus the sum of the past actual annual coal-firing emissions (shown in Table 8). The results of the analysis are in Table 9. As shown, the Project's calculated ozone concentration contribution is less than the SIL of 1ppb.

Table 8. Ozone SIL Analysis Precursor Emission Rates

Source ID	Emission Rate (tpy)	
	NO ₂	VOC
UNIT4 Coal	794.3	36.1
UNIT4 Natural Gas	997.5	65.4

Table 9. Ozone SIL Analysis Results

Precursor	Precursor Project Emissions (tpy)	Max 8-hr Ozone Impact of Hypothetical Source (ppb)	Hypothetical Emissions (tpy)	Project 8-hr Ozone Contribution (ppb)	Class II Significant Impact Level (ppb)
NO _x	203.2	2.333	500	0.95	--
VOC	29.3	0.024	500	0.001	--
Total Project Contribution				0.95	1

³ Note that SRP expects a maximum annual capacity factor of 47.5%. Annual NO_x and VOC emissions associated with a 47.5% capacity factor would lead to negative Project emissions and a negative total project contribution to ozone impacts.

REFERENCES

1. Guideline on Air Quality Models. Appendix W of 40 CFR Part 51, 82 FR 5182, November 29, 2024.
2. Air Quality Modeling Guidelines for Arizona Air Quality Permits. Facilities Emissions Control Section, Air Quality Division, Arizona Department of Environmental Quality, November 1, 2019.
3. Guideline for Determination of Good Engineering Practice Stack Height (Technical Support Document for Stack Height Regulations (Revised)). EPA-450/4-80-023R, U.S. Environmental Protection Agency, June 1985.
4. Clarification on the Use of AERMOD Dispersion Modeling for Demonstrating Compliance with the NO₂ National Ambient Air Quality Standard. U.S. Environmental Protection Agency, September 30, 2014.
5. Guidance on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and PM_{2.5} under the PSD Permitting Program. EPA-454/R-19-003, U.S. Environmental Protection Agency, April 2019.
6. Clarification on the Development of Modeled Emission Rates for Precursors (MERPs) as a Tier 1 Demonstration Tool for Ozone and PM_{2.5} under the PSD Permitting Program. U.S. Environmental Protection Agency, April 30, 2024.

EXHIBIT "4"

DECLARATION OF HAYDEN FENNELL
ON BEHALF OF SALT RIVER PROJECT

AGRICULTURAL IMPROVEMENT AND POWER DISTRICT

I, Hayden Fennell, state as follows:

1. I am over the age of 18, competent to make this declaration, and unless otherwise indicated, all of the facts set forth in the declaration are based on my personal knowledge.

2. I am employed at Salt River Project Agricultural Improvement and Power District (SRP) as a Senior Project Origination Consultant. I am the project manager for early-stage development activities on the Coronado Generating Station (CGS) Repower Project and the Springerville Unit 4 (SGS Unit 4) Repower Project. I have a Bachelor of Science in Environmental Science from the University of South Carolina and a Master of Science in Environmental and Resource Management from Arizona State University. I have worked at SRP for just over a year and have been working in early stage permitting for generation and transmission for almost seven years. Prior to SRP, I worked as an environmental consultant for utility companies assisting in generation and transmission siting and environmental permitting. My specialties include National Environmental Policy Act and Certificate of Environmental Compatibility permitting.

The SGS Unit 4 Repower Project

3. The SGS Unit 4 Repower Project will consist of converting the existing SGS Unit 4 to use natural gas instead of coal as its fuel source. The conversion will require replacement of the burners and ignition systems within the existing boilers, which produce steam for generating electricity. SRP will continue to use much of the existing plant infrastructure including the buildings, boilers, generators, condensers, selective catalytic reduction systems, and cooling towers. Equipment that is no longer needed for operations would be abandoned in place or removed as necessary. This conversion will follow the

1 same timeline as TEP-owned Units 1 and 2, which was approved by the Arizona
2 Corporation Commission on March 4, 2026.

3 4. The natural gas to be supplied to SGS Unit 4 will rely on the same new,
4 natural gas lateral pipeline to be constructed for SGS Units 1 and 2. The natural gas lateral
5 pipeline and fuel supply yard will be constructed, operated and maintained by a third-party
6 gas supplier.

7 **SGS Unit 4 Repower Project Timeline and Cost**

8 5. SRP is in the early phases of the SGS Unit 4 Repower Project including
9 permitting, early-stage engineering design, and coordination with potential third-party gas
10 suppliers. The anticipated Commercial Operation Date for the project is December 29,
11 2029, which was established to ensure that SGS 4 could remain in operation as needed into
12 the 2040's while meeting greenhouse gas emissions standards that went into effect in July
13 2024. Even if the greenhouse gas standards are repealed, SRP is committed to ceasing coal-
14 fired generation by 2032, and this project is essential for SRP to meet its sustainability
15 goals while maintaining reliability and affordability. The construction of the natural gas
16 lateral is anticipated to begin in late 2028, after approval by the Federal Energy Regulatory
17 Commission.

18 6. The estimated cost to construct and modify SGS Unit 4 is \$100 million.

19 **Economic Impact**

20 7. As a political subdivision of the State of Arizona, SRP is exempt from local
21 property taxes and is authorized by statute to make voluntary contributions in lieu of
22 pursuant to A.R.S. § 48-242. Accordingly, SRP voluntarily paid approximately \$10 million
23 in contributions to Apache County school districts for tax year 2025. Of this amount,
24 approximately \$2.4 million was donated to Round Valley School District, the district in
25 which SGS Unit 4 is located. SRP anticipates making comparable contributions throughout

1 the life of the project.

2 8. SGS is operated by TEP and is staffed at a facility-wide level, not on a unit-
3 by-unit basis. TEP is working to determine the staffing levels required for operation after
4 conversion of Units 1, 2, and 4, but it is expected to require fewer employees than current
5 staffing levels.

6 **Public & Stakeholder Outreach**

7 9. SRP completed a comprehensive public involvement program to support the
8 SGS Unit 4 Repower Project and maintain transparency with stakeholders. To reach
9 surrounding residents and agencies, SRP instituted multiple public participation activities,
10 including public meetings, project mailers, a telephone line, newspaper and social media
11 advertisements, a dedicated website, and agency briefings.

12 10. A bilingual dedicated project website was launched on April 1, 2026. The
13 website contains project information, news releases, anticipated timelines, details on public
14 meetings and information on how to contact SRP.

15 **Coal Community Transition**

16 11. SRP formed the Coal Community Transition team to address economic and
17 community concerns as SRP transitions away from coal generation. This team has hosted
18 bi-monthly meetings since 2022 to address community concerns and has provided
19 economic support in the form of grants to several Apache County community and non-
20 profit organizations. In addition to these meetings, the Coal Community Transition team
21 hosted an informational booth at the 2025 Apache County Fair (August 20-23, 2025) to
22 inform county residents that future projects were being sited in the region.

23 **Public Meetings**

24 12. Two project specific public meetings were held to provide the public with
25 information on the SGS Unit 4 Repower Project and CEC process. First, an in-person

1 public open house was held on April 14, 2026, followed by a virtual public meeting,
2 consisting of a presentation, on April 16, 2026. These events drew 45 attendees and six
3 comments.

4 **Mailings, News Releases, and Social Media Advertisements**

5 13. SRP sent public notification letters to over 4,300 property owners in the
6 nearby Towns of Saint Johns, Springerville and Eagar, as well as the residents within the
7 adjacent Elk Valley Ranch. The notification letters were mailed on April 1, 2026, to alert
8 community members of public meetings being held on April 14 and 16, 2026. Additionally,
9 SRP published news releases in the White Mountain Independent on April 10, 2026, to
10 inform local communities of the public meetings. SRP also ran bilingual social media
11 advertisements over a 24-hour period promoting each public open house to social media
12 users within the notification area.

13 **Stakeholder Outreach Letter**

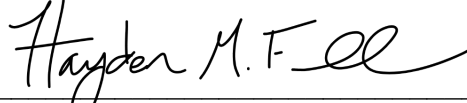
14 14. On April 2, 2026, SRP also sent a stakeholder outreach letter to state and
15 local government officials including: the Apache County Planning and Zoning
16 Commission, Board of Directors, Community Development Department; the Town of
17 Saint Johns; the Town of Eagar; the Town of Springerville; and Arizona State House
18 Representatives. A full list of recipients is included in Appendix A to the Environmental
19 Narrative Report attached as an exhibit to Emily Curci's Declaration.

20 **Community Support**

21 15. Overall, SRP has carried out a comprehensive public involvement program
22 to support the SGS Unit 4 Repower Project. I personally participated in each activity
23 discussed above, and throughout all activities the project has received overwhelming
24 support from members of the public, local governments, and other stakeholders.
25

1 I hereby declare under penalty of perjury that the foregoing is true and correct to the
2 best of my knowledge and belief.

3 Dated: 05/01/2026



4 Hayden Fennell
5 Senior Project Origination Consultant
6 Salt River Project Agricultural Improvement
7 and Power District
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EXHIBIT "5"

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DECLARATION OF EMILY CURCI
ON BEHALF OF KIMLEY-HORN, AS CONSULTANT TO SALT RIVER
PROJECT AGRICULTURAL IMPROVEMENT AND POWER DISTRICT

I, Emily Curci, state as follows:

1. I am over the age of 18, competent to make this declaration, and unless otherwise indicated, all the facts set forth in this declaration are based on my personal knowledge.

2. I am employed by Kimley-Horn and Associates (Kimley-Horn) as an Environmental Scientist.

3. Salt River Project Agricultural Improvement and Power District (SRP) engaged Kimley-Horn to oversee the analysis of environmental impacts associated with the Springerville Generating Station (SGS) Unit 4 Repower Project (SGS Unit 4 Repower Project). The SGS Unit 4 Repower Project will consist of converting SGS's existing Unit 4 to use natural gas instead of coal as its fuel source.

4. Specifically, Kimley-Horn analyzed whether the SGS Unit 4 Repower Project would impact land use, noise, scenic and visual resources, cultural resources, and biological resources. The impacts on air quality are analyzed separately.

5. I conducted and supervised the environmental analysis to evaluate the environmental impacts associated with the SGS Unit 4 Repower Project, exclusive of the natural gas delivery system.

6. The Arizona Corporation Commission approved the conversion of TEP-owned SGS Units 1 and 2 in March 2026. The natural gas pipeline lateral and fuel supply yard necessary for the conversion of SGS Units 1 and 2 are expected to provide natural gas for the conversion of SGS Unit 4. The pipeline lateral, fuel supply yard, and associated land or easements necessary for these facilities will be constructed, operated, and

1 maintained by a third-party gas supplier and authorized by the Federal Energy Regulatory
2 Commission (FERC).

3 7. Any additional piping or associated infrastructure necessary to deliver
4 natural gas to Unit 4, beyond what is required for the conversion of SGS Units 1 and 2, is
5 anticipated to be minor in scale and would not result in significant environmental impacts.
6 Such infrastructure is expected to be constructed within the developed portion of the SGS
7 main plant site and similar in profile and appearance to the facilities required for SGS Units
8 1 and 2. The SGS Unit 4 Repower Project, as analyzed by Kimley-Horn, requires
9 performing internal changes to the existing boiler systems, including installing new burners
10 and igniters.

11 8. As summarized below and more fully detailed in the Environmental
12 Narrative Report attached hereto as Exhibit A, the environmental impacts resulting from
13 the SGS Unit 4 Repower Project will be minimal given that the configuration of Unit 4 will
14 not change and all modifications (exclusive of the natural gas delivery system) will occur
15 within the existing Unit 4 structure.

16 **Project Location**

17 9. The existing SGS main plant site is located approximately 11.8 miles east of
18 U.S. Highway 191, and approximately 15 miles northeast of Springerville/Eagar, in
19 Apache County. The SGS main plant site is within Section 27, and portions of Sections 26,
20 28, 29, 32, 33, 34, and 35 of Township 11 North, Range 30 East, Gila-Salt River Principal
21 Meridian, as depicted on the Voigt Ranch, Arizona, United States (US) Geological Survey
22 7.5-minute topographic quadrangle. (See Environmental Narrative Report, Figure 1).

23 **Land Use and Recreation**

24 10. Kimley-Horn examined the impact of the SGS Unit 4 Repower Project on
25 land use. (See Environmental Narrative Report, Section 3).

1 11. The SGS Unit 4 Repower Project would be constructed within the existing
2 SGS Unit 4 structure, within the main plant site comprised of industrial land use, where no
3 plans for conflicting development exist.

4 12. There are no parks, trails, or recreation facilities located within the SGS main
5 plant site, and the SGS main plant site is not available for recreational purposes. Arizona
6 State Land Department (ASLD) lands in the vicinity of the SGS main plant site are
7 available for recreation opportunities. Access to nearby ASLD lands would not be affected
8 during construction of the SGS Unit 4 Repower Project, and the continued plant operations
9 will not change or alter existing recreational areas in the areas surrounding the plant.

10 13. The SGS Unit 4 Repower Project is compatible with existing and planned
11 land use, and there will be no impacts to land use from the SGS Unit 4 Repower Project.

12 **Scenic and Visual Resources**

13 14. No scenic resources were identified within an approximate one-mile radius
14 of the SGS main plant site.

15 15. SGS is located in a remote area away from surrounding towns and highways.
16 Topography is quite varied. Numerous hills, mesas, and buttes block views of SGS,
17 including Unit 4, from surrounding vantage points. The Elk Valley Ranch community, a
18 remote, off-grid, ranch community, is located directly east of the SGS. While there are 296
19 parcels in Elk Valley Ranch, most of these parcels are vacant. The closest residence to SGS
20 is located approximately 1.3 miles to east.

21 16. Because construction activities will take place within the existing Unit 4
22 structure, views of the facility will not be altered, and no visual impacts to nearby
23 communities are anticipated.

1 **Cultural Resources**

2 17. Kimley-Horn oversaw the assessment of potential impact of the SGS Unit 4
3 Repower Project on cultural resources. (See Appendix C of the Environmental Narrative
4 Report.)

5 18. The SGS Unit 4 Repower Project will occur within the existing Unit 4
6 structure, within the developed portions of the main plant site. Since modifications
7 associated with the SGS Unit 4 Repower Project will occur within existing facilities, there
8 are no potential impacts on cultural resources.

9 **Biological Resources**

10 19. Kimley-Horn analyzed the potential impact on wildlife and plants from the
11 SGS Unit 4 Repower Project. (See Environmental Narrative Report, Section 3).

12 20. The SGS main plant site spans approximately 2,058 acres, enclosed by a
13 perimeter barbed-wire fence. Most of SGS main plant site is developed or heavily
14 disturbed. However, there are undeveloped areas which constitute potential desert habitat,
15 but this habitat is previously disturbed, therefore it is considered low-quality. While the
16 potential exists for the undeveloped portions of the main plant site to be used by migratory
17 birds, bats, and insects, these portions of the SGS main plant site exhibit relatively low
18 value habitat for most wildlife, compared to most areas outside of and surrounding the
19 main plant site.

20 21. All construction for the SGS Unit 4 Repower Project will occur within the
21 existing SGS Unit 4 structure, within the developed main plant site. No potential habitat
22 will be removed as a result of the SGS Unit 4 Repower Project.

23 22. The existing SGS Unit 4 structure and developed areas of the main plant site
24 do not provide habitat for plants and animals, including special status species. Special
25 status species would not experience long-term detrimental impacts related to the loss or

1 alteration of vegetative cover based on a lack of suitable habitat within the existing
2 facilities.

3 23. Because of the industrialized use of the area, the SGS Unit 4 Repower Project
4 is not expected to impact biological resources.

5 **Noise**

6 24. The SGS Unit 4 Repower Project is anticipated to reduce overall operational
7 noise levels at SGS. Conversion of the boiler to burn natural gas is expected to lead to
8 quieter boiler operations; however, the most significant anticipated reductions in noise
9 levels are mainly due to the removal of equipment and/or cessation of operations associated
10 with coal handling and conditioning, which are typically very loud.

11 **Conclusion**

12 25. It is my expert opinion that the SGS Unit 4 Repower Project would have no
13 significant environmental impacts. The SGS Unit 4 Repower Project is compatible with
14 existing and planned land uses. The proposed facilities for the conversion of Unit 4 would
15 not be visible outside Unit 4 and would not result in visual impacts. All modifications will
16 occur within the existing Unit 4 facility; therefore, no cultural resource impacts are
17 anticipated. Because the SGS Unit 4 Repower Project is in an industrialized area with
18 degraded, low-value habitat, there will be no material impacts on biological resources. In
19 summary, the SGS Unit 4 Repower Project is environmentally compatible with existing
20 and future land uses, and any environmental resource impacts are negligible.

1 I declare that the foregoing is true and correct to the best of my knowledge,
2 information, and belief.

3 Dated: 05/01/2026

Emily Curci

5 Emily Curci
6 Environmental Scientist
7 Kimley-Horn and Associates

Springerville Generation Station Unit 4 Repower Project Environmental Narrative Report

Salt River Project Agricultural Improvement and Power District

Date: May 1, 2026

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1. Introduction

Arizona Corporation Commission (Commission) Decision No. 55477 dated March 18, 1987, in Docket No. L-00000C-86-0074-0000 approved a Certificate of Environmental Compatibility (CEC) authorizing the construction of Springerville Generating Station (SGS) Unit 4 as amended by Decision No. 65437. Tucson Electric Power Company (TEP) transferred the CEC authorizing the construction and operation of SGS Unit 4 to SRP on February 2, 2007.

SRP is now requesting an amendment to Decision Nos. 55477 and 65437 for the proposed SGS Unit 4 Repower Project, a project to convert the existing coal-fired unit to a natural gas-fired unit.

In support of the application to amend, Kimley-Horn conducted an environmental review for the SGS Unit 4 Repower Project. This review consisted of:

- review and summary of prior information submitted for the approved power plant and associated facilities;
- review of new information, including spatial and non-spatial data, related to the construction and operation of the SGS Unit 4 Repower Project; and
- compatibility analysis of the SGS Unit 4 Repower Project with existing and future land uses, scenic and visual resources, biological resources, cultural resources, and noise.

2. Project Overview

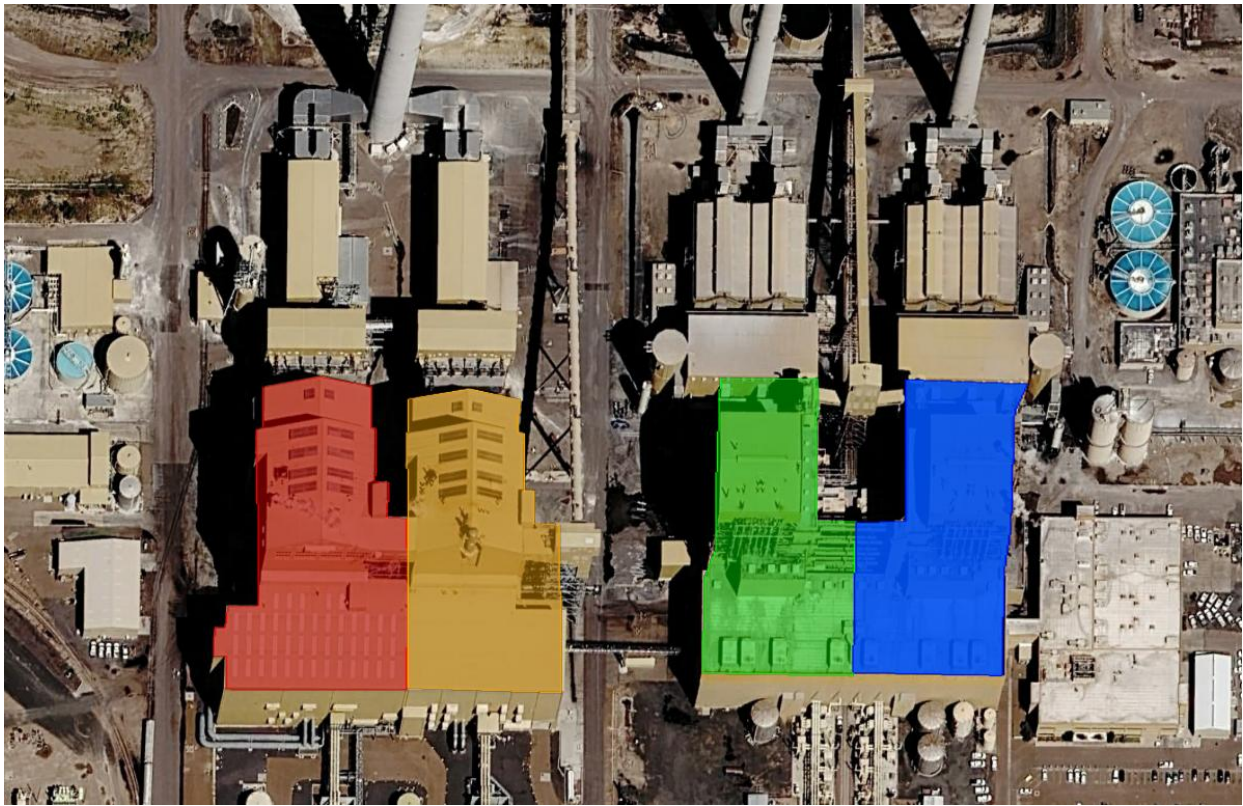
Project Description

SGS Unit 4 is one of four existing coal-fired units within the SGS main plant site. Unit 4 supplies power to SRP's service territory and provides capacity during times of high electrical demand (Figure 1). SGS Units 1 and 2 are owned by TEP, Unit 3 is owned by Tri-State Generation and Transmission Association, and Unit 4 is owned by SRP. TEP operates and maintains all four units. On March 4, 2026, the Commission voted unanimously to approve TEP's request to modify the CEC for SGS Units 1 and 2 to allow the conversion from coal to natural gas-fired steam generation.

A new natural gas pipeline lateral and fuel supply yard necessary for the conversion of SGS Units 1 and 2 will be constructed, operated, and maintained by a third-party gas supplier. The same natural gas infrastructures are expected to supply natural gas to Unit 4. This report does not detail impacts associated with the pipeline lateral or the fuel supply yard infrastructure. Any additional piping or associated infrastructure necessary to deliver natural gas to Unit 4, beyond what is required for the conversion of SGS Units 1 and 2, is anticipated to be minor in scale and would not result in significant environmental impacts. Such infrastructure is expected to be constructed within the developed portions of the SGS main plant site and similar in profile and appearance as the facilities required for SGS Units 1 and 2.

Following the conversion of SGS Units 1, 2, and 4 from coal-fired to natural gas generation, it is estimated that approximately forty to fifty percent of the existing workforce will continue to be employed to run the SGS facility.

Figure 1. SGS Units



Unit 4 Unit 3 Unit 2 Unit 1

The existing SGS Unit 4 includes a boiler that uses high temperatures, driven by coal combustion, to convert water into steam which then drives turbines to produce electricity. The SGS Unit 4 Repower Project entails converting the existing SGS Unit 4 to burn natural gas instead of coal as the fuel source. The conversion will require installation of a gas firing system, gas-specific burner/ignitor controls within the existing boilers. SGS Unit 4 provides, and will continue to provide, 509 volt-amperes, or approximately 458 megawatts (MW) of nameplate capacity and 417 MW of net generation capacity.

SGS Unit 4 shares a coal-handling system with Unit 3, but each unit has its own coal pulverizing systems. SRP would continue using other existing plant technologies, including but not limited to, the buildings, boilers, generators, condensers, applicable air pollution control systems, and cooling towers. Equipment no longer needed for operations would be abandoned in place or removed as necessary.

Location

SGS Unit 4 is located along County Road 4126, approximately 15 miles northeast of downtown Springerville, in Apache County, Arizona (Figure 2). SGS, which is centered on SGS Unit 4 (Figure 3), is located within Section 27, and portions of Sections 26, 28, 29, 33, and 34 of Township 11 North, Range 30 East, Gila-Salt River Principal Meridian.

Figure 2. Project Vicinity Map

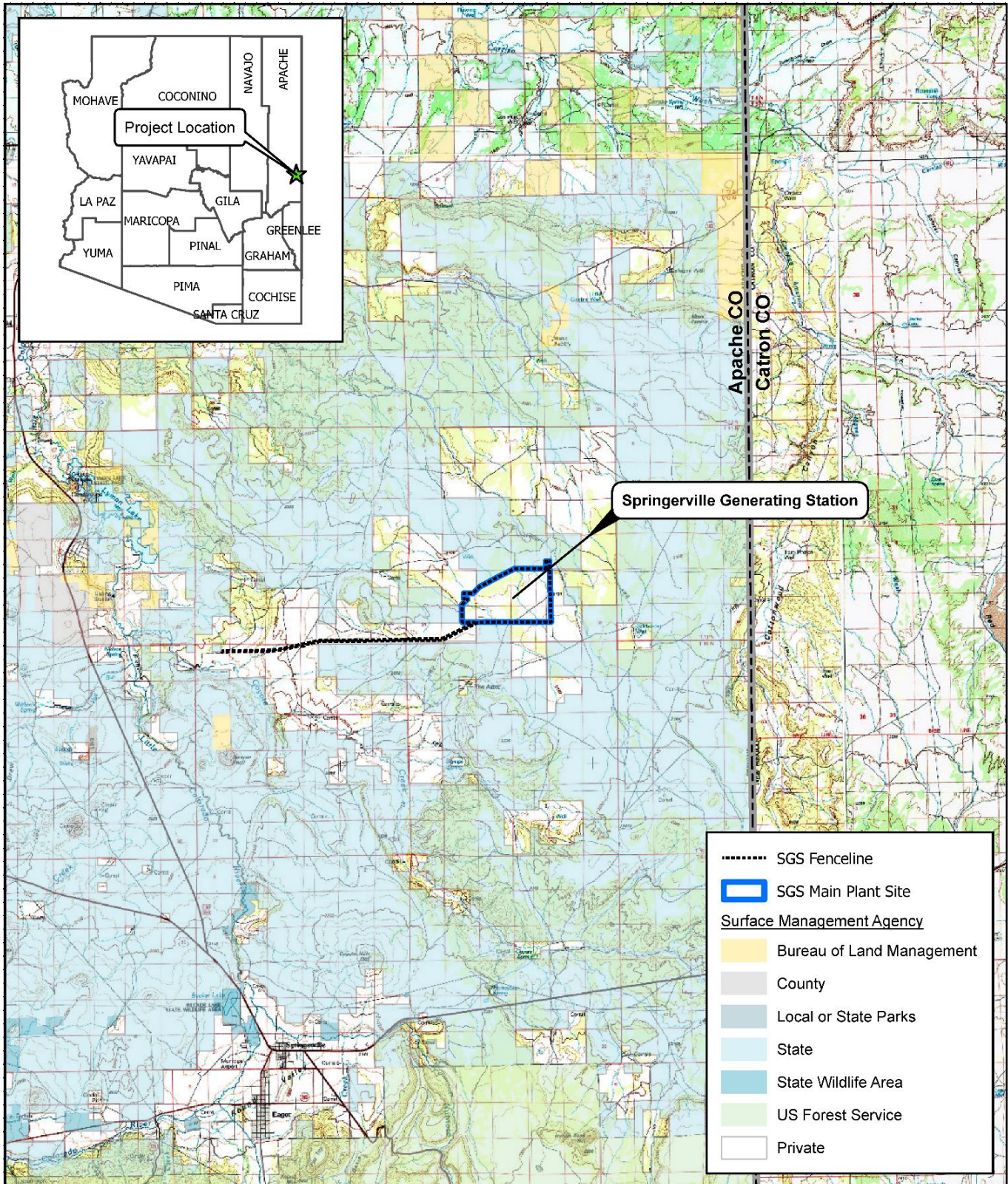
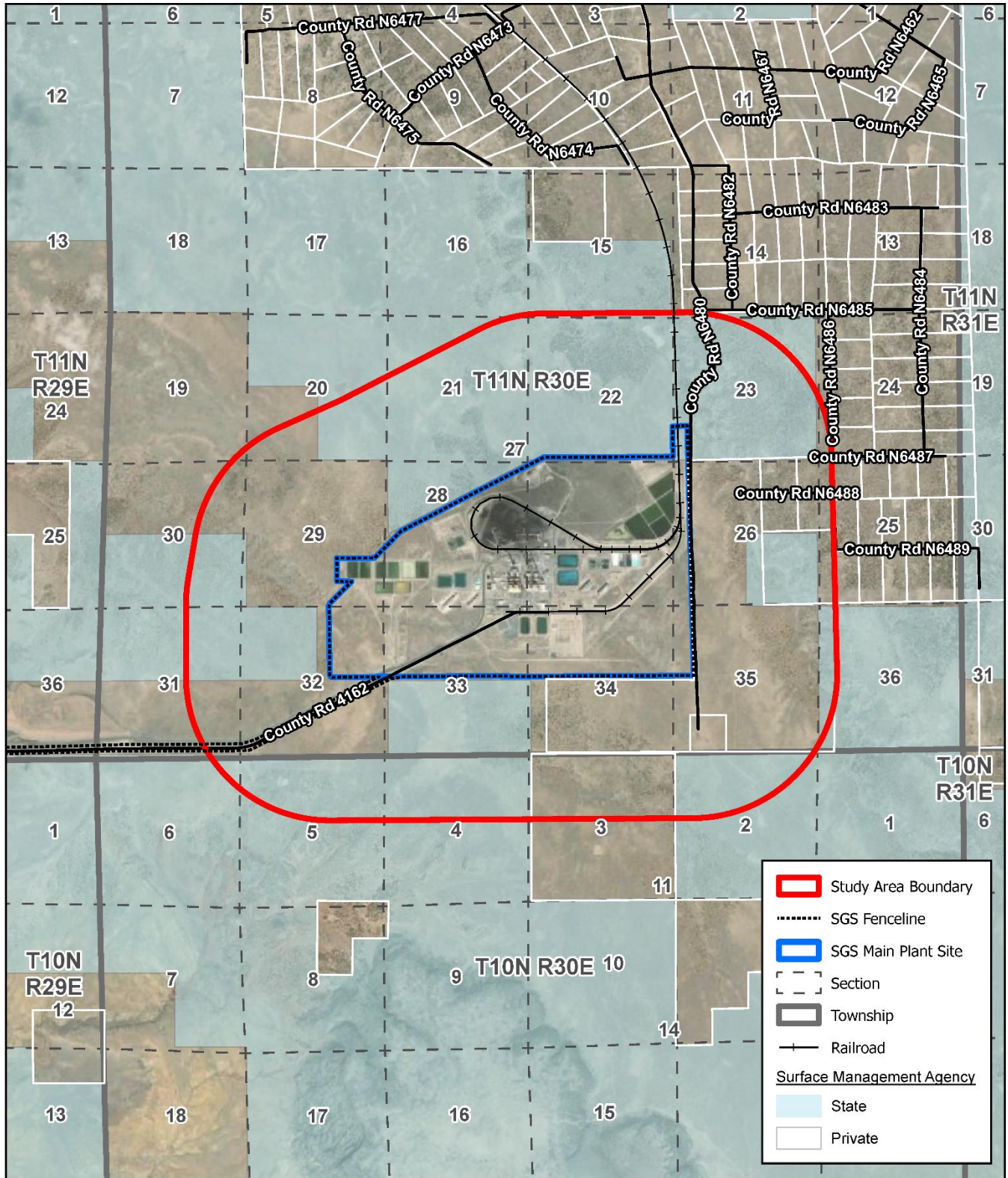


Figure 3. Ownership Map



Summary Table of Facility Information

In support of SRP’s application to amend Decision No. 55477, as amended, facility information material for the natural gas conversion is provided below:

1. Name and address of the Applicant:
Name: Salt River Project Agricultural Improvement and Power District Address: PO Box 52025, Phoenix 85072-2025
2. Name, address, and telephone number of a representative of the Applicant who has access to technical knowledge and background information concerning this application, and who will be available to answer questions or furnish additional information:
Name: Hayden Fennell Address: PO Box 52025, Phoenix 85072-2025 Telephone: (602) 236-5387 Fax: (602) 236-3407 Email: hayden.fennell@srpnet.com
3. Description of the proposed facilities:
4.1 With respect to an electric generating plant:
i. Type of generating facilities:
Decision No. 55477, as amended, authorizes the construction and operation of Unit 4 as a steam electric generating unit, fueled by coal. SRP’s application requests to amend Decision No. 55477, as amended to allow the conversion of SGS Unit 4 to a natural gas-fired unit.
ii. Number and size of proposed units:
The conversion will not change the nameplate capacity of the existing unit.
iii. The source and type of fuel to be utilized, including a proximate analysis of fossil fuels.
To supply SGS Unit 4 with natural gas, a lateral and fuel supply yard is expected to be constructed, operated, and maintained by a third-party gas supplier. The gas lateral and fuel yard would fall under the Federal Energy Regulatory Commission (FERC) jurisdiction, and the associated land or easements would be obtained by the third-party gas supplier.
Type of cooling to be utilized and source of any water to be utilized.
Following the conversion of the plant, there will be no material change to the cooling towers or source of water utilized compared to current coal-fired operations.
iv. Proposed height of stacks and number of stacks, if any.
Following the conversion of the plant, there will be no material change to the number of stacks, or stack height, compared to current coal-fired operations.

v. Dates for scheduled conversion and firm operation of each unit and date construction must commence in order to meet schedules:

Unit	Project Construction Start	Commercial Operation Date
4	3 rd Quarter 2029	4 th Quarter 2029

vi.a Project Operation When converted to natural gas, Unit 4 will be a firm resource that provides capacity during system peaks.

4. Description of the environmental studies the Applicant has performed.

The Applicant contracted with the following consultants to perform environmental studies.

Consultant	Environmental Studies
RTP Environmental Associates, Inc.	Air Quality Modeling Report (See Harbin Declaration, Exhibit A)
Kimley-Horn	Land Use, Scenic and Visual Resources, Cultural Resources, Biological Resources (this Exhibit)

3. Resource Review and Analysis of Impacts

This report analyzes the potential for impacts to land use, scenic and visual resources, biological resources, cultural resources, and noise from converting Unit 4 to use natural gas as the fuel source compared to the existing coal-fired operations using a one-mile buffer surrounding the SGS plant site as shown on Figure 3 (Study Area). As detailed below, the SGS Unit 4 Repower Project has negligible impacts to these resources within the Study Area as compared to exiting coal-fired operations.

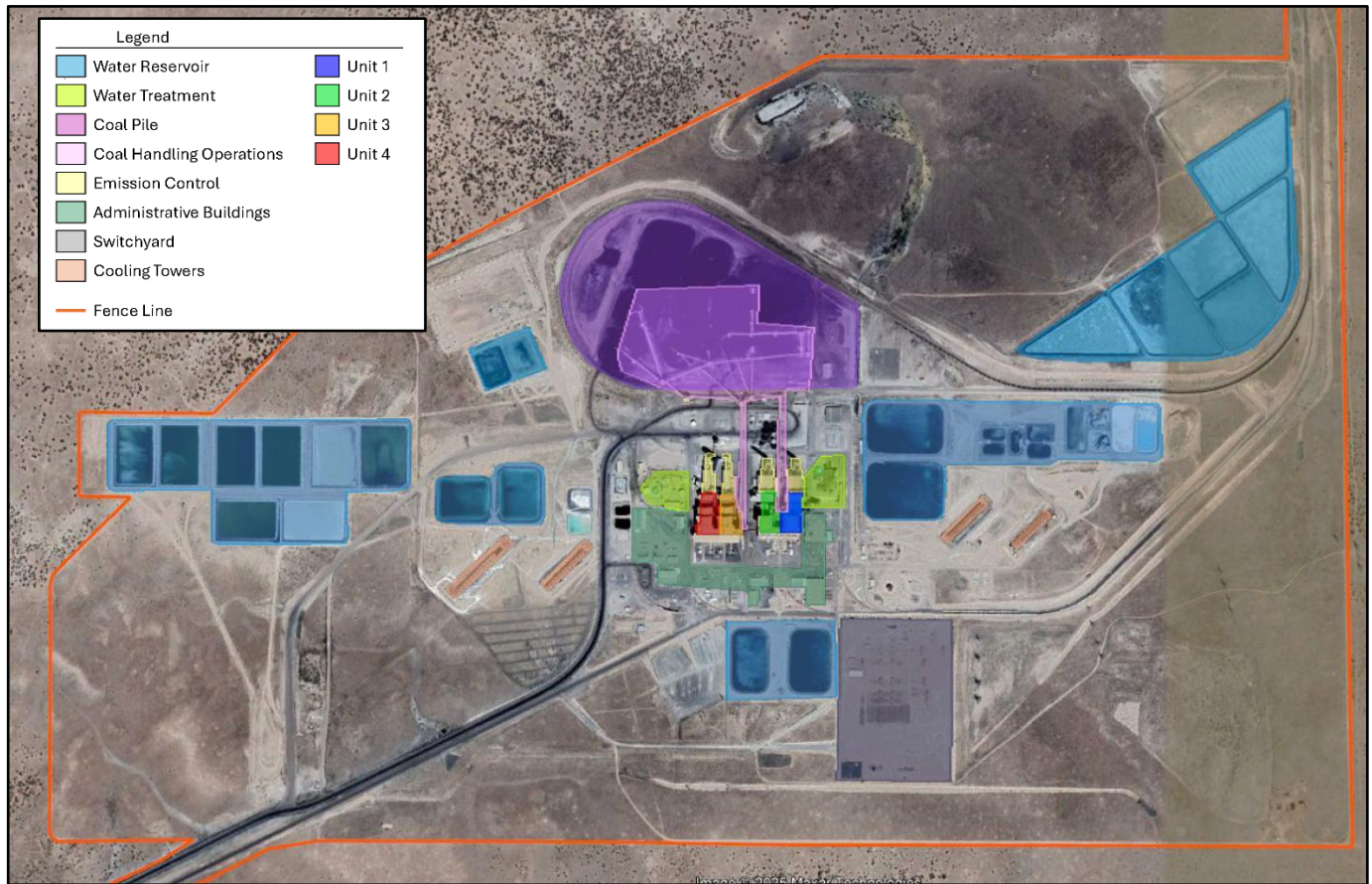
Impacts from the natural gas conversion to the Unit’s air emissions are separately analyzed.

Land Use

Jurisdiction and Land Ownership

Modifications needed to convert SGS Unit 4 to natural gas operations will occur within the main plant site shown by the fenceline outlined in Figure 4. Specifically, the conversion will require installation of a gas firing system, and gas-specific burner/ignitor controls within the existing boilers.

Figure 4. SGS Main Plant Site



Existing Land Use within the Study Area

Existing land uses within the Study Area, shown in Figure 3, include dispersed recreational opportunities (on Arizona State Land Department (ASLD) land), the existing SGS facility and associated transmission lines, transportation facilities (railroad, plant access road, and unpaved roads), and vacant land. Specific land uses are laid out in detail below.

Recreation- The ASLD owns and manages lands immediately adjacent to the SGS property which may be used for recreational hunting of elk, mule deer, or pronghorn.

Transportation- Transportation facilities within the Study Area include a mix of local, state, and private roadways as well as the railroad which brings coal to the SGS main plant site.

Utilities- Utility land uses in the Study Area include the existing SGS power plant, associated switchyard, and other buildings of facilities associated with the SGS power plant.

Vacant- A majority of land within the Study Area is vacant, undeveloped land. Most of the vacant land is owned by TEP; however, some sections are owned by ASLD.

Surrounding Land Use

While there are no residences within the Study Area, dozens of dispersed rural residences are located within a 5-mile radius of SGS, with the nearest residence located approximately 1.3 miles east of the SGS main plant site within the Elk Valley Ranch Community. The Elk Valley Ranch Community is a secluded, off-grid residential, recreational hobby ranching community.

The nearest towns are Springerville and Eagar, located at the intersection of U.S. Highways 191 and 60, approximately 15 miles southwest of SGS. Both communities are incorporated; Springerville encompasses approximately 12 square miles, and Eagar encompasses approximately 11 square miles. Existing development in Springerville and Eagar is primarily oriented toward tourism—such as hiking, camping, and fishing—and tourism-related services. The communities generally exhibit a sparse, suburban character.

Apache County Zoning Regulations

Apache County’s land-use planning aims to maintain its open, rural character, with specific regulations for development and a focus on managing growth while preserving traditional ranching areas. It also focuses on encouraging community development for its rural communities.

The Apache County Comprehensive Plan (Comprehensive Plan) (Apache County 2019) serves as a guide for decisions by the Planning and Zoning Commission and the Board of Supervisors concerning growth and development. It provides an understanding of existing and proposed land use for decision-makers, the public, and developers. According to the Comprehensive Plan, the existing SGS facility is located within an area designated as *Rural Ranch*. The County’s stated goal for this designation is “. . . to maintain the open character of land traditionally used for ranching in Apache County” (Apache County 2019:12).

Outreach to Stakeholders

As part of the land use study, the Comprehensive Plan as well as the Apache County interactive web map, were evaluated. Identified land uses and development plans were reviewed and verified with the Apache County Community Development Department, which manages planning and zoning applications in Apache County. Representatives from the Arizona legislature, Apache County, and other stakeholders were invited to participate in the SGS Unit 4 Repower Project stakeholder engagement efforts. The purpose of this representation was to ensure consistency with plans and to identify potential issues throughout the environmental and public planning outreach process.

In April 2026, on behalf of SRP, Kimley-Horn sent letters to state and local government officials listed in Table 1, providing information on the SGS Unit 4 Repower Project and requesting new or additional information on plans or planned developments. See Appendix A for a copy of the letter and accompanying map sent to community officials, and letters and emails received in response to the notification letters.

Table 1. List of Community Officials

Contact Name	Title	Jurisdiction/ Agency	Response
Matthew Fish	Community Development Director	Apache County	No response to date
Preston Raban	Economic Development Director	Apache County	No response to date
Travis Johnson	P&Z Commission Member	Apache County	No response to date
Brad Peterson	P&Z Commission Member	Apache County	No response to date
Bob Pollock	P&Z Commission Member	Apache County	No response to date
Michael Bragiel	P&Z Commission Member	Apache County	No response to date
Carey Dobson	P&Z Commission Member	Apache County	No response to date
Bobby Fite	P&Z Commission Member	Apache County	No response to date
Brad Jarvis	P&Z Commission Member	Apache County	No response to date
Kay Hauser	P&Z Commission Member	Apache County	No response to date
Dan Muth, Chairman	P&Z Commission Member	Apache County	No response to date
Nelson Davis	Board Member - District III	Apache County	No response to date
Alton Joe Shepherd	Board Member - District II	Apache County	No response to date
Dr. Joe Shirley, Jr.	Board Member - District I	Apache County	No response to date
Ryan Patterson	County Manager	Apache County	No response to date
Chris Chiesl	Community Development Director	St. Johns	No response to date
Paul Ramsey	City Manager	St. Johns	No response to date
Cindy Lee Richins	City Clerk	St. Johns	No response to date
Spence Udall	Mayor	St. Johns	No response to date
Jill Patterson	Vice Mayor	St. Johns	No response to date
Tony Raykovitz	Councilman	St. Johns	No response to date
Nathan Wengert	Councilman	St. Johns	No response to date
Joe Greene	Councilman	St. Johns	No response to date
Mandi Huth	Councilwoman	St. Johns	No response to date
Brad Jarvis	Councilman	St. Johns	No response to date
Kelsi Miller	Town Clerk	Springerville	No response to date
Ted Soltis	Town Manager	Springerville	Expressed strong support for converting the SGS facility to burn natural gas.
Richard Davis	Mayor	Springerville	No response to date
Doug Henderson	Vice Mayor	Springerville	No response to date
Florencio Lozoya	Council Member	Springerville	No response to date
Stormy Palmer	Planning and Zoning Director	Springerville	No response to date
Terry Shove	P&Z Commission Chairperson	Springerville	No response to date
Tony Contreras	P&Z Commission	Springerville	No response to date
Bill Lucas	P&Z Commission	Springerville	No response to date
Daniel Chavez	P&Z Commission	Springerville	No response to date

**Springerville Generating Station Unit 4 Repower Project
Environmental Narrative Report**

Contact Name	Title	Jurisdiction/ Agency	Response
Steve Huggenberger	P&Z Commission	Springerville	No response to date
Jessica Vaughan	Town Clerk	Eagar	Yes, forwarded to Town Manager and will submit comments on support of project
Guy Phelps	Mayor	Eagar	Expressed strong support for proposed project
Marsha Tucker	Vice-Mayor	Eagar	No response to date
Brandon Slade	Councilman	Eagar	No response to date
Bryce Burnham	Councilman	Eagar	No response to date
Ray Hamblin	Councilman	Eagar	No response to date
William Greenwood	Councilman	Eagar	No response to date
Titan Merrill	Councilman	Eagar	No response to date
Britney Reynolds	Community Development Director	Eagar	Yes, Support
Chelsea Slade	P&Z Commission Member	Eagar	No response to date
Becky Crosby	P&Z Commission Member	Eagar	No response to date
JoElla Younkin	P&Z Commission Member	Eagar	No response to date
Kristi Penrod	P&Z Commission Member	Eagar	No response to date
Brenda Ciminski	P&Z Commission Member	Eagar	No response to date
Debra Seeley	P&Z Commission Member	Eagar	No response to date
Brannon Eagar	Town Manager	Eagar	Expressed strong support for proposed project
Mae Peshlakai	Representative	AZ House of Reps	No response to date
Myron Tsosie	Representative	AZ House of Reps	No response to date
Teresa Hatathile	Senator	AZ Senate	No response to date
Ginger Ritter	Project Evaluation Program Supervisor	Arizona Game and Fish Department	Yes, will review, send comments, and coordinate with staff on attending public meeting
Aaron Hartzell	Regional Supervisor – Habitat Evaluation, and Lands Branch Chief	Arizona Game and Fish Department	AZGFD would like to work closely with SRP during the planning and development of this project. SRP would also appreciate the opportunity to review plans for natural gas pipeline lateral. *

*Note: the natural gas pipeline lateral will be constructed, operated, and maintained by a third-party gas supplier.

Land Use Conclusion

The SGS Unit 4 Repower Project will be constructed within the existing SGS main plant site, an established industrial area, on private property, used for ongoing electric generation, where no plans for conflicting development exist. The SGS Unit 4 Repower Project is compatible with existing and planned land uses. There will be no land use impacts from the SGS Unit 4 Repower Project.

Scenic and Visual Resources

The SGS main plant site is situated within a rural landscape characterized by open rangeland, sparse development, and existing energy infrastructure (see Figures 6 and 7). The area is characterized by high-elevation grasslands and open woodlands consisting of native perennial grasses, pinyon-juniper woodland. No scenic resources were identified within an approximate one-mile radius of the SGS main plant site. The main plant site's remote location, along with the area's hills, mesas, and buttes, combines to block views of SGS from the surrounding highways and the towns of Springerville, Eagar, and St. Johns. The closest unincorporated community is Elk Valley Ranch, a remote, off-grid, residential, recreational hobby ranching community, located directly east of SGS. While there are 296 parcels in Elk Valley Ranch, most of these parcels are currently vacant. The closest residence to SGS is located 1.3 miles to the east. Because modifications associated with the proposed conversion will occur within the developed portions of the main plant, views of SGS will not be altered, and no significant visual impacts are anticipated.

Cultural Resources

Prior Cultural Resources Information

Construction activities for the SGS commenced in 1978, resulting in substantial disturbance of all land within the boundaries of the main plant site. In addition to the construction of the power plant's facilities, extensive site preparation and grading to establish proper drainage patterns and accommodate the installation of an evaporation pond, wastewater ponds, and retention ponds, resulted in substantial disturbance of all land within the boundaries of the main plant site. Units 1, 2, 3, and 4 became operational in 1985, 1990, 2006, and 2009 respectively and have since remained in continuous service.

A records search identified nineteen (19) previously conducted cultural resource surveys within a 1-mile radius of the SGS main plant site, eight (8) of which intersect the main plant site (Chronicle Heritage 2026, Appendix B). Only one of the intersecting surveys was conducted within the past 10 years, with the remaining seven (7) intersecting surveys predating the Arizona State Museum's (ASM's) 10-year threshold and therefore are not considered accurate documentation for use in informed planning decisions (ASM 2024).

Figure 5. View of Existing Facility from the Southwest



The site file search and literature review identified no previously recorded archaeological sites within the main plant site. However, one historic-period linear feature – an unnamed access road visible on historic aerial imagery and early cartographic sources– provides access to SGS and extends into the main plant site. Historic map and aerial review indicate that this road was constructed between 1969 and 1983, coincident with development of the generating station, and remains in active use. According to ASM's (2024) Policy and Procedures Regarding Historical Sites and Features, in-use historical features such as roads are not subject to documentation under the Arizona Antiquities Act, and ASM does not assign site numbers or accept updates for in-use portions of such features. Furthermore, ASM guidance on linear resources notes that short, unimproved, or utilitarian access roads associated with industrial facilities and lacking independent historical significance are not considered eligible for inclusion in the National Register of Historic Places (NRHP) (ASM 2024).

Because modifications associated with the SGS Unit 4 Repower Project will occur within the developed portions of the main plant site, there are no potential impacts to cultural resources.

Biological Resources

The SGS Unit 4 Repower Project will have no effect on biological resources given that the natural gas conversion will occur within existing facilities within the boundaries of the main plant site – an already disturbed industrial site used for power generation. Nonetheless, biological resources were analyzed as described below.

Biological Resources Information

The Study Area (Figure 3) is within the Plains Grassland biotic community and the Plains and Great Basin Grassland subdivision (Brown 1994). The list of special status species considered in the

biological resources analysis was developed from the following sources: (1) federally listed, proposed, and candidate species provided by the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), (2) a list of sensitive species provided by the Arizona Game and Fish Department (AZGFD) Heritage Data Management System, and (3) the Native Plant Law (enforced by the Arizona Department of Agriculture). The potential for the occurrence of special status species in the Study Area was evaluated based on (1) existing publicly available data, (2) qualitative comparisons between known habitat requirements for each species and biotic and abiotic conditions found within the Study Area, and (3) experiences from similar evaluations conducted by Kimley-Horn biologists.

The USFWS IPaC identified six federally listed species that have the potential to occur within the Study Area (Table 2). The IPaC did not list any critical habitats, National Wildlife Refuge Lands, or fish hatcheries in the Study Area (USFWS 2026). The National Wetlands Inventory identified potential wetland areas within the Study Area; however, these are manmade ponds that support the generating facility and do not provide suitable habitat for special-status species. See Appendix C for the IPaC and AZGFD Environmental Review Tool (ERT) reports.

Table 2. Special Status Species with the Potential to Occur within the Study Area

Species	Status	Habitat Requirements	Habitat Suitability
Mammals			
Pale Townsend's big-eared bat <i>Corynorhinus townsendii pallescens</i>	SGCN-1	In Arizona, summer day roosts are found in caves and mines from desert scrub up to woodlands and coniferous forests. Night roosts may occur in abandoned buildings.	There are no suitable roosts within the Study Area. Pale Townsend's big-eared bats may be observed foraging within the Study Area; however, due to availability of suitable habitat outside the generation facility, the SGS Unit 4 Repower Project will not lead to declines in foraging habitat or populations.
Mexican wolf <i>Canis lupus baileyi</i>	LEXN, SGCN-1	Madrean pine-oak woodlands with plentiful cover, water, and prey, as well as grasslands, scrublands within the Sonoran Desert.	No suitable habitat within the main plant site. The Study Area is within the Wolf Management Zone 2 within an area considered to be occupied range; however, construction will occur within the developed portions of the SGS; therefore, there will be no impact to Mexican wolves.

Species	Status	Habitat Requirements	Habitat Suitability
New Mexico meadow jumping mouse	ESA-E	Riparian communities along rivers and streams, springs and wetlands, or canals and ditches; or scrub-shrub riparian areas that are composed of willow or alders with an understory of primarily forbs and sedges.	No suitable habitat occurs within the Study Area. While water is present at the site, the manmade stormwater, sewer treatment, and cooling ponds do not provide the necessary riparian habitat to support the New Mexico meadow jumping mouse.
Gunnison's prairie dog <i>Cynomys gunnisoni</i>	SGCN-1	In communal burrows in desert grasslands, short and midgrass prairies, meadows, and scrublands, at an altitude of 6,000 to 10,000.	No suitable habitat occurs within the Study Area. The species is known to inhabit eastern Arizona; however, the open desert areas within the Study Area do not support prairie dogs due to the presence of juniper which acts as a deterrent for the species.
Black-footed ferret <i>Mustela nigripes</i>	LEXN, SGCN-1	Prairies and grasslands; dependent prairie dog habitat as food and shelter source.	The species is known to inhabit eastern Arizona; however, black-footed ferrets are almost exclusively dependent on prairie dogs for food and their burrow complexes for shelter therefore, no suitable habitat occurs within the Study Area.
Birds			
Yellow-billed cuckoo <i>Coccyzus americanus</i>	ESA-T	This bird utilizes large contiguous patches of multi layered riparian habitat, such as cottonwood-willow gallery forests along rivers and streams below 6600 feet.	No suitable habitat occurs within Study Area. While water is present at the site, the manmade ponds do not provide the necessary riparian habitat to support yellow-billed cuckoos.
American peregrine falcon <i>Falco peregrinus anatum</i>	SGCN-1	Steep, sheer cliffs overlooking woodlands, riparian areas, or other habitats supporting avian prey species in abundance.	No suitable habitat occurs within the Study Area. The nearest suitable habitat occurs within the Apache-Sitgreaves National Forest approximately 20 miles southwest of the Study Area.

Species	Status	Habitat Requirements	Habitat Suitability
Golden eagle <i>Aquila chrysaetos</i>	BGEPA, SGCN-2	Open and barren areas, in prairies and wooded areas, especially in hilly in mountainous regions. Nesting on rock ledges, cliffs, or in large trees.	No suitable nesting habitat occurs within the Study Area. There is suitable foraging habitat within the Study Area but not within the main plant site. Golden eagles may be observed foraging within the Study Area; however, due to availability of suitable habitat outside the SGS facility, the Project will not lead to declines in golden eagle foraging habitat or populations.
Amphibians			
Northern leopard frog <i>Rana pipiens</i>	SGCN-1	Grasslands, brushlands, woodlands, and forests ranging from high into mountains usually in permanent water with rooted aquatic vegetation. Frequents ponds, canals, marshes, springs, streams, stock tanks, and borrow pits.	No suitable habitat occurs within the Study Area. While water is present at the site, the manmade ponds do not provide the appropriate riparian habitat.
Chiricahua leopard frog <i>Rana chiricahuensis</i>	SGCN-1	Found in permanent waters such as ponds, tanks, cinegas (wet meadows), and streams within mountains and valleys in southeastern Arizona at elevations ranging from 3,200 to 8,600 feet.	No suitable habitat occurs within the Study Area. While water is present at the site, the manmade ponds do not provide the appropriate riparian habitat.
Fishes			
Little Colorado spinedace <i>Lepidomeda vittata</i>	ESA-T	Slow to moderate water currents, over fine gravel bottoms. Avoids deep, heavily shaded pools and shallow open areas. Prefers unshaded pools with rocks or undercut banks for cover.	No suitable habitat occurs within Study Area. While water is present at the site the manmade ponds do not provide the appropriate riparian habitat.
Mollusks			
California floater <i>Anodonta californiensis</i>	SGCN-1	Found in sand and mud of lakes and reservoirs or in stable areas of low-gradient stream reaches.	There is no suitable habitat within the Study Area. While water is present at the site, the manmade ponds do not provide the necessary riparian habitat to support the California floater.

Species	Status	Habitat Requirements	Habitat Suitability
Insects			
Monarch butterfly <i>Danaus plexippus</i>	ESA-PT	Breeding and migratory monarch butterfly populations occur throughout Arizona habitats include riparian areas, native desert habitats, and urban habitats concentrated on parks. An abundance of milkweed is critical for this species. Additional plant species monarchs are known to utilize include dogbane alfalfa thistles seep willow sunflowers groundsel and cloves.	Although the manmade ponds within the facility could provide necessary water during the summer months, suitable plant species most associated with the monarch butterfly are not likely to occur in abundance in the Study Area. Additionally, project activities will be limited to the developed main plant site Therefore, the monarch butterfly has the potential to forage within the Study Area, but due to the availability of suitable habitat outside of the facility, the Project will not lead to declines in the species.
Suckley's cuckoo bumble bee <i>Bombus suckleyi</i>	ESA-PE	Requires suitable nesting sites for host colonies, nectar and pollen resources during the colony and rearing period. primarily underground cavities that have been created naturally or by other animals such as abandoned rodent nests.	Although the manmade ponds within the facility could provide necessary water during the summer months, suitable plant species most associated with Suckley's Cuckoo bumble bee are not likely to occur in abundance within the Study Area. Additionally, project activities will be limited to the developed main plant site Therefore, Suckley's cuckoo bumble bee has the potential to forage within the Study Area, but due to the availability of suitable habitat outside of the generation facility, the SGS Unit 4 Repower Project will not lead to declines in the species.

Status: ESA-E = Endangered Species Act Endangered; ESA-T = Threatened; ESA-PE = Proposed Endangered; ESA-PT = Proposed Threatened; LE, XN = Experimental Population, Non-Essential; BGEPA = Bald and Golden Eagle Protection Act; SGCN-1/2 = AZGFD Species of Greatest Conservation Need.

Analysis

Landcover in the Study Area is comprised of an existing industrial power plant surrounded by open desert. Vegetation in the Study Area is dominated by desert scrub and desert grassland plants, characterized by grasses and scattered shrubs. For the past 150 years human activities have influenced the St. Johns and Springerville area resulting in considerable changes in ecology. The

broad expanse of grass that once covered most of Apache County has deteriorated under heavy grazing pressure and become overrun with snakeweed and rabbitbrush. The decrease of range fires due to modern controls and the lack of dry grass fuel has allowed a steady invasion of juniper into the grasslands.

Since the majority of the SGS main plant site is developed, it does not constitute suitable habitat for wildlife. While there are some undeveloped lands within the main plant site which constitute potential desert habitat for use by migratory birds, bats, and insects, this habitat is degraded and exhibits relatively low value habitat for most wildlife. Undisturbed, open desert areas surrounding the main plant site provide more suitable habitats for wildlife.

Biological Conclusion

All construction will occur in the developed portion of the main plant site. No potential habitat will be removed as a result of the SGS Unit 4 Repower Project. This setting provides minimal habitat for plants and animals including special status species. Special status species would not experience long-term detrimental impacts related to the loss or alteration of vegetative cover within the plant site based on a lack of suitable habitat within the existing facilities. The SGS Unit 4 Repower Project would not contribute to a loss of native vegetation that would result in declines in any native plant or wildlife species. Because of the industrialized use of the area and low-value habitat, the SGS Unit 4 Repower Project is not expected to materially impact biological resources.

Noise

Kimley-Horn conducted a qualitative noise analysis for SGS Unit 4 Repower Project in context of the existing SGS operations (Appendix D). The existing coal-fired generation units are made up of various pieces of operational equipment that contribute to the current noise environment at the facility. Below are some of the main sources of noise associated with the existing coal-fired generation units.

- Intake and exhaust fans
- Coal grinders/crushers
- Cooling towers
- Pumps
- Electrical transformers
- Heavy machinery

The SGS Unit 4 Repower Project is anticipated to reduce overall operational noise levels at SGS. The following are some items that will contribute to the lower operational noise levels.

- Removal (or cessation of operation) of heavy, moving machinery (pumps, pulverizers, atomizers)
- Installation of new boiler components that have lower turbulent noise, leading to much quieter boiler operation
- Reduction in coal handling equipment and operations

- Reduction in quantity/size of fans and pumps

Based on the comparison of the operational equipment associated with the existing coal-fired units and the proposed conversion of Unit 4 to natural gas fuel, it is anticipated that overall operational noise levels at SGS will be reduced. The anticipated reductions in noise levels are mainly due to the removal of equipment and/or cessation of operations associated with coal handling, which are typically very loud.

4. Summary of Environmental Conclusions

In conclusion, the SGS Unit 4 Repower Project would have no major environmental impacts. The SGS Unit 4 Repower Project would not remove suitable habitat or impact special status species. The project modifications would occur within the developed portions of the main plant site and will therefore not result in altered views or visual impacts and will have no effect on cultural resources.

The SGS Unit 4 Repower Project is environmentally compatible with existing and future land uses and any environmental resource impacts are negligible.

5. References

- Apache County. 2019. Apache County Comprehensive Plan. Available at:
https://www.apachecountyaz.gov/accnt_591117/site_591118/Documents/Comprehensive-Plan-Final-June-2019.pdf. Accessed April 2026.
- Apache County. 2019. Zoning Ordinance of Apache County. Available at:
https://www.apachecountyaz.gov/accnt_591117/site_591118/Documents/Apache-County-Zoning-Ordinance-amended.pdf. Accessed April 2026.
- Arizona State Museum. 2024. Policy and Procedures Regarding the Use of Previous Archaeological Survey Data. <https://statemuseum.arizona.edu/sites/default/files/2024-03/Policy%20and%20Procedures%20Regarding%20the%20Use%20of%20Previous%20Survey%20Data.pdf>. Accessed April 2026.
- Chronicle Heritage. 2026. A Class I Literature Review of 1,977.61 Acres within the Salt River Project Springerville Generating Station, Springerville, Apache County, Arizona.
- Online Environmental Review Tool (OERT) from Arizona Game and Fish Department's Heritage Data Management System (HDMS) and Project Evaluation Program (PEP) accessed online ([Home | Arizona Environmental Review Tool](#)). Accessed March 2026.
- Information for Planning and Consultation (IPaC): Home, United States Fish and Wildlife Service, <http://ecos.fws.gov/ipac/>. Accessed March 2026.
- National Wetlands Inventory - Surface Waters and Wetlands. United States Fish and Wildlife Service, National Wetlands Inventory, <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper>. Accessed March 2026.

Appendix A

Notification Letter Sent to State and Local Government Officials & Responses

Figure 6. Example Notification Letter

April 4, 2026

Brad Peterson
Apache County Planning and Zoning Commission
75 W. Cleveland
PO Box 238
St Johns, AZ 85936

Subject: SRP's Application to Amend Arizona Corporation Commission Certificate of Environmental Compatibility Case No. 74, Springerville Generating Station Unit 4

Dear Vice Chairman Peterson:

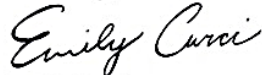
Salt River Project Agricultural Improvement and Power District (SRP) plans to apply to the Arizona Corporation Commission (ACC) for an amendment to the Certificate of Environmental Compatibility (CEC) for Case No. 74 to convert the existing Unit 4 of the Springerville Generating Station (SGS) to burn natural gas instead of coal as its fuel source. SGS is operated by Tucson Electric Power (TEP) and jointly owned by TEP, Tri-State Generation and Transmission Inc., and SRP. Each of these companies holds an individual CEC permit for their respective units. Recently, on March 4, 2026, the ACC approved TEP's request to amend the existing CEC for Units 1 and 2 to allow for a conversion to natural gas. Similarly, SRP expects to submit an application to the ACC in May 2026.

SGS's capacity plays an integral role for the greater Phoenix metropolitan area in meeting the peak energy demand, which is expected to steeply increase by 2035. The proposed project would allow for grid flexibility and provide a bridge to the mid-2040's, when other generating technology in development may be available for implementation in Apache County.

Your organization is invited to provide information or written comment regarding development plans in the vicinity of SGS, which is located approximately 14 miles northeast of Springerville, and 17 miles southeast of St. Johns (See attachment).

To allow your information to be included in SRP's application to amend the CEC in Docket No. L00000C-86-0000-0074 please forward your written comments to me by Friday, April 24, 2026, via email at emily.curci@kimley-horn.com, physical mail at 2046 Riverview Auto Drive, Suite 400, Mesa, AZ 85201, or directly on the ACC's public comment portal at <https://efiling.azcc.gov/online-services/utilities-public-comment-external>. Further, SRP is hosting an in-person public meeting at Round Valley High School from 5-7pm on April 14, 2026. Additional project information can be found on the project website at srp.net/Springerville.

Sincerely,



Emily Curci
Project Manager
Kimley-Horn

CC: Hayden Fennell, SRP

Enclosure

Figure 7. Map Accompanying Notification Letter

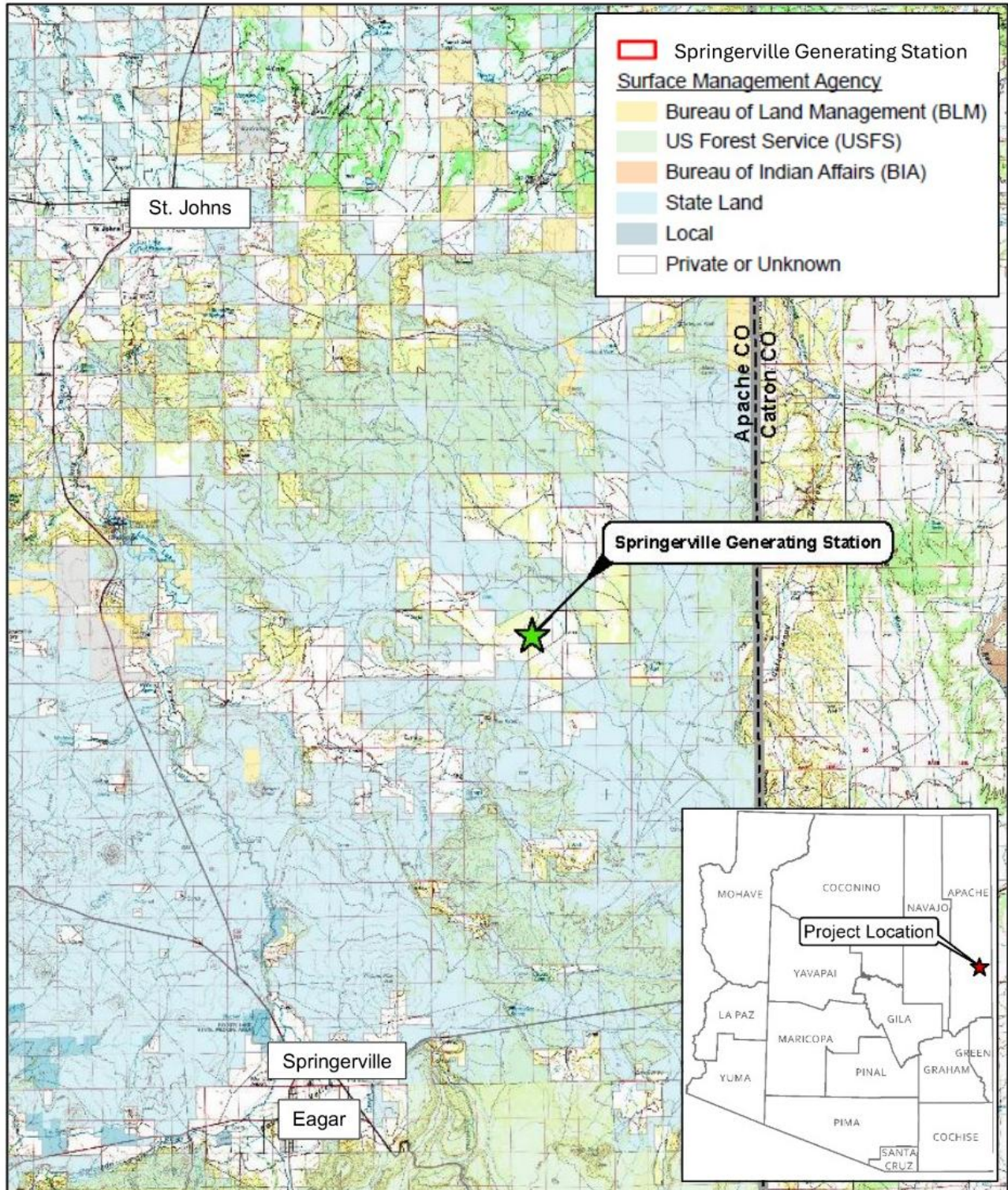


Figure 8. Response from Springerville Town Manager



418 E. Main Street, Springerville, AZ 85938 • Phone (928)333-2656

April 16, 2026

Salt River Project Agricultural Improvement and Power District (SRP)
2046 Riverview Auto Drive, Suite 400
Mesa, AZ 85201

RE: SRP's Application to Amend the Arizona Corporation Commission Certificate of Environmental Compatibility Case No. 74, Coronado Generating Station Unit 4

Dear Emily Curci:

I am writing to express my strong support for converting the Springerville Generating Station (SGS) facility to burn natural gas. The conversion will allow CGS not only to continue to provide a reliable source of electricity for the area but will also provide jobs for our residents.

Sincerely,

A handwritten signature in black ink, appearing to read "Ted Soltis".

Ted Soltis
Interim Town Manager

Via Email: Emily.curci@kimley-horn.com

Figure 9 Response from Mayor of Eagar



Guy Phelps
Mayor, Town of Eagar
P.O. Box 1300
Eagar, AZ. 85925
g.phelps@eagaraz.gov
928-333-4128
4/7/2026

Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

Subject: Support for SRP's Springerville Generating Stations Unit 4 Conversion to Natural Gas - Docket # L-00000C-86-0000-0074

Dear Commissioners,

I am writing to express my strong support for the proposed conversion of the Salt River Project's amendment to the Certificate of Environmental Compatibility (CEC) for Case No. 74 to convert the existing Unit 4 of the Springerville Generating Station (SGS) to burn natural gas instead of coal as its fuel source.

For many years, SRP has been a trusted partner and a vital contributor to our communities. Through reliable energy generation, local investment, job creation, and consistent engagement with community stakeholders, SRP has demonstrated its long-standing commitment to Arizona's economic strength and quality of life. The positive impact of SRP's operations has been felt across business sectors, schools, households, and local governments.

From the perspective of the Town of Eagar, the proposed repower project offers several important benefits, including:

- Support for regional grid reliability
- Continued economic activity and employment in the Round Valley area
- Investment in existing infrastructure rather than greenfield development
- A demonstrated commitment to public outreach and community communication
- Creating needed grid flexibility and provide a necessary bridge to the mid-2040's when other generating technology may be available.

Figure 10 Letter Response from Eagar Town Manager



Brannon Eagar
Manager, Town of Eagar
P.O. Box 1300
Eagar, AZ. 85925
b.eagar@eagaraz.gov
928-333-4128
2/20/2026

Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

Subject: Support for SRP's Springerville Generating Stations Unit 4 Conversion to Natural Gas - Docket # L-00000C-86-0000-0074

Dear Commissioners,

I am writing to express my strong support for the proposed conversion of the Salt River Project's amendment to the Certificate of Environmental Compatibility (CEC) for Case No. 74 to convert the existing Unit 4 of the Springerville Generating Station (SGS) to burn natural gas instead of coal as its fuel source.

My name is Brannon Eagar, and, as my name suggests, my family has lived in Eagar for many generations. As my parents, grandparents, great grandparents and great-great grandparents before me, I grew up here and raised my family here and I pray that my family will be able to continue here for even many more generations.

For many years, SRP has been a trusted partner and a vital contributor to our communities. Through reliable energy generation, local investment, job creation, and consistent engagement with community stakeholders, SRP has demonstrated its long-standing commitment to Arizona's economic strength and quality of life. The positive impact of SRP's operations has been felt across business sectors, schools, households, and local governments.

The proposed transition to natural gas represents a forward-looking solution that balances reliability, affordability, and environmental responsibility. Converting this facility will allow SRP to continue providing dependable energy while reducing emissions and maintaining the economic stability that our region depends upon. This transition helps ensure that jobs, tax revenues, and community partnerships remain intact for years to come.

Letter Response from Eagar Town Manager (continued)

As town manager, I have personally witnessed the value that SRP brings to our area. Their ongoing presence supports not only our energy needs but also the broader vitality of our local economy. Maintaining these facilities through modernization rather than closure protects our communities from unnecessary economic disruption while positioning Arizona for a sustainable energy future.

Therefore, on behalf of the Town of Eagar, myself, my family, and the communities I love I respectfully urge the Arizona Corporation Commission to support SRP's efforts to convert Unit 4 at SGS to natural gas. This approach preserves long-standing partnerships, strengthens grid reliability, and ensures continued economic benefits for the people and businesses of Arizona.

Thank you for your thoughtful consideration and for your service to our state.
Sincerely,

Brannon Eagar

**Brannon Eagar
Town Manager
Town of Eagar**

Where Roads Hit The Trails

P.O. Box 1300 * 22W 2nd Street * Eagar, AZ 85925 *
928-333-4128 * eagaraz.gov

Figure 11 Letter Response from AGFD Regional Supervisor



April 23, 2026

Emily Curci
Project Manager
Kimley-Horn
2046 Riverview Auto Drive, Suite 400
Mesa, AZ 85201

Electronically submitted to: emily.curci@kimley-horn.com

RE: SRP's Application to Amend ACC CEC - Springerville Generating Station Unit 4

Dear Ms. Curci:

The Arizona Game and Fish Department (Department) appreciates the opportunity to review Salt River Project Agricultural Improvement and Power District (SRP) plans to apply to the Arizona Corporation Commission (ACC) for an amendment to the Certificate of Environmental Compatibility (CEC) for Case No. 74 to convert the existing Unit 4 of the Springerville Generating Station (SGS) to burn natural gas instead of coal as its fuel source. The Department understands that SGS is operated by Tucson Electric Power (TEP), and jointly owned by TEP, Tri-State Generation, Transmission, Inc., and SRP, whom all of which are holding individual CEC permits for their respective Units. Additionally, the Department is aware that ACC approved TEP's request to amend the existing CEC for Units 1 and 2 to allow for conversion to natural gas.

Under Title 17 of the Arizona Revised Statutes, the Department, by and through the Arizona Game and Fish Commission, has jurisdictional authority and public trust responsibilities to conserve and protect the state fish and wildlife resources. In addition, the Department manages threatened and endangered species through authorities of Section 6 of the Endangered Species Act and the Department's Section 10(a)(1)(A) permit. It is the mission of the Department to conserve and protect Arizona's diverse fish and wildlife resources and manage for safe, compatible wildlife-related outdoor recreation opportunities for current and future generations. For your consideration, the Department provides the following comments based on the agency's statutory authorities, public trust responsibilities, and special expertise related to wildlife resources and wildlife-related recreation.

The Department recognizes the importance of planning efforts to develop energy infrastructure that contributes to regional and state economic growth needs and would like to work closely with

ARIZONA

azgfd.gov | 928.532.3680

PINETOP OFFICE: 2878 E. WHITE MOUNTAIN BLVD., PINETOP AZ 85935

GOVERNOR: KATIE HOBBS | COMMISSIONERS: CHAIR MARSHA PETRIE SUE, SCOTTSDALE | JEFF BUCHANAN, PATAGONIA | JAMES E. GOUGHNOUR, PAYSON
KURT KERR, PINETOP | JESSICA MANUELL, PARKS | DIRECTOR: TOM P. FINLEY | DEPUTY DIRECTOR: JOSHUA W. HURST

Letter Response from AGFD Regional Supervisor (continued)

SRP's Application to Amend ACC CEC - Springerville Generating Station Unit 4
April 23, 2026
Page 2

Kimley-Horn and SRP during the planning and development of this project. The Department recognizes that appropriate coordination, proper planning, and voluntary implementation of best management practices allow projects to be developed and avoid, minimize, or offset potential impacts to wildlife and wildlife-related recreational access during development and operation of the facilities.

If SRP proceeds with the construction of a natural gas pipeline, the Department would appreciate an opportunity to review construction plans when available. Following that review, the Department would welcome the opportunity to meet and discuss the plans and provide recommendations based on the Department's special expertise related to wildlife, their habitats, and wildlife-related recreation.

Thank you for the opportunity to provide input on the SRP's Application to Amend ACC CEC - Springerville Generating Station Unit 4. For further coordination, please contact Maeghan Miller at mmiller@azgfd.gov or 928-532-3681.

Sincerely,



Aaron Hartzell
Regional Supervisor, Region I

cc: Callie Cavalcant - Habitat, Evaluation, and Lands Branch Chief

AZGFD #M26-04063354

Figure 12 Email Response from Eager Town Clerk

Curci, Emily

From: Jessica Vaughan <j.vaughan@eagaraz.gov>
Sent: Thursday, April 2, 2026 12:26 PM
To: Curci, Emily
Cc: hayden.fennell@srpnet.com
Subject: Re: SRP's Application to Amend ACC CEC, Springerville Generating Station Unit 4

Hello Emily,

Thank you for sending me this information, I will talk about with the Town Manager so we can get our comments submitted.
Please let me know if there is anything else we can assist with.

Thank you,

Jessica Vaughan, MMC, CPM

*Town Clerk / Event Coordinator
22 W 2nd Ave / P.O. Box 1300
Eagar, AZ 85925
928-333-4128 * 231*



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Figure 13 Email Response from AGFD Project Evaluation Supervisor

Curci, Emily

From: Ginger Ritter <gritter@azgfd.gov>
Sent: Thursday, April 2, 2026 2:29 PM
To: Curci, Emily
Cc: hayden.fennell@srpnet.com
Subject: Re: SRP's Application to Amend ACC CEC, Springerville Generating Station Unit 4

Thank you Emily. We will review and get comments back to you by 4/24/26. I will coordinate with staff to see if we will be able to attend the public meeting.



Ginger Ritter (she/her)
PROJECT EVALUATION PROGRAM SUPERVISOR
ARIZONA GAME AND FISH DEPARTMENT

5000 W. Carefree Highway
Phoenix, AZ 85086

OFFICE: 623.236.7606
CELL: 602.510.3557
azgfd.gov

**Appendix B
Class I Cultural Resources Survey Report**



January 30, 2026

Tucson Electric Power
3950 East Irvington Road
Tucson, Arizona 85714-2114

RE: Class I Literature Review of 1,977.61 Acres in Support of Springerville Natural Gas Conversion Project, Springerville, Apache County, Arizona.

Sonoran Land Resources, LLC, on behalf of Tucson Electric Power (TEP), contracted Chronicle Heritage, LLC (Chronicle Heritage) to conduct a site file search and literature review of approximately 1,977.61 acres of private land (Project Area) in support of the proposed Springerville Natural Gas Conversion project in Apache County, Arizona (Project). TEP plans to convert Units 1 and 2 at the coal-fired Springerville Generating Station (SGS) to run on natural gas by 2030. The project will maintain access to affordable, around-the-clock energy for existing customers while reducing carbon emissions and preserving local jobs. Units 1 and 2 of SGS were authorized to be constructed under a Certificate of Environmental Compatibility (CEC) issued by the Arizona Corporation Commission in 1977, with coal as the fuel source. TEP is seeking to amend the CEC to allow these two units to run on natural gas.

Specifically, the Project area is within Section 27, the south half and northeast quarter of Section 28, the southeast quarter of Section 29, the northeast quarter of Section 32 and the north-half of Sections 33 and 34 of Township 11 North (N), Range 30 East (E), Gila and Salt River Baseline Meridian, on the U.S. Geological Survey (USGS) Voigt Ranch, Arizona (1983) 7.5-minute quadrangle maps (Figure 1). More specifically, the center of the Project area is at 1983 North American Datum, Universal Transverse Mercator Zone 12, 668320 mE, 3799080 mN.

The Project is subject to the Arizona Revised Statutes (A.R.S.) §41-865 et seq. regarding private land. Local regulations may also apply; Title 17 (Zoning) of the Springerville Code of Ordinances includes provisions related to environmental sensitivity (Section 17.90.100) and design review that may address the treatment of historic or cultural resources.

DESCRIPTION OF THE PROJECT

TEP is planning to convert Units 1 and 2 at the coal-fired Springerville Generating Station (SGS) to run on natural gas by 2030 located in Springerville, Apache County, Arizona for the proposed Springerville Natural Gas Conversion Project. The proposed project may include ground-disturbing activities such as vegetation removal, raking, grading, and excavation.

ENVIRONMENTAL SETTING

The Project area is located in eastern Apache County, Arizona, approximately 14 miles (22.5 kilometers) northeast of the Town of Springerville and approximately 16 miles (25.7 kilometers) northeast of the Town of Eagar. The Project area lies north of U.S. Route 60 and east of U.S.

Route 191 and is situated within a predominantly rural landscape characterized by open rangeland, sparse development, and existing energy infrastructure. The Project area is located within undeveloped land and falls within the Arizona/New Mexico Mountains ecoregion, which is typically characterized by high-elevation grasslands and open woodlands consisting of native perennial grasses, pinyon–juniper woodland, and ponderosa pine forests at higher elevations, with riparian vegetation generally confined to ephemeral drainage corridors (Griffith et al. 2014). The Project area lies within the Little Colorado River watershed and includes multiple ephemeral drainages that convey surface runoff generally northward and northeastward toward tributaries of the Little Colorado River during seasonal precipitation events, including summer monsoons and spring snowmelt. No perennial streams are present within the Project area.

Elevations within the Project area range from approximately 6,900 to 7,100 feet above sea level (fasl), with topography consisting of gently sloping uplands, low-relief volcanic landforms, and shallow incised drainages. The landscape reflects extensive volcanic activity associated with the Springerville Volcanic Field, a large monogenetic volcanic field composed of basaltic lava flows, cinder cones, and volcanic vents formed during late Miocene to Pleistocene eruptive episodes. Prominent topographic features in the region include Escudilla Mountain, located approximately 15 miles (24 kilometers) southeast of the Project area, and the White Mountains to the south. These features are characteristic of the broader transition zone between the Colorado Plateau and adjacent Basin and Range–influenced volcanic terrains. The Project area occupies a relatively stable upland position between larger drainage systems, with terrain gently sloping toward the Little Colorado River basin. The underlying geomorphology consists primarily of basaltic lava flows and reworked volcanic sediments associated with the Springerville Volcanic Field. These volcanic materials weather into gravelly and sandy sediments that are redistributed across uplands, hillslopes, and shallow drainages by fluvial and colluvial processes. Bedrock is largely mantled by colluvium and alluvium and is not extensively exposed within the Project area, but it contributes to the sediment load transported downslope during episodic runoff events (Arizona Geological Survey 2026).

Soils within the Project area reflect this geomorphic framework and are derived primarily from volcanic parent materials and reworked volcanic alluvium. According to the Soil Survey Staff (2026) for Apache County, Arizona, Central Part (AZ635), the Project area is underlain by Clovis loamy sand (31.1 percent), Hubert gravelly loam (43.6 percent), and Hubert gravelly loam, 2 to 15 percent slopes, eroded (25.3 percent) (Soil Survey Staff 2026). These soils are associated with gently sloping uplands, low hillslopes, and eroded fan surfaces. Localized areas of sediment accumulation within these landforms may provide limited potential for the preservation of intact subsurface cultural deposits. The soils are characterized by fine to moderately coarse textures, variable gravel content, and generally low to moderate slopes (0 to 15 percent). Gently sloping areas underlain by Clovis loamy sand and non-eroded Hubert gravelly loam exhibit a moderate potential for in situ preservation of buried archaeological materials, whereas eroded Hubert gravelly loam on steeper slopes is more likely to reflect truncated soil profiles and deflated surfaces. Specific soil types and their general distribution within the Project area are detailed in Table 1.

Table 1. Soils Within the Project Area

Soil Type	Percent	Parent Material	Landform(s)
Clovis loamy sand (slope 0–8 percent)	31.1	Volcanic-derived alluvium	Plains, gently sloping uplands
Hubert gravelly loam (slope 0–8 percent)	43.6	Gravelly colluvium and residuum from basalt	Uplands, low hillslopes
Hubert gravelly loam (slope 2–15 percent), eroded	25.3	Gravelly colluvium from basalt	Hillslopes, eroded fan surfaces

* Soil Survey Staff 2026

BUILT ENVIRONMENT

The built environment surrounding the Project area reflects the historically rural and sparsely developed character of northeastern Apache County. Development in the vicinity of the Project area has remained limited and has been largely associated with agriculture, rangeland use, water management, and energy-related infrastructure. Review of historic aerial imagery and available cartographic sources indicates that the broader area surrounding the Project site remained largely undeveloped through the mid-20th century, with minimal permanent structures, limited road infrastructure, and no concentrated residential development evident prior to the 1970s. Lyman Lake State Park is located approximately 8.5 miles (13.7 kilometers) northwest of the Project area; the park is centered on Lyman Lake, a man-made reservoir formed by Lyman Dam on the Little Colorado River in the early 20th century. Subsequent development in the region has occurred at a modest scale and is primarily associated with isolated facilities, utility corridors, water and energy infrastructure, and small clusters of buildings related to resource extraction or energy production, rather than suburban or commercial expansion.

Transportation infrastructure in the area consists primarily of U.S. Route 60 and U.S. Route 191, along with a limited network of paved and unpaved access roads that support regional travel and site access. Improvements to these routes have occurred incrementally over time but have not resulted in substantial secondary development in the immediate vicinity of the Project area. Despite the presence of nearby infrastructure and regional facilities, the Project area itself remains largely undeveloped, with no known historic-period buildings, structures, or paved surfaces within its boundaries. Given the absence of documented historic development prior to the 1970s, the limited extent of surrounding built infrastructure, and the continued use of the landscape for open rangeland and utility-related purposes, the potential for historic-period built-environment resources within the Project area is considered low.

PREVIOUS RESEARCH

Chronicle Heritage examined records in the online AZSITE database and the National Register Information System database to determine the location of any previously conducted archaeological surveys or previously recorded archaeological sites within a 1-mi radius of the Project area. Chronicle Heritage also consulted General Land Office (GLO) maps, historical

USGS topographic maps, and historical aerial photographs to evaluate the possible presence of historic infrastructure in and near the Project area.

A total of 19 previous cultural resource survey projects have been documented within the 1 mile (1.6 kilometer) search radius, of which eight surveys intersect the Project area (Table 2; Figures 2-5). The intersecting surveys include the Springerville Corridor and Access Road survey (1978-59.ASM; Wilson 1978), the 14 Miles of Pipeline survey (2000-115.ASM; Gilbert 2000), the Springerville Generating Station Survey (2004-1895.ASM; Harrison 2004), the Two Well Locations and Access Roads survey (2006-969.ASM; Gilbert 2007), the Three CO₂/Helium Wells and Access Roads survey (2003-1591.ASM; Lennon 2004), the St. Johns Archaeological and Natural Resource Survey (aka St. Johns Flow Lines) (2014-566.ASM; Brucker 2014), the TEP Pipeline survey (2009-141.ASM; Burleson 2009), and the Springerville Nicoll ADEQ Class III survey (2017-26.ASM; Klebacha and Dorenbush 2017). Only one of the surveys intersecting the Project area was conducted within the past 10 years, while the remaining intersecting surveys predate the 10-year threshold. In accordance with Arizona State Museum (ASM) policy, archaeological data older than 10 years may be outdated, and lands previously surveyed more than a decade ago require resurvey to ensure accurate documentation and informed planning decisions (ASM 2024). This standard aligns with the Arizona State Historic Preservation Office (SHPO) Guidance Point No. 5 (Arizona State Historic Preservation Office [SHPO] 2004) for expectations for current cultural resource compliance.

Table 2. Previous Projects Intersecting the Project Area

Project Number	Project Name	Reference
1978-59.ASM	Springerville Corridor and Access Road	Wilson 1978
2000-115.ASM	14 Miles of Pipeline	Gilbert 2000
2004-1895.ASM	Springerville Generating Station Survey	Harrison 2004
2006-969.ASM	Two Well Locations and Access Roads	Gilbert 2007
2003-1591.ASM	Three CO ₂ /Helium Wells and Access Roads	Lennon 2004
2014-566.ASM	St. Johns Archaeological and Natural Resource Survey (aka St Johns Flow Lines)	Brucker 2014
2009-141.ASM	TEP Tieline	Burleson 2009
2017-26.ASM	Springerville Nicoll ADEQ Class III	Klebacha and Dorenbush 2017

Within the one-mile (1.6 kilometer) search radius, a total of two previously recorded cultural resources have been identified. These include historic-period Euro-American archaeological sites recorded as AZ Q:12:42 (ASM) and AZ Q:12:41 (ASM). Neither site intersects the Project area. AZ Q:12:42 (ASM) is a historic-period site interpreted as a short-term camp or activity area associated with early 20th-century land use, while AZ Q:12:41 (ASM) consists of an isolated historic artifact scatter interpreted as refuse related to early ranching or homesteading activity. Neither site has been formally evaluated for listing in the National Register of Historic Places

(NRHP). No NRHP-listed historic buildings, districts, or neighborhoods are located within the Project area.

Chronicle Heritage reviewed historic cartographic and aerial imagery to identify potential historic-era features within and near the Project area. This review included examination of an 1883 General Land Office (GLO) survey plat (Figure 6), which depicts section lines and drainage features but does not identify structures, roads, homesteads, or other improvements within the Project area. Historic USGS topographic maps reviewed include St. Johns, Arizona (1:250,000 scale) from 1886, 1892, 1901, 1909, and 1921; Saint Johns, Arizona (1:250,000 scale) from 1954, 1957, 1958, and 1962; Voigt Ranch, Arizona (1:24,000 scale) from 1971; and Springerville, Arizona (1:100,000 scale) from 1981. Chronicle Heritage also reviewed historic aerial photographs, including imagery from 1969 and 1983, to evaluate land use and development patterns within the Project area.

Based on the results of this map and imagery review, Chronicle Heritage identified one historic-period linear feature within the Project area, consisting of an access road depicted on late 20th-century aerial imagery that provides ingress to the Springerville Generating Station. Although the road likely originated during the initial construction phase of the facility between 1969 and 1983, it remains in active use and has been subject to ongoing maintenance and improvement, resulting in a loss of historic integrity. The road functions as part of the modern transportation and utility access network and is not representative of an abandoned or discrete historic transportation feature. Consistent with guidance from the Arizona State Museum, linear features that remain in continuous use and lack association with significant historic events or patterns are generally not considered eligible for listing in the National Register of Historic Places (NRHP) (ASM 2023). All other historic features identified—including water tanks, windmills, fence lines, road segments, and lateral networks—are located outside the Project area but within a one-mile radius. Aerial imagery confirms that the Project area remained largely undeveloped throughout the 20th century.

RECOMMENDATIONS

The site file search and literature review identified no previously recorded archaeological sites within the Project area. However, one historic-period linear feature, consisting of an unnamed access road visible on historic aerial imagery and early cartographic sources, extends into the Project area and provides access to the Springerville Generating Station. Historic map and aerial review indicate that this road was constructed between 1969 and 1983, coincident with development of the generating station, and remains in active use. According to ASM's (2023) Policy and Procedures Regarding Historical Sites and Features, in-use historical features such as roads are not subject to documentation under the Arizona Antiquities Act, and ASM does not assign site numbers or accept updates for in-use portions of such features. Furthermore, ASM guidance on linear resources notes that short, unimproved, or utilitarian access roads associated with industrial facilities and lacking independent historical significance are not considered eligible for inclusion in the National Register of Historic Places (NRHP) (Arizona State Museum (ASM) 2023).

Although the Project area has previously been subjected to eight Class III cultural resource surveys, these surveys collectively cover approximately 64.7 acres, or approximately 3.3

percent of the total Project area, and only one survey, encompassing approximately 9.96 acres (0.5 percent) of the Project area, was conducted within the past 10 years. As outlined in ASM's Policy and Procedures Regarding the Use of Previous Archaeological Survey Data (Arizona State Museum [ASM] 2024), surveys older than a decade may no longer reflect current ground conditions due to changes in surface visibility, land use, and survey standards. This policy, consistent with Arizona State Historic Preservation Office (SHPO) Guidance Point No. 5, requires that areas last surveyed more than 10 years ago be resurveyed using current Class III standards to ensure complete and accurate cultural resource documentation.

Chronicle Heritage therefore recommends that a Class III pedestrian survey be conducted in the undeveloped portions of the Project area prior to any ground-disturbing activity, in accordance with current Arizona State Museum (ASM) and State Historic Preservation Office (SHPO) guidance, as portions of the Project area consists of open rangeland and peripheral areas that appear largely undeveloped and have not been subject to intensive or recent cultural resource survey.

Sincerely,
CHRONICLE HERITAGE

Written and submitted by:

Christine Jerla

Christine Jerla, M.A. | Senior Archaeologist

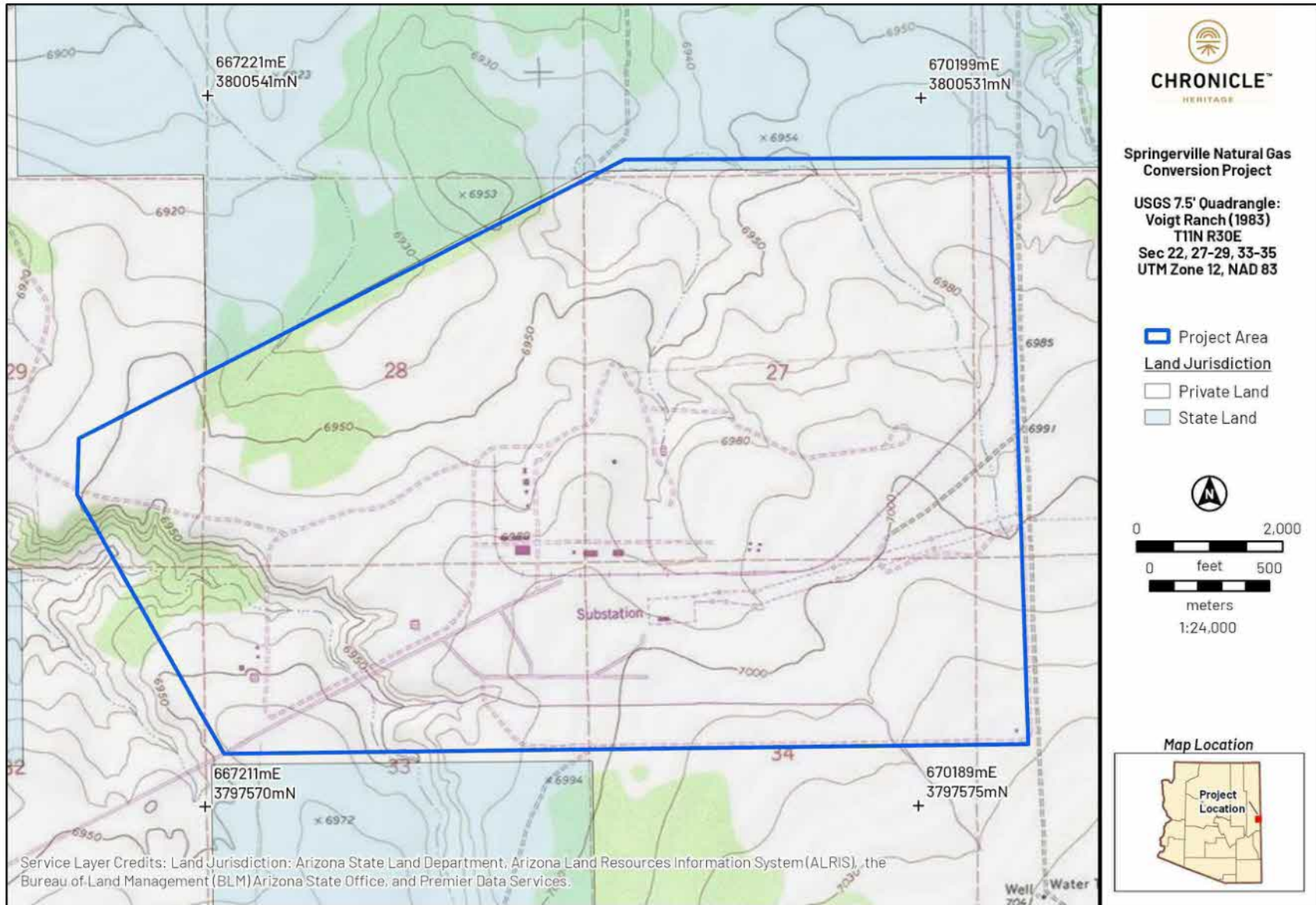


Figure 1. Project location map showing land jurisdiction and the location of the Project area.

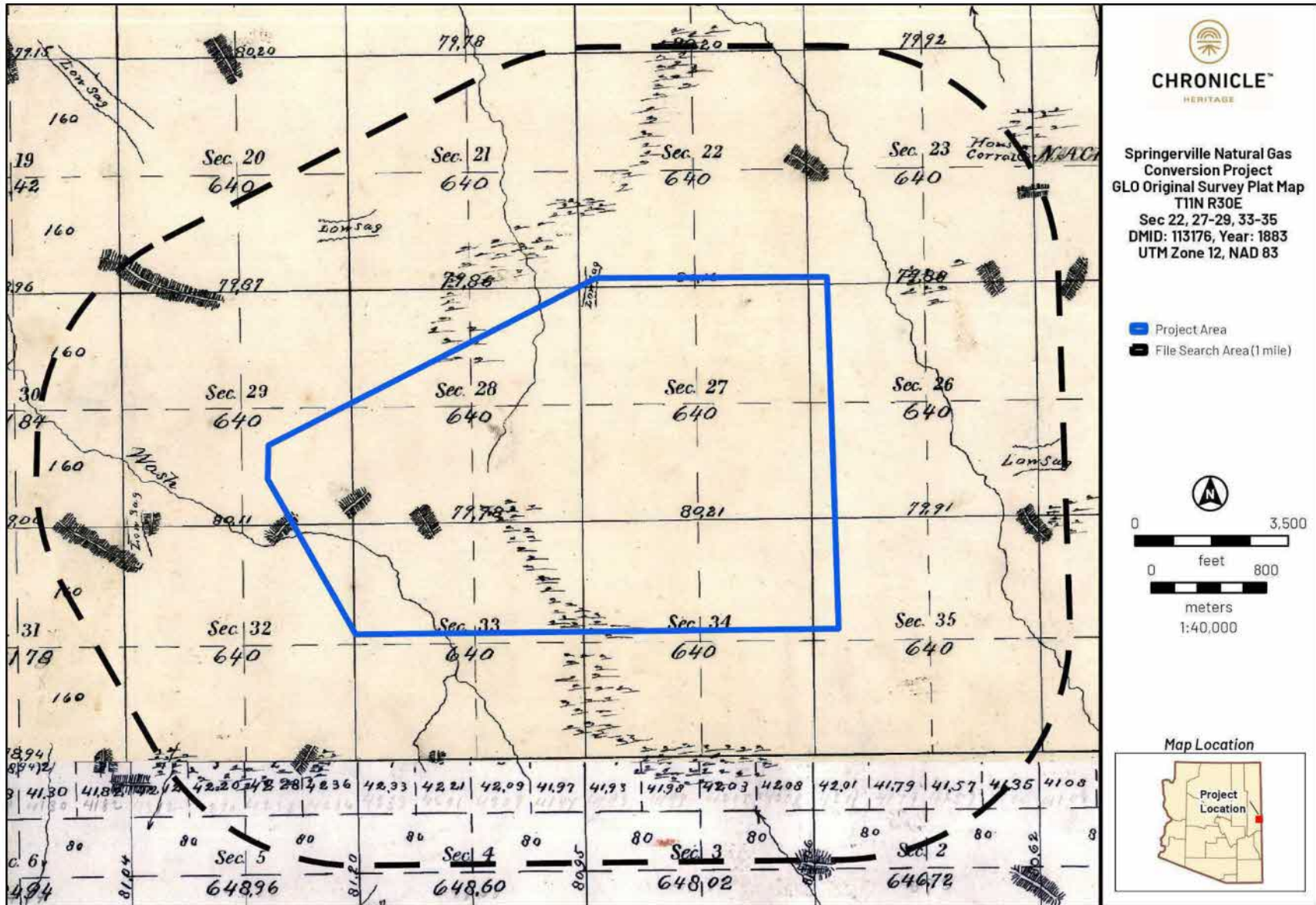


Figure 6. Map of the Project area showing GLO historic resources.

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Soil Survey Staff

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**Appendix C
USFWS IPaC and AZGFD ERT**



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Arizona Ecological Services Field Office
9828 North 31st Ave
#c3
Phoenix, AZ 85051-2517
Phone: (602) 242-0210 Fax: (602) 242-2513

In Reply Refer To:

03/18/2026 16:30:59 UTC

Project Code: 2026-0064257

Project Name: Springerville Generation Station

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The Fish and Wildlife Service (Service) is providing this list under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). The list you have generated identifies threatened, endangered, proposed, and candidate species, and designated and proposed critical habitat, that *may* occur within the One-Range that has been delineated for the species (candidate, proposed, or listed) and its critical habitat (designated or proposed) with which your project polygon intersects. These range delineations are based on biological metrics, and do not necessarily represent exactly where the species is located. Please refer to the species information found on ECOS to determine if suitable habitat for the species on your list occurs in your project area.

The purpose of the Act is to provide a means whereby threatened and endangered species and the habitats upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of Federal trust resources and to determine whether projects may affect federally listed species and/or designated critical habitat. A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If the Federal action agency determines that listed species or critical habitat *may be affected* by a federally funded, permitted or authorized activity, the agency must consult with us pursuant to 50 CFR 402. Note that a "may affect" determination includes effects that may not be adverse and that may be beneficial, insignificant, or discountable. An effect exists even if only one individual

or habitat segment may be affected. The effects analysis should include the entire action area, which often extends well outside the project boundary or "footprint." For example, projects that involve streams and river systems should consider downstream affects. If the Federal action agency determines that the action may jeopardize a *proposed* species or may adversely modify *proposed* critical habitat, the agency must enter into a section 7 conference. The agency may choose to confer with us on an action that may affect proposed species or critical habitat.

Candidate species are those for which there is sufficient information to support a proposal for listing. Although candidate species have no legal protection under the Act, we recommend that they be considered in the planning process in the event they become proposed or listed prior to project completion. More information on the regulations (50 CFR 402) and procedures for section 7 consultation, including the role of permit or license applicants, can be found in our Endangered Species Consultation Handbook at: <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>.

We also advise you to consider species protected under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712) and the Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. 668 *et seq.*). The MBTA prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when authorized by the Service. The Eagle Act prohibits anyone, without a permit, from taking (including disturbing) eagles, and their parts, nests, or eggs. Currently 1,026 species of birds are protected by the MBTA, including the western burrowing owl (*Athene cunicularia hypugaea*). Protected western burrowing owls can be found in urban areas and may use their nest/burrows year-round; destruction of the burrow may result in the unpermitted take of the owl or their eggs.

If a bald eagle or golden eagle nest occurs in or near the proposed project area, our office should be contacted for Technical Assistance. An evaluation must be performed to determine whether the project is likely to disturb or harm eagles. The National Bald Eagle Management Guidelines provide recommendations to minimize potential project impacts to bald eagles (see <https://www.fws.gov/law/bald-and-golden-eagle-protection-act> and <https://www.fws.gov/program/eagle-management>).

The Division of Migratory Birds (505/248-7882) administers and issues permits under the MBTA and Eagle Act, while our office can provide guidance and Technical Assistance. For more information regarding the MBTA, BGPEA, and permitting processes, please visit the following web site: <https://www.fws.gov/program/migratory-bird-permit>. Guidance for minimizing impacts to migratory birds for communication tower projects (e.g. cellular, digital television, radio, and emergency broadcast) can be found at <https://www.fws.gov/media/recommended-best-practices-communication-tower-design-siting-construction-operation>.

The U.S. Army Corps of Engineers (Corps) may regulate activities that involve streams (including some intermittent streams) and/or wetlands. We recommend that you contact the Corps to determine their interest in proposed projects in these areas. For activities within a National Wildlife Refuge, we recommend that you contact refuge staff for specific information about refuge resources, please visit [this link](#) or visit <https://www.fws.gov/program/national->

[wildlife-refuge-system](#) to locate the refuge you would be working in or around.

If your action is on tribal land or has implications for off-reservation tribal interests, we encourage you to contact the tribe(s) and the Bureau of Indian Affairs (BIA) to discuss potential tribal concerns, and to invite any affected tribe and the BIA to participate in the section 7 consultation. In keeping with our tribal trust responsibility, we will notify tribes that may be affected by proposed actions when section 7 consultation is initiated. For more information, please contact our Tribal Coordinator, John Nystedt, at 928/556-2160 or John.Nystedt@fws.gov.

We also recommend you seek additional information and coordinate your project with the Arizona Game and Fish Department. Information on known species detections, special status species, and Arizona species of greatest conservation need, such as the western burrowing owl and the Sonoran desert tortoise (*Gopherus morafkai*) can be found by using their Online Environmental Review Tool, administered through the Heritage Data Management System and Project Evaluation Program (<https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/project-evaluation-program/>).

We appreciate your concern for threatened and endangered species. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office. If we may be of further assistance, please contact our Flagstaff office at 928/556-2118 for projects in northern Arizona, our general Phoenix number 602/242-0210 for central Arizona, or 520/670-6144 for projects in southern Arizona.

Sincerely,
/s/

Heather Whitlaw
Field Supervisor
Attachment

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arizona Ecological Services Field Office

9828 North 31st Ave

#c3

Phoenix, AZ 85051-2517

(602) 242-0210

PROJECT SUMMARY

Project Code: 2026-0064257
Project Name: Springerville Generation Station
Project Type: Power Gen - Natural Gas
Project Description: Conversion of 1 coal fired burner to natural gas
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.31758495,-109.16737594462651,14z>



Counties: Apache County, Arizona

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Mexican Wolf <i>Canis lupus baileyi</i> Population: U.S.A. (portions of AZ and NM)see 17.84(k) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3916	Experimental Population, Non- Essential
New Mexico Meadow Jumping Mouse <i>Zapus hudsonius luteus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7965	Endangered

BIRDS

NAME	STATUS
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

FISHES

NAME	STATUS
Little Colorado Spinedace <i>Lepidomeda vittata</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6640	Threatened

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Suckley's Cuckoo Bumble Bee <i>Bombus suckleyi</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10885	Proposed Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

-
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
 2. The [Migratory Birds Treaty Act](#) of 1918.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act (MBTA). Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their nests, should follow appropriate regulations and implement required avoidance and minimization measures, as described in the various links on this page.

The data in this location indicates that no eagles have been observed in this area. This does not mean eagles are not present in your project area, especially if the area is difficult to survey. Please review the 'Steps to Take When No Results Are Returned' section of the Supplemental Information on Migratory Birds and Eagles document to determine if your project is in a poorly surveyed area. If it is, you may need to rely on other resources to determine if eagles may be present (e.g. your local FWS field office, state surveys, your own surveys).

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO FWS MIGRATORY BIRDS OF CONCERN WITHIN THE VICINITY OF YOUR PROJECT AREA.

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Kimley Horn

Name: Emily Curci

Address: 2046 Riverview Auto Drive Suite 400

City: Mesa

State: AZ

Zip: 85201

Email: emily.curci@kimley-horn.com

Phone: 6026783442

Arizona Environmental Online Review Tool Report



*Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and
manage for safe, compatible outdoor recreation
opportunities for current and future generations.*

Based on the project type entered, no further review is needed. Please review the entire report for project type and/or species recommendations for the location information entered. If you have questions about the project/species specific recommendations, please contact the Project Evaluation Program directly at PEP@azgfd.gov.

Project Name:

Springerville Generation Station Unit 4

Project Type:

Energy Production/Storage/Transfer, Energy Production (generation), coal power plant (maintenance/modification)

Project ID:

HGIS-27785

Project Description:

Conversion of 1 coal fired burner (unit 4) to natural gas

Contact Person:

Emily Curci

Organization:

Kimley Horn

On Behalf Of:

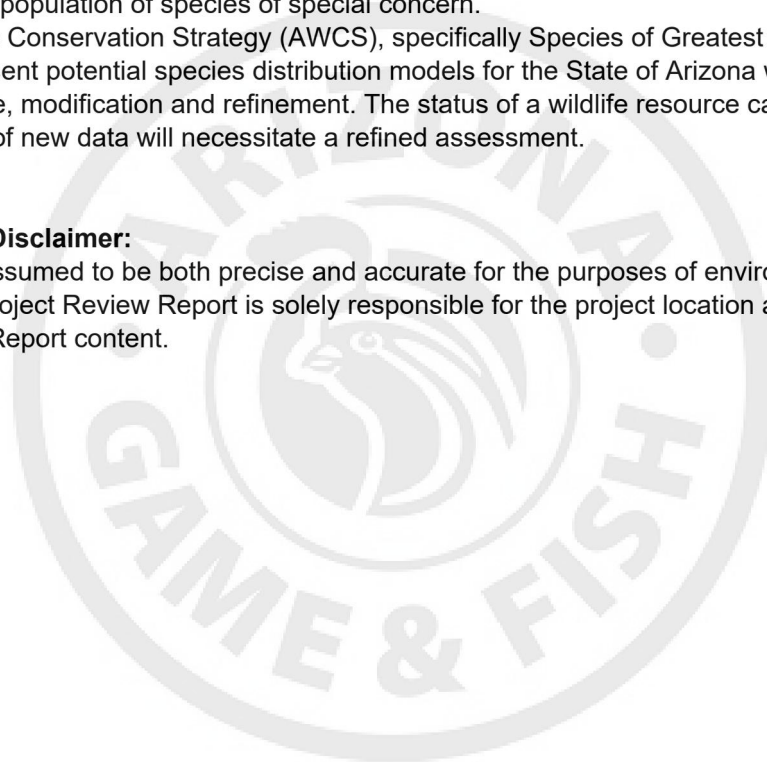
CONSULTING

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. Arizona Wildlife Conservation Strategy (AWCS), specifically Species of Greatest Conservation Need (SGCN), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

Locations Accuracy Disclaimer:

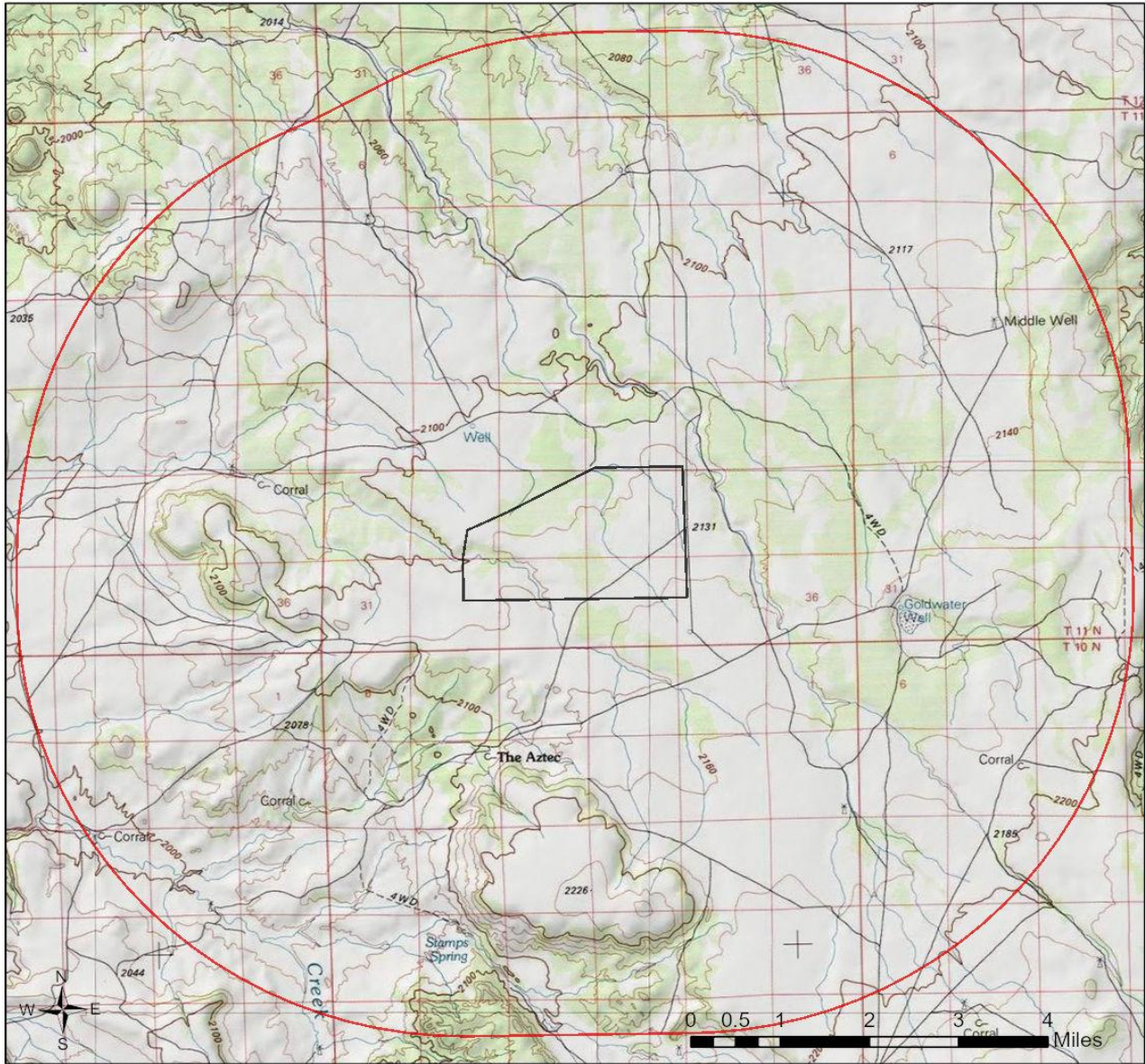
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.





Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
Project Evaluation Program, Habitat Branch
Arizona Game and Fish Department
5000 West Carefree Highway
Phoenix, Arizona 85086-5000
Phone Number: (623) 236-7600
Fax Number: (623) 236-7366
Or
PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies.

Springerville Generation Station Unit 4 USA Topo Basemap With Locator Map



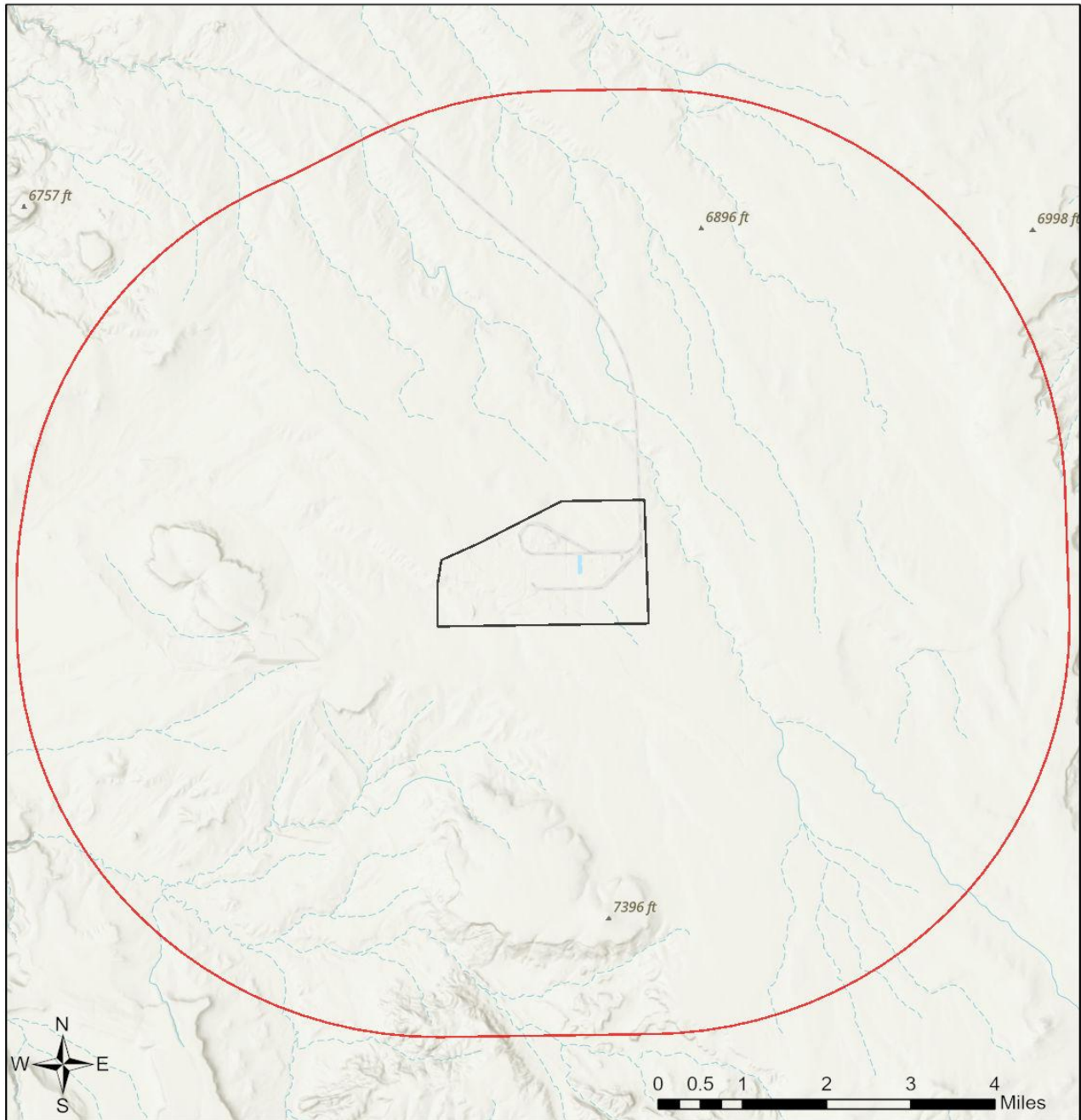
-  Buffered Project Boundary
-  Project Boundary







Project Size (acres): 2,038.84
Lat/Long (DD): 34.3176 / -109.1653
County(s): Apache
AGFD Region(s): Pinetop
Township/Range(s): T11N, R30E
USGS Quad(s): VOIGT RANCH

County of Yavapai, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS
Copyright:© 2013 National Geographic Society, i-cubed
Esri, USGS



Springerville Generation Station Unit 4 Important Areas



-  Buffered Project Boundary
-  Project Boundary
-  Important Bird Areas
-  Critical Habitat
-  Pinal County Riparian
-  Wildlife Connectivity

Project Size (acres): 2,038.84

Lat/Long (DD): 34.3176 / -109.1653

County(s): Apache

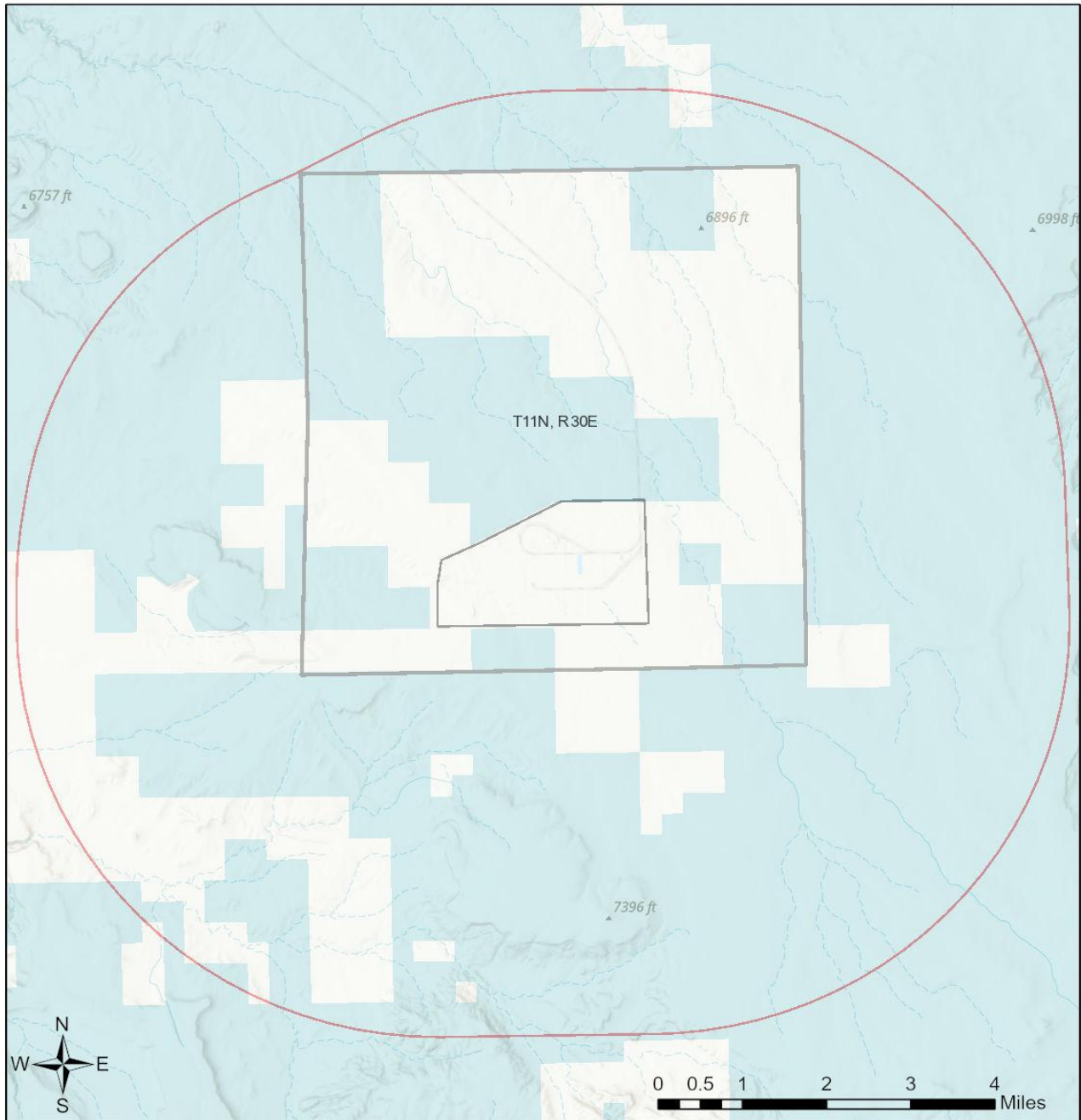
AGFD Region(s): Pinetop

Township/Range(s): T11N, R30E

USGS Quad(s): VOIGT RANCH

Esri, NASA, NGA, USGS
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

Springerville Generation Station Unit 4 Township/Ranges and Land Ownership



<ul style="list-style-type: none"> Buffered Project Boundary Project Boundary AZ Game & Fish Dept. BLM BOR Indian Res. Military 	<ul style="list-style-type: none"> Mixed/Other National Park/Mon. Private State & Regional Parks State Trust US Forest Service Wildlife Area/Refuge Township/Ranges 	<p>Project Size (acres): 2,038.84</p> <p>Lat/Long (DD): 34.3176 / -109.1653</p> <p>County(s): Apache</p> <p>AGFD Region(s): Pinetop</p> <p>Township/Range(s): T11N, R30E</p> <p>USGS Quad(s): VOIGT RANCH</p> <p><small>Esri, NASA, NGA, USGS Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS</small></p>
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Special Status Species Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Canis lupus baileyi	Mexican Wolf	LE,XN		S		1

Note: Status code definitions can be found at <https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/>.

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
N/A	Apache/Navajo Counties Wildlife Movement Area - Diffuse					

Note: Status code definitions can be found at <https://www.azgfd.com/wildlife-conservation/on-the-ground-conservation/state-wildlife-action-plan/state-wildlife-action-plan-status-definitions/>.

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aechmophorus clarkii	Clark's Grebe					2
Aechmophorus occidentalis	Western Grebe					2
Anarhynchus montanus	Mountain Plover					2
Anodonta californiensis	California Floater		S			1
Antilocapra americana americana	American Pronghorn					2
Aquila chrysaetos	Golden Eagle	BGA		S		2
Athene cunicularia hypugaea	Western Burrowing Owl		S	S		2
Baeolophus ridgwayi	Juniper Titmouse					3
Buteo regalis	Ferruginous Hawk			S		2
Buteo swainsoni	Swainson's Hawk					2
Calcarius ornatus	Chestnut-collared Longspur					2
Chordeiles minor	Common Nighthawk					2
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat		S	S		1
Cynomys gunnisoni	Gunnison's Prairie Dog			S		1
Dumetella carolinensis	Gray Catbird		S			3
Empidonax wrightii	Gray Flycatcher					2
Falco mexicanus	Prairie Falcon					2
Falco peregrinus anatum	American Peregrine Falcon		S	S		1
Falco sparverius	American Kestrel					2
Gymnorhinus cyanocephalus	Pinyon Jay	UR		S		2
Haemorhous cassinii	Cassin's Finch					2
Lasiurus cinereus	Hoary Bat					2
Megascops kennicottii	Western Screech-owl					2
Melanerpes lewis	Lewis's Woodpecker					2
Mustela nigripes	Black-footed Ferret	LE,XN				1

Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Myadestes townsendi	Townsend's Solitaire					2
Myotis auriculus	Southwestern Myotis					2
Myotis thysanodes	Fringed Myotis					2
Myotis yumanensis	Yuma Myotis					2
Neotamias cinereicollis	Gray-collared Chipmunk					2
Neotamias minimus	Least Chipmunk		S			2
Neotoma stephensi	Stephen's Woodrat					2
Nyctinomops macrotis	Big Free-tailed Bat					2
Oreohelix houghi	Diablo Mountainsnail					2
Oreoscoptes montanus	Sage Thrasher					2
Passerculus sandwichensis	Savannah Sparrow					2
Perognathus flavus goodpasteri	Springerville Pocket Mouse		S			2
Poocetes gramineus	Vesper Sparrow					2
Rallus limicola	Virginia Rail					3
Rana chiricahuensis	Chiricahua Leopard Frog	LT		S		1
Rana pipiens	Northern Leopard Frog		S	S		1
Spizella breweri	Brewer's Sparrow					2
Sylvilagus nuttallii pinetis	A Southwestern Cottontail					3
Tadarida brasiliensis	Brazilian Free-tailed Bat					2
Toxostoma bendirei	Bendire's Thrasher					2

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Antilocapra americana americana	American Pronghorn					
Callipepla squamata	Scaled Quail					
Odocoileus hemionus	Mule Deer					
Puma concolor	Mountain Lion					
Zenaida macroura	Mourning Dove					

Project Type: Energy Production/Storage/Transfer, Energy Production (generation), coal power plant (maintenance/modification)

Project Type Recommendations:

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals) and may affect wildlife behavior and populations. The AZGFD recommends using only the minimum amount of light needed for safety, especially in areas immediately adjacent to open space or undeveloped lands. The AZGFD encourages the use of motion sensing lighting and narrow spectrum lighting (amber or warm tones typically 2700 Kelvin or lower) wherever possible to lower the range of species affected by lighting. Also, please consider shielding, canting, or cutting all lighting, where possible, to ensure that light reaches only areas needing illumination and to minimize impacts to nocturnal wildlife.

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at <https://www.invasivespeciesinfo.gov/> and the Arizona Native Plant Society <https://aznps.com/invas> for recommendations on how to control these species. To view a list of documented invasive species or to report invasive species in or near your project area visit [iMapInvasives](#) - a national cloud-based application for tracking and managing invasive species at <https://imap.natureserve.org/imap/services/page/map.html>.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select "See What's Here" for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

Follow manufacturer's recommended application guidelines for all chemical treatments. The U.S. Fish and Wildlife Service, Integrated Pest Management Group has a reference document that serves as their pesticide recommendations for protecting wildlife and fisheries resources, titled "Reducing Risks to Pollinators from Pest Control", <https://www.fws.gov/sites/default/files/documents/Reducing%20Risks%20to%20Pollinators%20From%20Insect%20and%20Plant%20Pest%20Control%20-%20Farmlands.pdf> The AZGFD recommends that direct or indirect impacts to sensitive species and their forage base from the application of chemical pesticides or herbicides be considered carefully when identifying timing, location, and application methods.

Evaluate potential impacts to wildlife and fish species due to changes in access to water, water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods). Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing the project to minimize impacts to spawning fish and other aquatic species. Wash, drain, and dry equipment to reduce the spread of exotic invasive species. AZGFD recommends early coordination with the Project Evaluation Program (PEP@azgfd.gov) for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The AZGFD recommends following the Avian Power Line Interaction Committee (APLIC) guidelines for new power lines, which can be found in the current version of *Suggested Practices for Avian Protection on Power Lines and Reducing Avian Collisions with Power Lines*. Large bodied birds, such as hawks, owls, vultures, and eagles, may be vulnerable to line strikes and electrocution during construction and operation of power lines and substations; power poles can also serve as perches for large-bodied birds. These potential impacts can be avoided or minimized by following the APLIC guidelines which include designing the power lines with enough space between energized components to reduce the likelihood of a bird electrocution or installing bird flight diverters in sections of line where elevated bird strikes are anticipated (e.g. lines over water bodies or in the path of colonial roosting locations). The AZGFD's Raptor Coordinator, who can be contacted at raptors@azgfd.gov or 623-236-7575, can provide further information on specific design features and best management practices.

The AZGFD recommends revegetating disturbed areas with native drought-tolerant species that represent the natural surrounding landscape. Landscaping with native plants can help support wildlife and pollinator species in the area while reducing dust and erosion. In addition, the applicable land management agencies should be consulted regarding guidelines for revegetation efforts. The AZGFD also recommends the development of a short and long-term monitoring plan, including adaptive management guidelines to address invasive species control and maintain native vegetation.

Arizona's wildlife is highly dependent on any available surface water. Wildlife, especially waterfowl, are attracted to any form of open water. Implement measures to prevent wildlife access to water collection/storage basins, evaporation or settling ponds, and/or facility storage yards containing hazardous and other human-made substances. Design slopes to discourage wading birds and use fencing, netting, hazing or other measures to exclude wildlife.

Project Location and/or Species Recommendations:

Analysis indicates that your project is located in the vicinity of an identified **wildlife habitat connectivity feature**. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer

to: <https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-identifying-corridors/>.

Please contact the Project Evaluation Program (pep@azgfd.gov) for specific project recommendations.



Appendix D

Noise Analysis



Prepared For: Salt River Project

Prepared By: Kimley-Horn

Subject: *Springerville Generating Station Unit 4 Repower Project – Noise Comparison*

Executive Summary

Salt River Project (SRP) is proposing to convert Unit 4 at the Springerville Generating Station (SGS) in Apache County, Arizona, from coal-fired generation to run on natural gas. This technical memorandum provides a brief comparison of the existing and future sources of sound for the proposed fuel conversion project.

Project Location and Description

The SGS facility is located approximately 15 miles northeast of Springerville, approximately 17 miles southeast of St. John, and approximately 7 miles west of the Arizona/New Mexico border.

SGS's Unit 4 is one of four existing units within the SGS main plant site. SGS Units 1 and 2 are owned and operated by TEP, Unit 3 is owned and operated by Tri-State Generation and Transmission Association, and Unit 4 is owned and operated by SRP. On March 4, 2026, the Commission voted unanimously to approve TEPs request to modify the Certificate of CEC for SGS Units 1 and 2 to allow the conversion from coal to natural gas-fired steam generation.

The fuel type conversion will change the overall sound characteristics of the SGS, as coal handling and multiple other mechanical systems, major sources of noise emissions, are not needed to support a natural gas-fired generation unit. The conversion from coal-fired to gas-fired generation is anticipated to reduce overall operational sound levels at the facility.

Coal-Fired Operational Noise

The existing coal-fired generation units are made up of various pieces of operational equipment that contribute to the current noise environment at the facility. Below are some of the main sources of noise associated with the existing coal-fired generation units.

- Intake and exhaust fans
- Coal grinders/crushers
- Cooling towers
- Pumps
- Electrical transformers
- Heavy machinery

Natural Gas Operational Noise

The proposed natural gas-fired generation unit is anticipated to reduce overall operational noise levels at the SGS. The following are some items that will contribute to the lower operational noise levels.

- Boiler conversion, which is expected to be more efficient with natural gas
- Removal or abandonment in place portions coal handling equipment and operations serving Unit 4
- Reduction in quantity/size of fans and pumps

Conclusions

Based on the brief comparison of the operational equipment associated with the existing coal-fired units and the proposed conversion of Unit 4 to natural gas fuel, it is anticipated that overall operational noise levels at the SGS will be reduced. The anticipated reductions in noise levels are mainly due to the removal or abandonment in place of equipment and operations associated with coal handling, which are typically very loud.

EXHIBIT "6"

MAR 18 1987

BEFORE THE POWER PLANT AND TRANSMISSION LINE

SITING COMMITTEE OF ARIZONA

DOCKETED BY	C.M.
-------------	------

IN RE: TUCSON ELECTRIC POWER COMPANY'S)
REQUEST TO APPROVE THIS APPLICATION FOR)
UNIT 4 OF THE SPRINGVILLE GENERATING)
STATION LOCATED WITHIN A PARCEL OF PROPERTY)
CONSISTING OF SECTION 27; THE SOUTH HALF)
(S1/2) AND THE SOUTHEAST HALF OF THE NORTH)
HALF (SE1/2 N1/2), SECTION 28; THE EAST HALF)
(E1/2), SECTION 29; THE NORTHEAST QUARTER)
(NE1/4), SECTION 32; THE NORTH HALF (N1/2),)
SECTION 33; THE NORTH HALF (N1/2), SECTION)
34, ALL IN TOWNSHIP 11 NORTH RANGE 30 EAST)
GILA AND SALT RIVER BASE AND MERIDIAN,)
APACHE COUNTY, ARIZONA, AND ALL RELATED)
FACILITIES LOCATED WITHIN THE EXISTING)
SPRINGVILLE GENERATION STATION PLANT SITE.)

Case No. 74

ACC DECISION

NO. 55477

CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY

Pursuant to public notice published as provided by law, the Power Plant and Transmission Line Siting Committee (the "Committee") convened a public hearing in the Apache Room of the Phoenix Hilton at Central and Adams in Phoenix, Arizona, commencing at 10:00 a.m. on August 28, 1986 regarding the Application filed on June 17, 1986 (the "Application") of Tucson Electric Power Company (the "Applicant"), for a Certificate of Environmental Compatibility in conformance with the requirements of Arizona Revised Statutes §40-360, et seq.

The Application requested approval of a location within the existing approved boundaries of the Springerville Generating Station as the site for construction and operation of a 350 megawatt generating unit identified as Unit 4. The site proposed for Unit 4 is located exclusively within Apache County, Arizona.

The following members and designees of members of the Committee were present for the August 28, 1986 hearing:

1. Thomas P. Prose, Chairman (designee for Robert Corbin)
2. Michael Mays (designee for Charles Tedeford)
3. James Pierce
4. Arthur N. Lee
5. Richard Oxford (designee for Robert Lane)
6. Tim Henley (designee for Kathy Ferris)
7. Kayelen Bishop
8. Renz Jennings
9. Arlo B. Lee
10. Floyd Robbs
11. Karen Heidel
12. Carroll Dekle (designee for Lloyd Novick)
13. Kenneth Kvamme (designee for Raymond Thompson)
14. Tanna Baldwin (designee for the Director of the Arizona State Parks Board)

The Applicant was represented by its attorneys, Dennis R. Nelson and Geoffrey L. Denempont. There were no interventions. The Arizona Center for Law in the Public Interest and the St. Johns Irrigation and Ditch Company entered limited appearances in connection with the proceeding.

Testimony was presented on behalf of the Applicant by Einar Greve, Alexander Ward, H. Duane Bock, Dr. John W. Harshbarger, Dr. Erroll L. Montgomery, Dr. Amiram Roffman, Dr. Frederick Rueter, and Dr. John P. Wilson. Twenty-two exhibits were offered by the Applicant and received into evidence at the hearing. Committee members and designees were given an opportunity to examine, and did examine, the Applicant's witnesses.

At the conclusion of the August 28, 1986 hearing, the Committee voted to continue the hearing for the purpose of permitting Applicant to prepare responses to questions submitted by the Committee relating to the Applicant's forecasting methods and to the projected combined impact of water withdrawals from

the Kaibab-Coconino Aquifer due to the operations of the Springerville Generating Station and the Coronado Generating Station. The procedure governing the submission by Applicant of the additional data was established pursuant to an "Order for the Continuance of Hearing Pending Applicant's Presentation of Data Responses" dated October 1, 1986 (the "Order"). Pending the continuation of the hearing, the Chairman caused copies of the transcript of the August 28 hearing to be prepared and distributed to each Committee member.

Pursuant to the Order, the Applicant filed its responses to the data requests with the Committee on November 26, 1986. The Chairman thereafter duly notified each member of the Committee in the manner provided by law that the hearing on this matter would be continued on December 22, 1986 commencing at 10:00 a.m. at the Navajo Room of the Phoenix Hilton at Central and Adams in Phoenix, Arizona.

As scheduled, the continuation of the hearing commenced at 10:00 a.m. on December 22, 1986 at the Navajo Room of the Phoenix Hilton in Phoenix, Arizona, at which time the following members and designees of the Committee, constituting a majority of the Committee, were present for hearing:

1. Thomas P. Prose, Chairman (designee for Robert Corbin)
2. Michael Mays (designee for Charles Tedeford)
3. Gaye Page (designee for Kayelen Bishop)
4. Karen Heidel
5. Jacquie McNulty
6. Arlo Lee
7. Arthur Lee
8. Renz Jennings
9. Carroll Dekle (designee for Boyd Dover)
10. John Carr (designee for Duane Schroufe)
11. Dennis Sundie (designee for Kathy Ferris)

Gaye Page, Jacquie McNulty, John Carr and Dennis Sundie were not present at the August 28th hearing; however, each indicated

that they had reviewed the record of the August 28th hearing prior to the time at which the continuation of the hearing commenced. All other Committee members listed were present at the August 28th hearing.

The applicant was present and represented by its attorneys Dennis R. Nelson and Geoffrey L. Denempont.

Testimony was presented on behalf of the Applicant by Einar Greve, Dr. Erroll Montgomery, Dr. Amiram Roffman, and Joe King. Ten additional exhibits were offered by the Applicant and received into evidence at the hearing. Committee members were given an opportunity to examine, and did examine, the Applicant's witnesses.

A complete list of the exhibits received into evidence in this proceeding is attached as Exhibit A.

The Committee, having considered the Application and the testimony and exhibits presented by the Applicant, and having been fully informed in the premises, upon motion duly made and seconded, by a majority vote of the Committee, hereby approves the Application and grants the Applicant the following Certificate:

Tucson Electric Power Company, the Applicant, is hereby granted in accordance with its Application a Certificate of Environmental Compatibility for the construction of a coal-fired steam-generating unit rated at 350 megawatts to be located at the Springerville Generating Station in Apache County, Arizona, to be known as Springerville Unit No. 4 ("Unit No. 4").

This Certificate shall and hereby does permit the Applicant to construct Unit No. 4 and related facilities in the manner described by the Application in this proceeding, and as more specifically described by Applicant's testimony and evidence introduced in this proceeding.

This Certificate of Environmental Compatibility is granted on the following conditions:

(i) that, pursuant to the provisions of ARS §40-360.06, the Applicant comply with all applicable air and water pollution control standards and regulations, and with all applicable ordinances, master plans and regulations of the State of Arizona, and of any county or incorporated city or town with jurisdiction in the premises; and

(ii) that the Applicant comply with conditions set forth in Exhibit B hereto relating to ground water pumping activities associated with the Springerville Generating Station as prescribed by the Arizona Department of Water Resources; and

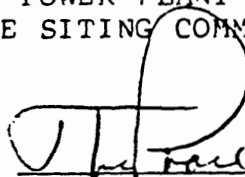
(iii) that the Applicant obtain from the Arizona Corporation Commission (the "ACC"), within one year prior to Applicant undertaking any preparatory engineering, design or construction efforts pertaining to Unit No. 4, an order, pursuant to hearing, confirming that the electric energy to be produced by Unit No. 4 is necessary in order for the Applicant to provide an "adequate, economical and reliable supply of electric power" to its customers, all in accordance with the requirements of ARS §40-360.07(B).

Nothing in this Certificate should be construed to impair the Applicant's rights to return to this Committee in order to seek a Certificate of Environmental Compatibility for a generating unit capable of providing an adequate, economical and reliable supply of electric power to the Applicant's customers, in lieu of Unit No. 4, which may be less burdensome upon the surrounding environment.

GRANTED this 22nd day of December, 1986.

THE POWER PLANT AND TRANSMISSION
LINE SITING COMMITTEE

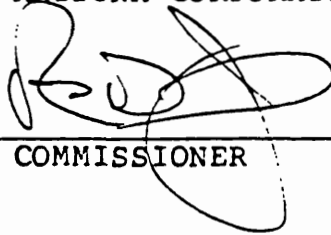
BY



Thomas Prose, Chairman

The foregoing Certificate of Environmental Compatibility is hereby approved subject to the condition that Tucson Electric Power Company comply in all respects with the Water Use Policy it has developed and included as part of its Springerville Generating Station Water Management Plan, Preliminary Report, dated August 25, 1986 and identified as Exhibit 15 in the record.

BY ORDER OF THE ARIZONA CORPORATION COMMISSION.

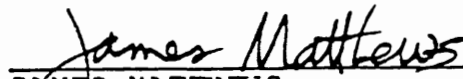


CHAIRMAN

COMMISSIONER

COMMISSIONER

IN WITNESS WHEREOF, I, JAMES MATTHEWS, Executive Secretary of the Arizona Corporation Commission, have hereunto set my hand and caused the official seal of this Commission to be affixed at the Capitol in the City of Phoenix, this 18 day of March, 1987.



JAMES MATTHEWS
Executive Secretary

DISSENT _____

APPLICANT'S LIST OF EXHIBITS

<u>No.</u>	<u>Description</u>
1	Prepared direct testimony of Einar Greve, Alexander Ward, H. Duane Bock, John W. Harshbarger, Ph.D., Errol L. Montgomery, Ph.D., Amiram Roffman, Ph.D., Frederick Rueter, Ph.D.
2	Diagram entitled "Springerville plant site and vicinity" (corresponding with EAR figure 1, page 2)
3	Aerial photo
4	U.S.G.S. map of Northern Arizona
5	Diagram entitled "Springerville generating station site area" (corresponding with EAR figure 3.1-2, page 3-7)
6	Diagram entitled "Springerville generating station; Unit 4 main power building within existing site" (corresponding with EAR figure 3.1-3, page 3-9)
7-A	Letter from Apache County Board of Supervisors dated 7-10-86 to TEP
7-B	Letter from City of St. Johns dated 7-28-86 to TEP
7-C	Letter from St. Johns Chamber of Commerce dated 7-16-86 to TEP
7-D	Letter from Town of Springerville dated 8-6-86 to TEP
7-E	Letter from Town of Eagar dated 8-26-86 to TEP
8	Hydrogeologic features map (WMP figure 1 [illustrations])
9	Hydrogeologic cross section A-A' (WMP figure 2 [illustrations])
10	Maximum projected decline in hydrostatic head (WMP figure 6 [illustrations])
11	Water level contour map - 1976 (WMP figure 4 [illustrations])
12	Water level contour map - 1986 (WMP figure 3 [illustrations])

Applicant's List of Exhibits - continued

<u>No.</u>	<u>Description</u>
13	Projected water level contour map - 2020 (WMP figure 7 [illustrations])
14	TEP pumping regimen: Four generating units (WMP figure 5 [illustrations])
15	Revised Springerville generating station water management plan (draft)
16-A	Photograph of entrance to Lyman Lake State Park on left, taken 8-25-86
16-B	Photograph at highest point of Lyman Lake State Park at picnic ground, 8-25-86
16-C	Photograph of furthest point on road from Lyman Lake State Park, taken 8-25-86
17	Addendum report dated 11-26-86 entitled, "Pro- jections for Composite Drawdown Impact Kaibab- Coconino Aquifer Based on Proposed Groundwater Withdrawals at the Coronado and Springerville Electrical Generating Stations"
23	Responses of Tucson Electric Power Company to requests for information
24	Letter from Alamito Company to the Committee dated 12-19-86
25	Letter from Dr. Roffman to Tucson Electric Power Company dated 12-19-86
26	Letter from Dr. Roffman to Tucson Electric Power Company dated 12-19-86

1. TEP will establish a hydrologic monitoring program to assess impacts on the surface and groundwater systems in the area of Springerville Generating Station. The program shall:
 - A. Monitor water level drawdown impacts within a 20 mile radius of the wellfields.
 - B. Collect data, in addition to that collected by the US Geological Survey, on the flow regime of the Little Colorado River and on the rate of groundwater discharge to the River and springs along the river.
 - C. Monitor to determine any effects of the TEP pumpage of shallow groundwater systems due to induced downward leakage in the monitored area.
2. The monitoring report described above in Paragraph 1 shall be submitted to the Department of Water Resources annually.
3. The groundwater model shall be updated and re-calibrated every five years using data collected in the monitoring program. After each update TEP shall develop a concise summary report which consolidates information in the modeling, monitoring and hydrogeologic data documents. Such

a report shall describe the model, the extent and adequacy of the data used in the model, and the strengths and weaknesses of the model. The summary report shall also list the types of hydrologic monitoring data needed to improve the reliability of the model and decrease the uncertainty in the projection of pumpage effects on groundwater systems and the Little Colorado River. The summary report shall be submitted to the Department of Water Resources.

4. The monitoring program shall be subject to approval by the Department of Water Resources.

EXHIBIT "7"

BEFORE THE ARIZONA CORPORATION COMMISSION

1
2 WILLIAM A. MUNDELL
3 CHAIRMAN
4 JIM IRVIN
5 COMMISSIONER
6 MARC SPITZER
7 COMMISSIONER

NOV 01 2002

DOCKETED BY [Signature]

6 IN THE MATTER OF TUCSON ELECTRIC
7 POWER COMPANY'S APPLICATION FOR A
8 HEARING REGARDING A FOURTH
9 GENERATING UNIT LOCATED IN
10 SPRINGERVILLE, ARIZONA.

DOCKET NO. L-00000C-77-0030
CASE NO. 30

DOCKET NO. L-00000C-86-0074
CASE NO. 74

DECISION NO. 65347

OPINION AND ORDER

11 DATE OF HEARING: November 9, 2001 (pre-hearing); November 13, 14, 28,
12 29 and 30, 2001

13 PLACE OF HEARING: Eagar, Arizona on November 13 and 14, 2001;
14 Phoenix, Arizona on November 9, 28, 29 and 30, 2001

15 ADMINISTRATIVE LAW JUDGE: Teena Wolfe

16 IN ATTENDANCE: William A. Mundell, Chairman
17 Jim Irvin, Commissioner
18 Marc Spitzer, Commissioner

19 APPEARANCES: Mr. Ray Heyman and Mr. Michael Patten, ROSHKA
20 HEYMAN & DEWULF, on behalf of Applicant Tucson
21 Electric Power Company;

22 Mr. Tim Hogan, Arizona Center for Law in the Public
23 Interest, on behalf of The Grand Canyon Trust;

24 Mr. Eric Guidry, Staff Attorney, on behalf of the Energy
25 Project of the Land and Water Fund of the Rockies; and

26 Mr. Stephen Gibelli, Staff Attorney, Legal Division, on
27 behalf of the Utilities Division of the Arizona
28 Corporation Commission.

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1 BY THE COMMISSION:

2 PROCEDURAL HISTORY

3 On July 19, 2001, the Grand Canyon Trust ("Trust") through the Arizona Center for Law in
4 the Public Interest filed with the Arizona Corporation Commission ("Commission") a Motion to
5 Rescind, Alter or Amend Decision Nos. 48313 (September 26, 1977) and 55477 (March 18, 1987),
6 which granted Certificates of Environmental Compatibility ("CECs") to Tucson Electric Power
7 Company ("TEP"). The Trust's motion asked the Commission to order TEP to file an updated
8 application for CECs for Springerville Units 3 and 4 prior to commencing any construction on those
9 units and directing the Arizona Power Plant and Transmission Line Siting Committee to conduct
10 hearings to determine whether the CECs need to be amended or revoked.
11

12
13 On July 20, 2001, TEP filed a Motion to Dismiss the Trust's Motion to Rescind, in which
14 TEP asserted that the Trust's Motion to Rescind was improper.

15 Also on July 20, 2001, TEP filed an Application for Hearing.

16 On August 3, 2001, the Trust filed its Response to TEP's Motion to Dismiss, asserting that
17 the Trust's Motion to Rescind was in the public interest because environmental factors had changed
18 since the CECs for Springerville Units 3 and 4 were issued.

19 Also on August 3, 2001, the Trust filed an Application to Intervene.

20 On August 7, 2001, TEP filed a Reply in Support of Motion to Dismiss.

21 On August 16, 2001, the Trust filed a Motion to Strike a portion of TEP's August 7, 2001
22 Reply.
23

24 On August 20, 2001, the Commission issued a Procedural Order granting intervention to the
25 Trust and setting a Procedural Conference for August 22, 2001 for the purpose of hearing oral
26 arguments on the motions and to discuss the procedural schedule for these matters. The Procedural
27 Conference was held as scheduled and TEP and the Trust argued their respective positions on the
28

1 Motions. The Trust was given additional time to brief further issues for the Commission.

2 On September 19, 2001, TEP and the Trust filed a Joint Stipulation and Motion ("Joint
3 Stipulation") requesting that a single hearing be held before the Commission regarding the need for
4 Springerville Unit 4 and updated data on certain enumerated environmental factors relating to
5 Springerville Units 3 and 4. The Joint Stipulation provides that upon its approval by the
6 Commission, that the Motion to Rescind will be deemed withdrawn. The Joint Stipulation states that
7 upon Commission approval of the Stipulation, the Commission could hear the case and either affirm
8 one or both of the CECs, or determine that TEP has not made the requisite showing of need for Unit 4
9 pursuant to Decision No. 55477, and/or order that additional proceedings be held pursuant to A.R.S.
10 § 40-252 regarding the CECs.

12 By Procedural Order of October 5, 2001, a hearing was set to address the issues set forth in
13 the Joint Stipulation. The Procedural Order established a procedural schedule for the hearing, for the
14 filing of direct and rebuttal testimony, and for publication of notice of the hearing.

16 On October 24, 2001, the Land and Water Fund of the Rockies ("LAW Fund") filed a
17 petition for leave to intervene, which was granted by Procedural Order on October 31, 2001.

18 On November 1, 2001, TEP filed its Notice of Filing Affidavits of Publication.

19 On November 8, 2001, the Trust filed a Motion to Join Salt River Project as an Indispensable
20 Party ("Motion"). On November 16, 2001, TEP filed its Brief in Opposition to the Motion, and on
21 November 21, 2001, the Trust filed its Brief and Reply regarding the Motion to Join. By Procedural
22 Order of November 28, 2001 the Motion was denied, finding that the Salt River Project was not an
23 indispensable party to this proceeding. On December 3, 2001, the Trust filed notice of its intent not
24 to apply for any subpoenas related to Salt River Project in connection with this proceeding.
25

26 The parties prefiled testimony in accordance with the October 5, 2001 Procedural Order.
27 Hearings were held as scheduled in Eagar, Arizona, on November 13 and 14, 2001, and in Phoenix,
28

1 Arizona on November 28, 29 and 30, 2001. TEP, the Trust, the LAW Fund and the Commission's
2 Utilities Division Staff ("Staff") appeared at the hearing and presented testimony. Public comment
3 was taken on each day of the hearing. Numerous members of the public and local political leaders
4 appeared at the hearing and provided comment expressing a great deal of community support of the
5 expansion of the Springerville Generating Station to include Units 3 and 4. At the hearing, TEP
6 indicated that it would file, as a late-filed exhibit, a redacted copy of the Joint Development
7 Agreement between Unisource Energy Development Company and Salt River Project Agricultural
8 Improvement and Power District ("JDA"). At the conclusion of the hearing, the matter was taken
9 under advisement pending the submission of briefs that were to include any conditions that the parties
10 believed should be imposed if the Commission issued an order authorizing construction of Unit 4,
11 pursuant to the requirements of Decision No. 55477. TEP filed the JDA on December 13, 2001.
12 TEP, the Trust, and Staff filed their post-hearing briefs on December 19, 2001, and the LAW Fund
13 filed its post-hearing brief on December 20, 2001. All parties filed reply briefs on January 7, 2002.
14 Written public comments were also filed after the hearing, both in support of and against the
15 expansion of the Springerville Generating Station.
16
17

18 On February 19, 2002, the Trust filed a Notice of Filing Exhibit. A Procedural Order was
19 issued on February 22, 2002 requiring the parties to file responses thereto. TEP, Staff and the LAW
20 Fund filed responses to the Trust's Notice of Filing Exhibit on March 5 and March 7, 2002.

21 On May 2, 2002, TEP filed a Notice of Resolution of Environmental Protection Agency
22 Issues ("Notice of Resolution"). The Air Quality Permit issued by the Arizona Department of
23 Environmental Quality was included as an exhibit to the filing. Pursuant to a Procedural Order issued
24 on May 3, 2002, the Trust, the LAW Fund and Staff filed responses to the Notice of Resolution on
25 May 20 and May 22, 2002.
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BACKGROUND

1
2 The Springerville Generating Station ("SGS") is located in northeastern Arizona, 15 miles
3 from the town of Springerville, approximately 50 miles from the Petrified Forest National Park, and
4 33 miles from the Mt. Baldy Wilderness area. SGS facilities currently include two coal-burning
5 steam turbine units, each with a nominal rating of 380 megawatts ("MW") for continuous operation.
6 Springerville Units 1 and 2 were constructed pursuant to a CEC granted by Commission Decision
7 No. 48313 (September 26, 1977). That CEC authorized TEP to construct three coal-burning steam
8 electric generating units, each rated at 350 MW, for a total plant capacity of 1050 MW. Unit 1 began
9 commercial operation in 1985, and Unit 2 began commercial operation in 1990. TEP was
10 conditionally granted a CEC to construct Springerville Unit 4, a coal-fired steam-generating unit
11 rated at 350 MW, in Commission Decision No. 55477 (March 18, 1987). That CEC granted TEP
12 authority to construct Unit 4 in accordance with its application, on the following conditions:
13

14 (i) that, pursuant to the provisions of A.R.S. § 40-360.06, the Applicant comply with
15 all applicable air and water pollution control standards and regulations, and with all
16 applicable ordinances, master plans and regulations of the State of Arizona, and of any
17 county or incorporated city or town with jurisdiction in the premises; and

18 (ii) that the Applicant comply with conditions set forth in Exhibit B [t]hereto relating
19 to ground water pumping activities associated with the Springerville Generating
20 Station as prescribed by the Arizona Department of Water Resources; and

21 (iii) that the Applicant obtain from the Arizona Corporation Commission (the "ACC"),
22 within one year prior to Applicant undertaking any preparatory engineering, design or
23 construction efforts pertaining to Unit No. 4, an order, pursuant to hearing, confirming
24 that the electric energy to be produced by No. Unit 4 is necessary in order for the
25 Applicant to provide an "adequate, economical and reliable supply of electric power"
26 to its customers, all in accordance with the requirements of A.R.S. § 40-360.07(B).¹

27 Unisource Energy Development Company, an affiliate of TEP, and the Salt River Project
28 Agricultural Improvement District ("Developers") have entered into a Joint Development Agreement

¹ A.R.S. § 40-360.07(B) provides:

In arriving at its decision, the commission shall comply with the provisions of § 40-360.06, and shall balance, in the broad public interest, the need for an adequate, economical and reliable supply of electric power with the desire to minimize the effect thereof on the environment and ecology of this state.

1 to develop Springerville Units 3 and 4. The Joint Development Agreement calls for a special purpose
2 limited liability company or other legal entity to be formed for the purpose of developing, financing,
3 constructing, owning, operating, and maintaining an integrated coal-fired electricity generating
4 facility to be located adjacent to the Springerville Power Plant comprised of two new units, Units 3
5 and 4, which are to be developed under the terms of the Joint Development Agreement.

6 The Developers are preparing to construct two additional coal-burning steam turbine
7 generating units, Units 3 and 4, each with a nominal rating of up to 400 MW, near the existing SGS
8 Units 1 and 2. The Developers wish to construct Unit 3 pursuant to the CEC held by TEP for Units 1
9 through 3 granted in Decision No. 48313, and to proceed with construction of Unit 4 under the CEC
10 held by TEP upon receipt of a Commission Order as required by Decision No. 55447.

11 Pursuant to the Joint Stipulation entered into by the Trust and TEP, TEP and Trust agreed that
12 the hearing in this matter would address the need for Unit 4, and environmental data pertaining to
13 Units 3 and 4, limited to the following factors:

- 14 I. The cumulative impact of the CO₂ fields and related facilities that are being proposed
15 by Canadian Ridgeway Petroleum and the SGS;
 - 16 II. The impact of Units 3 and 4 on the air (including CO₂ emissions) in the vicinity of the
17 SGS;
 - 18 III. The impact of Units 3 and 4 on water, including groundwater (using updated
19 hydrological modeling) in the vicinity of the SGS;
 - 20 IV. The impact of the water withdrawal required by Units 3 and 4 on endangered species,
21 including any riparian areas affected by the SGS;
 - 22 V. The impact of Units 3 and 4 on the Mt. Baldy Wilderness Area and the Petrified Forest
23 National Park; and
 - 24 VI. With regard to need for Unit 4, alternatives that TEP studied but did not pursue.
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DISCUSSION**I. The Cumulative Impact of the CO₂ Fields and Related Facilities that are Being Proposed by Canadian Ridgeway Petroleum and the Springerville Generating Station**

Mr. James S. Pignatelli, Chairman of the Board, President and Chief Executive Officer of TEP and TEP's parent company, UniSource Energy Corporation, testified that while Ridgeway Arizona Oil Corporation ("Ridgeway") has been exploring a deep CO₂ and helium reserve reportedly located in Apache County, Arizona, that the project involving CO₂ near the SGS is independent of TEP's power operations. Mr. Pignatelli stated that the exploration field is located near the SGS, but that none of the wells used by Ridgeway to extract CO₂ or helium are located on property owned or leased by TEP, and that TEP is not involved in the exploration or extraction process. Mr. Pignatelli further stated that a company called Flo-CO₂ is constructing a liquification plant on the grounds at Springerville, and that Flo-CO₂ will receive CO₂ from Ridgeway for processing at the liquification plant. Mr. Pignatelli also stated his understanding that Ridgeway is considering the construction of a CO₂ compressor station and a 600-mile pipeline to transport CO₂ for use in the oil and gas industry for enhanced oil recovery. Mr. Pignatelli was unaware of any studies that would relate to the environmental impact of Ridgeway's project.

II. The Impact of Units 3 and 4 on the Air (Including CO₂ Emissions) in the Vicinity of the Springerville Generating Station**A. Testimony on Impacts of Emissions (other than CO₂) in the Vicinity of the Springerville Generating Station**

Mr. Pignatelli testified on behalf of TEP that TEP's Title V Air Quality Permit application on file with the Arizona Department of Environmental Quality ("ADEQ") requested an initial cap on emissions of sulfur dioxide ("SO₂") for the entire SGS, including the proposed Units 3 and 4, based on actual emissions of existing Units 1 and 2 for the years 1999-2000, so that there would be no increase in SO₂ emissions, even though the SGS generating capacity would double. He further

1 testified that after 2010, TEP will voluntarily reduce SO₂ emissions from all four SGS units,² thereby
 2 achieving a net reduction approaching 30 percent from the current emissions at the site. Mr.
 3 Pignatelli stated that TEP's Title V permit application also proposed a cap on emissions of nitrogen
 4 oxides ("NO_x") for the entire SGS, including the proposed Units 3 and 4, based on actual emissions
 5 of existing Units 1 and 2 for the years 1999-2000, so that there would be no increase in NO_x
 6 emissions, even though the SGS generating capacity would double. According to Mr. Pignatelli, TEP
 7 would achieve the proposed caps on SO₂ and NO_x by performing pollution control upgrades, at a cost
 8 of approximately \$100 million, to Units 1 and 2.
 9

10 Mr. Robert J. Paine testified on behalf of TEP regarding the air quality impact of the SGS,
 11 including projections for proposed Units 3 and 4. Mr. Paine supervised the ENSR Corporation
 12 ("ENSR") team that conducted an Air Quality Impact Analysis for the SGS at the request of TEP.³
 13 The Air Quality Impact Analysis was included in Mr. Paine's prefiled direct testimony.

14 As part of its analysis, ENSR conducted computerized air dispersion modeling⁴ to determine
 15 the impacts of the proposed SGS expansion in the vicinity of the SGS, which is a Class II area for
 16 Prevention of Significant Deterioration ("PSD") Increments, and in three nearby protected PSD Class
 17 I areas, the Mt. Baldy Wilderness Area, the Petrified Forest National Park, and the Gila Wilderness
 18 Area, which are located wholly or partially within 100 kilometers of the SGS. The model computes
 19 emission concentration averages for comparison of the predictions to the National Ambient Air
 20

23 _____
 24 ² TEP's testimony indicated that this reduction would be achieved primarily by switching to a lower sulfur content coal
 source.

25 ³ CH2M Hill, another consultant hired by TEP, performed the groundwork for the initial Springerville Air Quality Impact
 Analysis.

26 ⁴ Inputs into the computerized dispersion model conducted by ENSR included a historical record of hourly meteorological
 data representative of the emission site; data regarding model "receptors," which are the locations where the pollutant
 27 concentrations are predicted; and the emission source's physical stack dimensions and exhaust gas characteristics, such as
 temperature and flow rate. The time period covered by ENSR's computer model is one year, to account for seasonal
 28 variations in weather conditions. The model predicts concentration at each receptor using the mathematical relationship
 between the location of the emission plume's central axis, its distance from the individual receptor, and its amount of
 spread.

1 Quality Standards ("NAAQS") or to the allowable PSD incremental increases in air pollution
2 concentrations.

3 ENSR performed its dispersion modeling analysis for carbon monoxide ("CO"), particulate
4 matter with sizes under 10 microns ("PM-10"), and lead, because the projected amount of those
5 emissions will trigger requirements for dispersion modeling under PSD rules established under the
6 Federal New Source Review program. In addition, ENSR conducted some modeling for nitrogen
7 dioxide ("NO₂") and SO₂. Mr. Paine stated that although the total SO₂ emissions will not increase on
8 average as a result of the addition of Units 3 and 4, future short-term SO₂ emissions could sometimes
9 be higher than current levels, depending on the quality of individual batches of coal, so ENSR's
10 dispersion model looked at the 3-hour and 24-hour predicted concentrations for SGS. ENSR also
11 analyzed impacts from 23 additional hazardous air pollutants, or HAPs, on the Arizona Ambient Air
12 Quality Guidelines ("AAAQG") that are emitted in quantities above 500 pounds per year, including
13 mercury, hydrogen fluoride, and hydrogen chloride. At the hearing, Mr. Paine testified that the
14 proposed doubling of megawatts produced at SGS, due to the doubling of coal consumption, would
15 result in an approximate doubling of the emissions of PM-10, lead, CO, CO₂ and hazardous air
16 pollutants.
17
18

19 Mr. Paine testified that according to the results of the ENSR model, the addition of Units 3
20 and 4 would have insignificant air quality impacts for CO and lead. He stated that under EPA rules,
21 the larger impacts the model showed for PM-10 required that a cumulative impact analysis be
22 performed for PM-10, but not for CO or lead. ENSR subsequently conducted a cumulative air
23 quality modeling analysis for PSD increment consumption and NAAQS compliance for PM-10, and
24 also for short-term SO₂ emissions. That cumulative impact modeling analysis included Units 1 and 2,
25 proposed Units 3 and 4, background sources, and regional background sources. The cumulative
26
27
28

1 impact modeling analysis, which conservatively assumed that peak air emissions occur every hour of
2 the year, showed compliance with PSD increments and NAAQS levels for air quality.

3 Mr. Rick Moore, Program Officer for the Trust, testified on behalf of the Trust regarding the
4 impacts of SGS Units 3 and 4 on the air (including CO₂ emissions) in the vicinity of the SGS. He
5 stated that the Trust is concerned about global warming, visibility degradation, and the deposition of
6 SO₂, NO_x and hazardous air pollutants on the ecosystems surrounding SGS.

7
8 Mr. Moore testified that, based on TEP's Title V Permit application at the time of the hearing,
9 that Units 1, 2, 3 and 4 would emit, per year, 37,434,000 pounds of SO₂ (to be reduced to 26,200,000
10 pounds in 2011), 23,318,000 pounds of NO_x, 10,440 pounds of cyanide, 50 pounds of arsenic, and
11 505 pounds of mercury. Mr. Moore noted that cyanide and arsenic emissions are not regulated. Mr.
12 Moore also testified that the Trust is concerned about the potential human health effects of human
13 exposure to SO₂, NO_x and hazardous air pollutants, and cited an EPA report declaring that risks are
14 associated not only with the breathing of toxics, but with the deposition of toxic pollutants onto soils
15 or surface waters.

16
17 The Trust objected to the level of pollution control for Units 3 and 4 proposed by TEP in its
18 Title V Permit application with ADEQ. The Trust contended that it is only because Units 1 and 2 are
19 not meeting the legally applicable SO₂ and NO_x emission limits that TEP is able to propose no
20 increase in emissions with the addition of Units 3 and 4. Mr. Moore stated at the hearing that the
21 Trust was participating in TEP's PSD permit process at ADEQ, and had submitted comments there
22 which it had copied to the United States Environmental Protection Agency ("EPA").

23
24 The Trust asserted that the top level of Best Available Control Technology ("BACT") for SO₂
25 is a removal efficiency of 95 percent, while TEP proposes 70 percent for Units 3 and 4; and that
26 TEP's proposal would result in an approximately 65 percent reduction in NO_x emissions, whereas
27 state-of-the-art BACT would result in an 85 to 95 percent reduction.

1 The Trust also contended that TEP's proposal to cap total annual emissions of SO₂ and NO_x to
2 the current level of Unit 1 and 2 emissions does not ensure that there will be no increase in hourly,
3 daily, or monthly emissions. The Trust stated that the TEP proposal included no short-term cap on
4 NO_x emissions, and that the short term cap proposed for SO₂ emissions would allow a 53 percent
5 increase in hourly SO₂ emissions over current Units 1 and 2 emissions. The Trust took issue with the
6 ENSR modeling analysis, particularly with the results concerning the impacts of the proposed
7 expansion on visibility and PSD increments in the nearby Class I areas. The Trust's disagreements
8 with those ENSR model conclusions are summarized in Section V below, in the discussion of the
9 issue of visibility impacts on the Mt. Baldy Wilderness Area and the Petrified Forest National Park.
10 The Trust pointed out that BACT requirements would include emissions limits on a shorter-term
11 basis to ensure protection of Class I areas.
12

13 Mr. Moore testified that additional environmental benefits could be obtained by switching the
14 SGS fuel source from Lee Ranch Mine coal to Powder River Basin coal. He stated that if TEP
15 burned only Powder River Basin coal, and installed BACT on all four units at SGS, that SO₂
16 emissions would be in the range of 2,500 tons per year, a reduction of more than 16,000 tons from
17 TEP's proposal. He asserted that use of state-of-the-art combustion technologies for coal, such as
18 efficient Integrated Gasification Combined Cycle ("IGCC") technology, particularly with CO₂
19 capture and disposal, could reduce the ecological impacts of Units 3 and 4.
20

21 Mr. Paine acknowledged that IGCC technology holds the promise of reducing emissions
22 while increasing the efficiency of utilizing coal for power generation, but maintained that it is not yet
23 a mature, reliable or economic technology alternative for the SGS.
24

25 Mr. Paine testified on rebuttal that TEP proposed to reduce the NO_x emissions from Units 1
26 and 2 by approximately 50 percent from their current levels by installing new Low NO_x burner
27 technology; that TEP's proposed reductions in SO₂ emissions would be achieved by upgrading the
28

1 existing SO₂ scrubber system for Units 1 and 2 to achieve removal rates of at least 70 percent and
2 possibly as much as 80-85 percent; and that the lower emission limits proposed for 2011 and
3 thereafter would be achieved by using lower sulfur coal. Mr. Paine responded to the Trust's concern
4 regarding the SGS fuel source by pointing out that 2011 is the earliest date available contractually for
5 changing the coal supply to the plant, and that TEP intends to utilize coal with a lower sulfur content
6 as a part of its SO₂ reduction strategy when it is contractually able to do so. Mr. Pignatelli testified
7 that TEP is currently under contract into the 2011 timeframe for coal from the Lee Ranch Mine,
8 which was opened for Units 1 and 2, and that the coal is tending to increase in sulfur content, which
9 requires the addition of limestone to stay within current permit limitations. He stated that TEP is
10 currently looking at coal supplies to either blend with Lee Ranch Mine coal or replace it, and is
11 currently funding a study on coal pretreatment processes, including coal blending and limestone
12 injection, to reduce the sulfur content of the coal burned at SGS. He explained that TEP's base
13 contract is for approximately 2.4 million tons of coal annually, and that SGS currently burns about
14 3.2 million tons. Mr. Pignatelli said that TEP can begin reducing sulfur as soon as it develops a good
15 process of mixing and preprocessing the coal. Mr. Paine testified that changes to TEP's coal source
16 will require the addition of separate coal handling facilities and changes to the boilers associated with
17 Units 1 and 2, at an estimated cost of approximately \$60 million..

18
19
20 Mr. Paine also stated that TEP proposed to design Units 3 and 4 to minimize the emissions of
21 NO_x, SO₂ and PM with state-of-the-art technology such as baghouse technology for PM control; Low
22 NO_x Burners in combination with Selective Catalytic Reduction ("SCR") for control of NO_x; and dry
23 scrubbers capable of 90 percent SO₂ reduction. Mr. Paine stated that the dry scrubbers, in
24 combination with the baghouses, and especially when considered together with further SO₂
25 reductions from Units 1 and 2, would provide equivalent or greater SO₂ control than would be
26 required as BACT for the SGS expansion. He testified that TEP is proposing to utilize technology
27
28

1 for Units 3 and 4 that has been approved as BACT on similar units according to the EPA's
2 BACT/LAER Clearinghouse. Mr. Paine asserted that the BACT and Lowest Achievable Emission
3 Rate ("LAER") technology to control emissions of ash and its trace metals is use of a baghouse, and
4 that the use of spray dryer absorbers is also considered BACT for the removal of hydrogen fluoride
5 and sulfuric acid, and will provide control of mercury and hydrogen chloride. Mr. Paine stated that
6 the bottom line for the proposed project is that in effect, TEP proposes building a new 800 MW
7 electric power plant with zero net emissions of SO₂ and NO_x. Mr. Paine stated that TEP proposed
8 total NO_x reductions that are more significant than simply applying BACT for NO_x to Unit 3 and Unit
9 4 alone.
10

11 B. Impacts of CO₂ Emissions

12 1. Testimony

13 Mr. Moore testified that SGS Units 1 and 2 currently produce approximately 7.6 million tons
14 of CO₂, and that if Units 3 and 4 come on line, SGS will produce an additional 7.6 million tons of
15 CO₂, which he stated is equivalent to the CO₂ emissions of about 1.2 million average cars. Mr. Joel
16 Smith testified for the Trust on the issue of climate change. Mr. Smith testified that increases in
17 emissions of CO₂ and other greenhouse gases lead to global warming, and that CO₂ is the most
18 important greenhouse gas directly affected by human activities. He stated that the electric power
19 industry currently emits about 40 percent of total U.S. CO₂ emissions and about 35 percent of all U.S.
20 greenhouse gases, that electric power industry emissions increased in the 1990s, and that projections
21 are for continued increases. Mr. Smith believes Arizona's climate may change as a result of
22 increased emissions of greenhouse gases, and stated that average global temperatures will increase at
23 a faster rate over the 21st century than they did in the 20th century, and that global average
24 precipitation will increase. He estimated that Arizona's average temperature over this century will
25 rise by between approximately 2°F to approximately 10°F, based on his survey of 15 global climate
26
27
28

1 models, but acknowledged that exactly how climate will change in individual states cannot be
2 forecasted.

3 Mr. Smith believes that climate change in Arizona resulting from greenhouse gas emissions is
4 likely to affect Arizona's ecosystems by reducing the current diversity of species in Arizona, by
5 either decreasing or increasing Arizona's water supplies, and by either decreasing or increasing
6 livestock production in Arizona, depending on whether conditions become wetter or drier. While
7 acknowledging that the effect of two coal-fired units on climate change is very small, Mr. Smith
8 asserted that the cumulative effects of individual decisions affecting climate change, such as the
9 siting of Units 3 and 4, should be considered.
10

11 When asked what his recommendation would be based on his testimony, Mr. Smith stated that
12 his recommendation would be to first reduce the need for building new plants. When asked what his
13 recommendation would be, assuming that there was a need for the plant, Mr. Smith said that he
14 would recommend carefully looking at alternative ways of producing the energy that would produce
15 less CO₂ in a cost-effective manner, such as IGCC, and to take climate change into account. Mr.
16 Smith stated that it probably is possible to quantify the effects of Units 3 and 4 on global, or regional,
17 climate based on the modeling that has been done in this case, but that he had not prepared such an
18 analysis. Mr. Smith was unable to comment as to the adequacy of TEP's proposed pollution
19 mitigation measures for Units 3 and 4 to address his concerns, because he had not studied them.
20

21 The LAW Fund believes that there is a significant likelihood that restrictions on carbon
22 emissions will be imposed on SGS Units 3 and 4 during the lifetime of those facilities, and that the
23 potential cost impacts from possible future regulations could be substantial. Dr. Berry testified on
24 behalf of the LAW Fund that based on his review of a number of studies on the costs of complying
25 with possible future CO₂ emissions standards, the costs of meeting future regulatory standards might
26 be on the order of \$50 to \$100 per ton of CO₂ emissions. The LAW Fund asserted that the addition
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1 of SGS Units 3 and 4 to the state's fuel resource mix would increase Arizona's dependence on
2 conventional coal-fired generation, which might limit the state's ability to respond effectively to
3 future climate change regulations.

4 2. The Scope of the Commission's Deliberation on the Issue of CO₂ Emissions

5 During the hearing, Commissioner Spitzer requested that the parties brief the issue of
6 whether, in fulfillment of the Commission's statutory duty under A.R.S. § 40-360.06(A)(6), the
7 Commission's scope of deliberation extends to consideration of environmental effects outside the
8 State of Arizona, in particular to consideration of the issue of global warming effects.
9

10 TEP responded that for legal and policy reasons, the Commission need not address issues that
11 focus on effects beyond the boundaries of Arizona, such as the effect of global warming, when it
12 balances the need for electric power with its impact on the ecology of the State. TEP argued that
13 because CO₂ is not yet a regulated emission, the Commission need not attempt to factor in CO₂
14 emissions into the statutory balancing test. TEP further argues that regulation of such emissions is
15 the subject of both national and international debate and analysis, and there is no evidence in the
16 record of this case to support the imposition of CO₂ emission limitations on Units 3 or 4.
17

18 Staff responded that it believes that the Commission should examine the impact of the new
19 units on the environment without any specific limitations.

20 The Trust responded that it is reasonable for the Commission to consider impacts on the
21 atmosphere as part of its decision-making process, but asserted that it is unnecessary to look beyond
22 Arizona in determining whether the Commission should consider the contribution of SGS Units 3 and
23 4 to global warming.
24

25 The LAW Fund responded that possible future limitations of greenhouse emissions would
26 create a risk of increased costs.
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1 3. Discussion/Resolution

2 The scope of this hearing was defined by the parties to include the impact of CO₂ emissions
3 on the air in the vicinity of the SGS, and all the evidence presented by the parties was considered.

4 The Trust believes that the record in this case includes sufficient evidence regarding the
5 impacts that global warming may have for this state. The Trust asserts that there is little doubt among
6 climate change scientists that the impacts of global warming will profoundly affect natural
7 ecosystems, particularly in an arid state with high biodiversity and elevational gradients such as those
8 that are found in Arizona. On behalf of the Trust Mr. Smith testified to his review of the available
9 scientific literature, and to his estimation of the possible effects of global warming on Arizona's
10 ecosystems. Mr. Smith stated that average global temperatures will increase at a faster rate over this
11 century than they did over the last century, and that global precipitation will also increase. However,
12 Mr. Smith acknowledged that it is not possible to predict exactly how the predicted climate change
13 would affect Arizona's precipitation, water supplies, agricultural output, or livestock production. Mr.
14 Smith could not quantify the effect of Units 3 and 4 on regional or global climate change, but
15 acknowledged that the effect would be very small. While the record of this proceeding contains
16 evidence about the impacts that global warming may have for this state, we do not find the evidence
17 conclusive, and find that the record does not provide a sufficient basis for quantifying local, regional,
18 or global effects of carbon emissions.

19 C. Discussion/Resolution of Conditions Recommended by the Parties Regarding the
20 Impact of Units 3 and 4 on the Air (Including CO₂ Emissions) in the Vicinity of the
21 Springerville Generating Station

22 The Trust urges that TEP be required to offset some of the CO₂ emissions from the SGS
23 through DSM programs such as energy efficiency, and to submit a DSM study to the Commission,
24 prior to construction, showing that the power from Unit 4 cannot be met in whole or in part by DSM
25 programs. The Trust states that the Commission should also require TEP to implement all cost-
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1 effective energy efficiency and other DSM in its service territory, using the Total Resource Cost and
2 Societal tests to determine cost-effectiveness, to reduce load in the service territory, mitigate the
3 environmental impacts of electricity generation and transmission, and reduce the intensity of import
4 constraint in the Tucson area load pocket, and that TEP should identify the funding level, funding
5 mechanism, and cost recovery mechanism as part of the study.

6 We encourage TEP and all Arizona utilities to practice energy efficiency and to implement
7 energy efficiency measures when feasible and cost effective, not only as a means of pollution control,
8 but also as a means of cost containment, both of which we support. However, based on the record in
9 this case, we find that there is insufficient quantification of the global warming effects generally
10 described by Mr. Smith to justify an imposition of specific DSM offset requirements. In addition,
11 because the record does not support an assumption that the power produced by Unit 4 will be
12 consumed by TEP's retail customers, there is no support for the imposition of such requirements on
13 TEP, and we will not adopt this recommendation. Neither will we adopt the Trust's recommendation
14 that TEP be required to conduct a study on energy efficiency and DSM programs showing that the
15 power from Unit 4 cannot be met in whole or in part by such programs. Any power TEP purchases in
16 the future for its retail customers, including any purchased from Units 3 and 4, will be subject to
17 prudence review, which should ensure that TEP practices the most cost-effective means possible of
18 procuring energy for its retail customers.

19 The Trust asserts that by its production of an October 2001 white paper regarding alternatives
20 for CO₂ emissions, TEP acknowledges the likelihood that greenhouse gases will be regulated, and has
21 begun to explore the potential for reductions in connection with the SGS expansion. The Trust urges
22 that TEP be required to submit a report to the Commission on the feasibility of the options identified
23 in its October report prior to construction. We believe that TEP's forward-thinking action in
24 identifying alternatives to deal with possible new emissions regulations is laudable. However, CO₂ is
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1 not yet a regulated emission, and if regulations are enacted, the compliance actions required will be
 2 dependent upon the scope of those regulations. We will therefore not require TEP to submit the
 3 report the Trust recommends.

4 The Trust also recommends that given the divergent opinions on the practicality of IGCC, the
 5 Commission should require TEP to complete a study fully exploring the feasibility of that technology
 6 before the Commission acts on TEP's application. The LAW Fund also urged that the Commission
 7 condition approval of the application upon TEP performing and filing with the Commission a
 8 feasibility study on installing more advanced clean coal technologies at SGS, and should reserve the
 9 right to reject TEP's proposal after review and an opportunity for public comment and a hearing. We
 10 believe that this proceeding did provide the opportunity for public comment, and that there is
 11 sufficient evidence on the record in this proceeding, regarding the costs and benefits of clean coal
 12 technology, including IGCC, to act upon without requiring TEP to file such a feasibility study.

14 The LAW Fund argued that there is a significant likelihood that restrictions on carbon
 15 emissions will be imposed on SGS Units 3 and 4 during the lifetime of those facilities, and that the
 16 potential cost impacts from possible future regulations could be substantial. While we will not
 17 speculate on the likelihood of such future federal regulation, we will impose the condition that, just as
 18 the overall economic risk of Units 3 and 4 shall be borne by the Developers, the Developers should
 19 be required to bear the risk of any costs of possible regulation of CO₂ emissions in the future.

21 The Trust proposed that if the Commission determines that it should grant TEP's application
 22 regarding Unit 4, it should condition such approval upon TEP:

- 24 • Obtaining a PSD permit for the existing Springerville facility (Units 1 & 2);
- 25 • Installing BACT for SO₂, NO_x, and PM for Units 1 & 2 and operating them
 26 in compliance with an emission limit that expresses BACT for those
 pollutants;
- 27 • Performing all work necessary to bring Springerville into prompt, strict and
 28 continuous compliance with the provisions of the current PSD program set

1 forth at 40 C.F.R. § 52.21, in Arizona's SIP at 40 C.F.R. § 52.120 and in a
2 valid PSD permit;

- 3 • Operating Springerville in strict compliance with the current provisions of the
4 PSD program set forth at 40 C.F.R. § 52.21, in the Arizona SIP at 40 C.F.R. §
5 52.120, and in a valid PSD permit; and
- 6 • Maintaining the equipment and trained workforce sufficient to ensure prompt
7 and continuous compliance with the Commission's decision.

8 The Trust proposed the above conditions prior to ADEQ's issuance of the Title V Permit.

9 The Trust also recommended that TEP should be required to develop and file a plan that
10 investigates the feasibility of either withdrawing from the Lee Ranch contract or implementing
11 techniques to reduce the sulfur content of coal burned at SGS. TEP's testimony in this case indicates
12 that it intends to explore these options. As a condition of construction of Unit 4, coal handling
13 facilities that allow lower-sulfur coal to be mixed with coal from the Lee Ranch Mine should be
14 operational before the first new unit becomes operational, the amount of coal taken under the Lee
15 Ranch Mine contract should not exceed the base contract amount from the date the first new unit
16 becomes operational, and the coal supply to the plant should be changed to a lower sulfur content
17 coal when contractually feasible.

18 D. Post-hearing filings

19 1. Filings

20 On February 19, 2002, after the parties filed their post-hearing briefs and reply briefs, the
21 Trust filed its Notice of Filing Exhibit. The Trust's filing included a letter to the ADEQ Air Quality
22 Division Director from the EPA Region IX Air Division Director. The letter and its attachment
23 constituted a formal EPA objection to ADEQ's proposed Title V permit for TEP, and was based on
24 the EPA's position that TEP should not be allowed to utilize the proposed emissions reductions from
25 SGS Units 1 and 2 to net Units 3 and 4 out of full PSD review. The letter expressed the EPA's wish
26 to work with ADEQ to address the issues identified in the EPA's objection, and stated that the EPA
27 28

1 was optimistic of a successful resolution within the 90 days allowed for ADEQ to address the EPA's
2 objection.

3 TEP, Staff and the LAW Fund filed responses to the Trust's Notice of Filing Exhibit. TEP
4 objected to the letter as being both untimely and irrelevant to the issues in this case, in that TEP had
5 already acknowledged that it would have to receive both Commission approval and an air quality
6 permit from ADEQ in order to construct Units 3 and 4. The LAW Fund asserted that based on the
7 letter, the Commission should dismiss TEP's application and instruct TEP to file a revised application
8 only after resolution of all the SGS air permitting issues. Staff did not believe that the EPA letter
9 should have any impact on the proceeding, and took no position on the substance of the EPA's
10 objection. Staff believed that the Commission's action in this matter should simply recognize that the
11 construction of additional generating units at the SGS is conditioned upon compliance with the
12 requirements of the ADEQ and EPA. Staff stated that TEP should notify the Commission when the
13 EPA's issues are resolved, and of the nature of the resolution.
14

15
16 On May 2, 2002, TEP filed its Notice of Resolution. The Title V Air Quality Permit issued to
17 TEP by ADEQ ("Title V Permit") was attached to the filing. Under the terms of that permit, SO₂ and
18 NO_x emissions are capped according to how many units will be operating. After the first of Units 3
19 or 4 becomes operational, a "Three-Unit Cap" of 9,205 tons per year on SO₂ emissions and 7,947
20 tons per year of NO_x on emissions goes into effect; after both Units 3 and 4 become operational, a
21 "Four-Unit Cap" of 10,800 tons per year on SO₂ emissions and 9,600 tons per year on NO_x emissions
22 goes into effect, and if neither Unit 3 nor Unit 4 has commenced operation by December 31, 2007,
23 the permittee must notify the EPA that it has elected to subject Units 1 and 2 to the "Two-Unit Cap"
24 of 7,550 tons per year on SO₂ emissions and 6,300 tons per year on NO_x emissions. In addition, the
25 permit provides that if neither Unit 3 nor 4 have begun operation by December 3, 2009, the Title V
26

1 Permit will lapse and the existing SGS permit shall remain unaffected. The year 2000 actual
 2 emission from Units 1 and 2 was 19,047 tons of SO₂ and 11,700 tons of NO_x.

3 The Trust, the LAW Fund and Staff filed responses to the Notice of Resolution on May 20
 4 and May 22, 2002. The Trust responded that it had submitted a petition to the EPA requesting that
 5 the EPA object to the Title V Permit. The Trust stated that the EPA had 60 days in which to respond
 6 to the Trust's petition, and asserted that the validity of the Title V Permit was in doubt. As of this
 7 date, the Trust has not filed any notice in these dockets of any EPA response to its petition.
 8

9 The LAW Fund responded that the emissions limits under the Title V Permit will not allow
 10 TEP to proceed with the netting proposal presented in its testimony in this case, and reiterated its
 11 recommendation that the Commission should dismiss TEP's application or direct TEP to submit a
 12 revised application to include a detailed analysis of the economic competitiveness of the proposed
 13 expansion and the need for Unit 4.⁵ The LAW Fund asserted that that the Commission cannot render
 14 a decision in this matter because we do not have before us accurate projections of the costs of
 15 complying with the Title V Permit issued after the hearing.
 16

17 2. Discussion/Resolution

18 While we agree with the LAW Fund that the emissions limits under the Title V Permit will
 19 not allow TEP to proceed with the netting proposal presented in its testimony in this case, we do not
 20 find that the lower emissions limits imposed by the Title V Permit vis à vis the emissions limits TEP
 21 originally proposed to ADEQ, as presented in pre-filed testimony and made subject to cross-
 22 examination in these dockets, constitute a basis for dismissal of TEP's application. Nor do we find
 23 that any increased costs resulting from stricter emissions limitations prevent the Commission from
 24

25 _____
 26 ⁵ The LAW Fund stated that such analysis should include an evaluation of the costs of the expansion (including
 27 compliance with the Title V Permit); the regional demand for energy services, the supply of electric generation,
 28 uncertainty about the supply and demand situation, the risk of increased costs from future climate change and other
 environmental regulations, alternative resources for meeting the demand for electric energy services (including wholesale
 power purchases and demand-side management ("DSM")), and the costs and relative risks of those resource alternatives;

1 rendering a decision. This Commission has, in the recent past, required stricter emissions limitations
 2 than those proposed by CEC applicants. The balance of the recommendations concern issues that
 3 were raised and addressed during the hearing on this matter. In addition, as TEP points out, it was
 4 known at the time of the hearing that a Title V Permit would be required for the proposed SGS
 5 expansion.

6 Staff stated in its response that with the issuance of the Title V Permit, the issues originally
 7 raised in the Trust's February 19, 2002, Notice of Filing Exhibit have been addressed and resolved.
 8 Having received no notification by the Trust that the EPA has acted upon its petition, we agree.
 9

10 **III. The Impact of Units 3 and 4 on Water, Including Groundwater (Using Updated
 11 Hydrological Modeling) in the Vicinity of the Springerville Generating Station**

12 **A. Updated Hydrological Modeling**

13 TEP's witness Mr. Ronald DeWitt, a principal of Montgomery and Associates ("M&A"),
 14 testified that in 1984, TEP requested that M&A conduct an investigation to evaluate the hydrologic
 15 impact of withdrawing 20,000 acre-feet per year of groundwater from the existing SGS production
 16 wells. TEP also requested at that time that M&A assist in developing a water pumping plan for those
 17 wells and develop recommendations for location and design of future groundwater monitoring wells.
 18 Witness DeWitt testified that M&A conducted the evaluation using a computer groundwater flow
 19 model⁶ that simulated the Kaibab-Coconino aquifer system. In 1986, M&A updated the groundwater
 20 model to include groundwater pumpage for the Coronado Generating Station. In 1993, M&A
 21 updated the model again to include actual reported pumpage amounts and to incorporate minor
 22 changes in anticipated future pumping regimens. At that time M&A also reverified the model using
 23 water level data obtained during the hydrologic monitoring program implemented pursuant to the
 24 1986 water management plan
 25
 26

27 and whether more advanced combustion technologies, such as IGCC, can be employed at SGS to reduce the
 28 environmental risks and impacts of increased coal-fired generation.

⁶ The flow model was a finite-difference groundwater flow model developed by the U.S. Geological Survey.

1 Mr. DeWitt stated that M&A conducts water monitoring activities three times per year in the
2 vicinity of Springerville as part of an ongoing hydrologic monitoring program. The hydrologic
3 monitoring program involves the measurement of water levels in SGS exploration, production, and
4 monitor wells, and in selected livestock and exploration wells in the area. Once per year, M&A
5 prepares an annual monitor report that is submitted to TEP and to the Arizona Department of Water
6 Resources ("ADWR"). Mr. DeWitt asserted that the groundwater monitoring program is consistent
7 with the Groundwater Management Plan submitted in Case No. 74.
8

9 In 2001, TEP requested that M&A assess the present availability and dependability of 20,000
10 acre-feet per year of groundwater in the vicinity of the SGS, and that M&A reassess the impact on the
11 regional Kaibab-Coconino aquifer of withdrawing groundwater at that rate. TEP also requested that
12 M&A evaluate the status and suitability of TEP's existing wells to provide the required water supply.
13

14 Witness DeWitt testified that M&A conducted a 2001 model investigation to determine if
15 sufficient groundwater is available to meet the future needs of SGS Units 3 and 4. For their 2001
16 model investigation, M&A revised the 1986 model to reflect actual pumpage measured through the
17 year 2000. Mr. DeWitt testified that the 2001 model incorporates water level data obtained during
18 the hydrological monitoring program, as well as the results of pumping tests conducted at three
19 previously untested monitoring wells. He also stated that the 2001 model reflects the fact that actual
20 observed groundwater level declines in the Springerville wellfield have been less than originally
21 projected by the previous models. The 2001 model includes pumpage from the Kaibab-Coconino
22 aquifer by the Coronado Generating Station, the City of St. Johns, Lyman Water Company, Concho
23 Farms, and a farming operation located about five miles west of Lyman Lake. Mr. DeWitt stated that
24 M&A used conservative assumptions in developing its groundwater model to avoid overestimating
25 the groundwater supply. Based on those conservative assumptions, M&A believes that the
26 drawdown in groundwater levels projected by the updated model is larger than will actually occur.
27
28

1 1. Groundwater Impacts

2 According to Mr. DeWitt, the updated 2001 model is more reliable than the 1986 model due
3 to a longer and more complete record of data and due to improvements in calibration. He stated that
4 based on the updated 2001 model, groundwater is available from the Kaibab-Coconino aquifer to
5 meet the anticipated 20,000 acre-feet per year water requirements of SGS for 25 to 40 years after the
6 addition of Units 3 and 4. He stated that the simulated drawdown under the 2001 model for the SGS
7 wellfield area 40 years after the addition of Units 3 and 4 is approximately equal to the drawdown
8 that was simulated by the 1986 model to occur only 28 years after the addition of Units 3 and 4.
9 According to TEP, model projections indicate that maximum drawdown resulting from Springerville
10 pumpage for all four Units for 40 years would be on the order of 10 feet or less for SGS wellfields,
11 City of St. Johns, and Concho Farms, and in the magnitude of 75 to 80 feet for Lyman Water
12 Company and the farming operation located about five miles northwest from Lyman Lake. Model
13 projected drawdown from Springerville pumpage at the 4 wells that lie southwest of the Antelope
14 Valley anticline ranges from 150 to 200 feet during the project life. The projected draw-downs are
15 all believed to be conservatively estimated and thus larger than will actually occur.
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18 2. Surface Water Impacts

19 Mr. DeWitt stated that SGS pumpage will not affect the flow of surface water in the Little
20 Colorado River or its tributaries upstream from and including Lyman Lake. He stated that
21 downstream from Lyman Lake where the Kaibab-Coconino aquifer is closer to land surface,
22 composite drawdown resulting from pumpage of groundwater by SGS, the Coronado Generating
23 Station, and agricultural users from the Kaibab-Coconino aquifer may have some impact on
24 discharge at the springs that occur along the Little Colorado River downstream from Lyman Lake.
25 Mr. DeWitt stated that the potential reduction in spring discharge cannot be determined because the
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1 present understanding of the relationship between the springs and the groundwater conditions in the
2 Kaibab-Coconino aquifer is not well-defined.

3 Mr. DeWitt believes that groundwater and surface water monitoring should continue in the
4 area of the springs so that impacts to these springs by SGS and other groundwater users can be
5 documented and so that necessary and appropriate actions can be taken to alleviate such impacts. Mr.
6 DeWitt listed possible courses of action, including: purchasing surface water rights in sufficient
7 amount to offset the impact; reducing of the amount of groundwater pumped at the SGS wellfield
8 either through water conservation or by importing water from other sources; or directly providing
9 water to the affected water users.
10

11 The Trust's witness Mr. Moore expressed concern that additional withdrawal of water by TEP
12 for Units 3 and 4 could affect spring discharges, thereby adversely impacting riparian habitats and the
13 species associated with them. Mr. Reid F. Bandeen, president and principal hydrogeologist of
14 Truchas Hydrologic Associates, provided rebuttal testimony on behalf of the Trust. Mr. Bandeen
15 disagreed with Mr. DeWitt's statement that the present understanding of the relationship between the
16 springs downstream from Lyman Lake and groundwater conditions in the Kaibab Coconino aquifer is
17 not well defined, and that the potential reduction in spring discharge cannot be determined. Mr.
18 Bandeen stated that the United States Geological Survey ("USGS"), using geochemical analysis and
19 streamflow measurements, has estimated that the Coconino aquifer supplies approximately 36 to 41
20 percent of the base flow to the Little Colorado River between Lyman Lake and USGS Gage No.
21 09385700, located downstream from Salado Springs.⁷ Mr. Bandeen stated that given that the
22 Coconino aquifer supplies a significant amount of the flow in the Little Colorado River between
23 Lyman Lake and the gauging station below Salado Springs, and is also the source of flows to springs
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28 This information came from a USGS report entitled "Estimates of Ground-Water Flow Components for Lyman Lake,
Apache County, Arizona, dated March, 1990.

1 in that reach of the Little Colorado⁸, impacts to the Coconino aquifer will have direct and significant
2 impacts to spring flow and the flow in the Little Colorado along the reach between Lyman Lake and
3 the gauging station below Salado Springs. Mr. Bandeen further stated that the projected drawdown in
4 the vicinity of Salado Springs under either the 1986 or the 2001 M&A models is sufficient to draw
5 down the Coconino aquifer below the level of Salado Springs, eliminating the source of water to the
6 springs. He testified that based on his review of the M&A analysis, water level drawdown specific to
7 the SGS pumpage by itself is sufficient to impact or dry up Salado Springs, potentially by the year
8 2028, 25 years after the addition of Units 3 and 4.
9

10 Mr. Bandeen agreed with Mr. DeWitt's statements that the drawdown in the aquifer decreases
11 with horizontal distance from the pumping well(s), and that several decades after SGS pumping is
12 terminated, that groundwater levels will begin to rise, and ultimately, after several decades, would be
13 expected to approach their pre-development levels. Mr. Bandeen points out, however, that just as
14 drawdown in the vicinity of the spring area will develop over a period of years, that the recovery of
15 water levels in the spring area will require a similar period of years following the cessation or
16 moderation of SGS pumping, and that it is important to allow for this lag period when considering
17 any mitigation measures to be undertaken by SGS in response to measured impacts to spring flows
18 that are detected by monitoring activities.
19

20 Mr. Bandeen asserted that the mitigation measures described by Mr. DeWitt would not
21 necessarily be appropriate to offset the impacts of the springs. In particular, he stated that purchasing
22 surface water rights to offset the impact to the springs does not eliminate the impact, that the lag
23 effect of reductions in pumping must be considered; and that it is unclear whether riparian habitat is
24 included within Mr. DeWitt's definition of a water user, or how water would be provided to restore
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27 ⁸ Mr. Bandeen explained that in addition to Salado Springs, an unnamed spring located between Lyman Lake and Salado
28 Springs is marked by travertine deposits, as is Salado Springs. These deposits are formed as a result of the precipitation
of calcium and carbonate from the Coconino aquifer groundwater, which demonstrates that the spring water comes from
the aquifer.

1 such habitat. Mr. Bandeen stated at the hearing that much detail on the proposed monitoring plan
2 remains to be worked out, including establishing baseline conditions, performing feasibility studies,
3 and developing contingency plans and how they would be implemented. He stated that the objective
4 of the monitoring plan should be the ability to detect measurable, real-time impacts to the surface
5 water features and to mitigate those impacts as they occur.

6 At the hearing, Mr. DeWitt acknowledged that he believes the water that issues from the
7 springs comes from the Kaibab Coconino aquifer, but that the actual connection between the springs
8 and the aquifer is not well understood. Mr. DeWitt also pointed out that reductions in stream flows
9 as measured at gauging stations have some correlation to the ADWR's repair of the Lyman Lake
10 Dam in 1990, and also to the start-up of wells around 1995 or 1996 at a nearby potato farm located
11 approximately four miles west of Salado Springs. He stated that concurrent with the start-up of those
12 wells, the flow at the gauging station below Salado Springs dropped from an average of between four
13 and seven cubic feet per second ("CFS") to an average of between two and four CFS.

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16 B. Recommendations of the Parties Regarding the Impact of Units 3 and 4 on Water,
17 Including Groundwater (Using Updated Hydrological Modeling) in the Vicinity of the
18 Springerville Generating Station

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1. Conditions Proposed by TEP

In its closing brief, TEP stated that it does not believe that additional conditions to the CEC
are necessary at this time, but that it recognizes that issues raised at the hearing regarding its water
management plan and a test well at Salado Springs could be resolved by conditions to the CEC. TEP
therefore proposed the following conditions to address those issues:

- TEP will submit its current water management plan for Springerville Generating Station including the hydrologic monitoring program and updated groundwater model, to the Arizona Department of Water Resources ("ADWR") for review and comment within 90 days of the date of this Decision in this docket, and TEP will file ADWR's comments with the Commission's docket control.

- 1 • TEP will install a monitoring well in an appropriate location to allow TEP to
2 monitor any potential impact on Salado Springs from groundwater pumping
3 for the Springerville Generating Station.

4 2. Conditions Proposed by the Trust

5 The Trust requested that the Commission condition the final approval of a CEC for Unit 4 on
6 TEP taking the following actions, subject to the support of the appropriate landowners, to be
7 completed before the first unit begins producing power:

- 8 • Establish a baseline monitoring plan based on historic flow levels of the Little
9 Colorado River and Salado Springs;
- 10 • Prepare a detailed monitoring plan for the Little Colorado River below Lyman
11 dam, particularly for Salado Springs and submit annual reports to the Apache
12 County Commissioners and Arizona Department of Water Resources;
- 13 • Undertake a feasibility study for different options to ensure Salado Springs
14 and the associated wetland is not impacted by groundwater drawdown;
- 15 • Prepare an action plan – including criteria that triggers the plan - for
16 providing water, either surface or through a recharge well, to protect riparian
17 areas along the Little Colorado River that are impacted by drawdown.

18 3. Conditions Proposed by Staff

19 Staff stated in its brief that it does not dispute the testimony presented by TEP at the hearing
20 that TEP has been submitting annual reports based on its water management plan and has also been
21 submitting its hydrologic monitoring results as part of its filings. Staff believes, however, that TEP
22 should be required to submit some documentation from ADWR demonstrating ADWR's ultimate
23 approval of the hydrological monitoring program. Staff recommends that TEP be held to the
24 conditions stated in Decision No. 48313 and 55477, and that TEP be required to demonstrate that
25 ADWR has approved both the water management plan and the hydrologic monitoring program within
26 180 days of a Decision in this matter or 30 days prior to breaking ground on construction of Units 3
27 and 4, whichever comes first.

28

1 C. Discussion/Resolution

2 TEP's own hydrological studies show that there is a high likelihood of impacting Salado
3 Springs and possibly other springs in the immediate vicinity of the Little Colorado River. TEP's
4 environmental consultant agreed that riparian habitat is rare in Arizona and should be protected, and
5 recommended that it may be appropriate for TEP to monitor surface and groundwater in the area of
6 the springs below Lyman Lake. TEP's hydrological consultant agreed that a monitoring and
7 mitigation plan should be established.
8

9 The Trust believes that, given TEP's acknowledgement of the potential of groundwater
10 pumpage impacting the Little Colorado River and its associated springs, coupled with the
11 uncertainties of hydrological monitoring, and its witness Dr. Stevens' assertion that the wetland
12 associated with Salado Springs is one of the largest cienega complexes remaining in northern
13 Arizona, that the withdrawal of additional water for Units 3 and 4 is, from an ecological perspective,
14 not prudent. Dr. Stevens, however, acknowledged that his concerns would be ameliorated by the
15 implementation of a monitoring program that would provide adequate warning to avoid a dewatering
16 event at Salado Springs, and if an administrative process were in place to assure that the problem was
17 corrected before a dewatering event took place.
18

19 We too are concerned with the prospect of groundwater pumpage associated with the SGS
20 expansion having an adverse impact on the Little Colorado River and its associated springs, and the
21 condition TEP proposed regarding hydrological monitoring does not go far enough to ameliorate our
22 concerns. We believe that in order to minimize the effect of the expansion of SGS, the conditions
23 proposed by the Trust should be imposed as a condition of construction of Unit 4. Because these
24 conditions require the development of a new hydrological monitoring program, we will require that
25 the Developers submit documentation from ADWR demonstrating ADWR's ultimate approval of the
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1 new hydrologic monitoring program within 180 days of a Decision in this matter or 30 days prior to
2 breaking ground on construction of Units 3 and 4, whichever comes first.

3 **IV. The Impact of the Water Withdrawal Required by Units 3 and 4 on Endangered**
4 **Species, Including any Riparian Areas Affected by the Springerville Generating Station**

5 A. Identification of Endangered Species in the Springerville Generating Station Area

6 In the summer of 2001, TEP requested that Dr. Lisa K. Harris, owner and president of the
7 Harris Environmental Group ("HEG"), review previous environmental studies HEG conducted on
8 SGS Units 3 and 4, and investigate whether the construction and operation of Units 3 and 4 would
9 impact any special status species. HEG prepared a biological review report dated October 23, 2001
10 regarding the SGS site for TEP ("Biological Review Report"). The Biological Review Report was
11 included as an exhibit to and incorporated in Dr. Harris' testimony. HEG began its review and
12 investigation by contacting the Arizona Game and Fish Department ("AGFD")⁹ to obtain information
13 on which special status species might be found in the study area, and by contacting the US Fish and
14 Wildlife Service to determine federally listed species within Apache County.
15

16 Dr. Harris stated that HEG reviewed maps to identify areas in the vicinity of SGS that might
17 provide habitat for special status species, visited the SGS site to observe the areas where Units 3 and
18 4 construction is planned and visited the Little Colorado River in the vicinity of the SGS, both
19 upstream and downstream.
20

21 Through its contacts with the AGFD and the US Fish and Wildlife Service, HEG determined
22 that there are six special status species that may be present in the vicinity of the SGS. These include
23 three fish: the Little Colorado Sucker, the Little Colorado Spinedace, and the Speckled Dace; and
24 three birds: the Bald Eagle, the Mountain Plover and the Gray Catbird. Dr. Harris testified that the
25 Bald Eagle is an occasional visitor to the SGS, and that AGFD biologists have identified the
26

27 ⁹ The AGFD maintains a database called the Heritage Data Management System, which is a database arranged by
28 township section and range of all known special status species occurrences reported to the Arizona Game and Fish
Department.

1 Mountain Plover as occurring in undisturbed areas near the SGS, but that there is no habitat for the
2 Gray Catbird located at the SGS or nearby. She stated that all three identified special status fish
3 species can be found in the Little Colorado River.

4 According to the Biological Review Report, of the five special status species with habitat in
5 the SGS vicinity, only the Little Colorado Spinedace and the Bald Eagle are listed as a threatened
6 species and are federally protected by the Endangered Species Act of 1973. According to the
7 Biological Review Report, no critical habitat is currently designated for the Little Colorado
8 Spinedace in the mainstream Little Colorado River. The Biological Review Report states that the
9 Little Colorado Sucker and the Speckled Dace are candidate species under the Endangered Species
10 Act, and the Mountain Plover is proposed for listing as threatened under the Endangered Species Act.

12 • B. Impact of Springerville Generating Station Expansion Construction and Water
13 Withdrawal on Identified Special Status Species

14 Dr. Harris testified that Units 3 and 4 and supporting facilities will be constructed in areas that
15 have already been disturbed through the construction and operation of Units 1 and 2, and that all of
16 the vegetation was removed from the entire generating site almost 20 years ago. The Biological
17 Review Report concludes that the proposed SGS expansion is not likely to affect the continued
18 existence of the Bald Eagle or the Mountain Plover or their habitat because of prior disturbance
19 levels, the non-unique habitat characteristics of the area. It also concludes that because no Gray
20 Catbird habitat exists within the proposed project area, the proposed SGS expansion will not affect
21 the Gray Catbird or its habitat.

23 Dr. Harris testified that HEG considered the potential impacts on the identified special status
24 fish species from two sources: the loss or reduction of surface flow caused by groundwater pumping,
25 and the increased transport and subsequent deposition of sediments caused by activities related to the
26 planned SGS expansion. The Biological Review Report concludes that that sediment transport into
27 nearby stream systems from expansion-related activities should be nonexistent or insignificant,
28

1 because runoff from the majority of the plant is contained onsite. However, it states that expansion
2 activities near the SGS wellfields could have a small potential for indirect impacts upon stream
3 habitats from increased erosion and subsequent transport of sediments into the adjacent Coyote
4 Creek, which drains into the Little Colorado River. The Biological Review Report states that with
5 proper planning, any significant increases in deposition of sediments into drainages can be avoided,
6 thereby avoiding any effects on the Little Colorado Spinedace, the Little Colorado Sucker, the
7 Speckled Dace, or their habitat.
8

9 Dr. Harris testified that HEG discussed with M&A, TEP's hydrology consultant, Errol
10 Montgomery and Associates, the potential hydrological impacts of SGS' groundwater pumping on
11 riparian areas in the vicinity of SGS. The Biological Review Report concludes that the extent to
12 which groundwater withdrawal for the TEP SGS will affect surface flow in the Little Colorado River
13 below Lyman Reservoir is unknown at this time, and that further study will be required to determine
14 what effect existing and future water needs of the TEP SGS may have upon fishes of the Little
15 Colorado River downstream of Lyman Reservoir. Dr. Harris stated that based on TEP's assurance
16 that it will monitor groundwater withdrawal, including the potential effect on spring discharges into
17 the Little Colorado River, she believes that any potential adverse impact on riparian areas would be
18 safeguarded.
19

20 Dr. Lawrence E. Stevens, a private consulting ecologist with Stevens Ecological Consulting,
21 provided rebuttal testimony on behalf of the Trust. He stated that the environmental impact
22 information provided by TEP and HEG is generally well considered, but that based on his belief of
23 the breadth of the Commission's statutory requirements, several issues are unresolved. Dr. Stevens
24 listed the following as potential impacts and unresolved issues: 1) The present ecological compliance
25 efforts appear to be too narrow in scope; 2) Additional sensitive species and ecosystems may warrant
26 consideration; 3) Information is lacking on sites in the affected region with potentially great
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1 biological wealth, particularly springs and riparian areas; 4) The area of impact is not defined; 5)
2 Few ecological baseline data are presented on potential HAP fallout impacts; 6) The impact of
3 groundwater pumping on fish and aquatic habitats are unknown, and no baseline population or habitat
4 use data are presented, particularly for endangered fish; 7) On-site environmental mitigation
5 opportunities may exist; and 8) Non-native plant species issues (the possible introduction of non-
6 native weed species resulting from construction disturbances) may warrant consideration.

7
8 As an example of the narrow scope of HEG's analysis, Dr. Stevens cited the focus of HEG's
9 analysis primarily on endangered species in the immediate vicinity of the SGS construction site. Dr.
10 Stevens acknowledged that the area that will be impacted by Units 3 and 4 would be the same area
11 that is already being impacted by Units 1 and 2. He remains concerned, however, that insufficient
12 ecological monitoring data exists to measure the actual effects of present HAP fallout from SGS on
13 sensitive species. His concern extends to areas within a radius of 20 to 40 kilometers from the SGS
14 site. Dr. Stevens testified that ecological data on the present condition of the surrounding ecosystems
15 is required in order to provide a baseline against which to measure future change.

16
17 Dr. Stevens stated that based on his ongoing inventory of more than 200 springs in northern
18 Arizona over the past five years, that Salado Springs is one of the largest carbonate wet meadow
19 (cienega) complexes remaining in what was, in the geologic past, a large area of carbonate,
20 travertine-depositing springs in the upper Little Colorado River drainage. He states that animal and
21 plant life there indicate that it is a perennial spring system, and that an inventory of this site may be
22 warranted during the growing season, as it may be a habitat for numerous plants and animals. He
23 stated that even a single, short-duration dewatering event at a spring such as Salado Springs is
24 sufficient to eliminate fish or other aquatic organisms, and that monitoring will not prevent such an
25 occurrence unless it is designed to provide a conservative early warning approach, which approach he
26 believes has not been considered. He testified that if a monitoring program were in place that would
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1 provide adequate warning to avoid a dewatering event at Saiado Springs, and if an administrative
2 process were in place to assure that the problem was corrected before a dewatering event took place,
3 his concerns for the springs would be ameliorated.

4 Dr. Stevens suggested that HEG's recommendation to establish a monitoring program for
5 breeding birds could be expanded to include breeding and migrant waterbird use of the SGS
6 evaporating ponds, that opportunities may exist to use the evaporating ponds to increase wetland
7 vegetation cover, and that documentation of waterbird use of the evaporating ponds may be useful as
8 evidence of environmental mitigation by TEP.
9

10 In response to Dr. Stevens' criticism that HEG's analysis of the potential impact of the SGS
11 expansion was too narrow in scope, Dr. Harris stated that because most of the potential impacts
12 would be to the immediate surrounding area, to the surface flow of the Little Colorado River, and to
13 any special status species based on groundwater impacts, she limited the scope of her report and
14 analysis to those areas. Dr. Harris also responded that HEG looked at all special status species,
15 whether listed by the State, the Bureau of Land Management, or the Forest Service, and that the
16 reason the HEG report addressed primarily federally-listed endangered species was that the other
17 listed species are not known to occur in the Springerville area. Regarding migrant waterbird use of
18 the SGS evaporating ponds, Dr. Harris doubted the feasibility of Dr. Stevens' suggestion, due to the
19 salinity of the ponds, and stated that if plants could be grown there, that it was unknown how the
20 plants' root systems would affect the integrity of the ponds. Dr. Harris also testified that because
21 SGS is a brownfield site that was graded 20 years ago, any damage from the possible introduction of
22 non-native weed species resulting from construction disturbances has already occurred.
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1 C. Recommendations of the Parties Regarding the Impact of the Water Withdrawal
 2 Required by Units 3 and 4 on Endangered Species, Including any Riparian Areas Affected by
 3 the Springerville Generating Station

4 Dr. Harris, in her testimony, recommended that it may be appropriate for TEP to monitor
 5 surface water and groundwater in the area of the springs below Lyman Lake. The Biological Review
 6 Report prepared by HEG contains the following recommendations:

7 We recommend that TEP quantify the extent to which current, continuing, and
 8 escalating groundwater pumping for the SGS will affect surfaceflow and water quality
 9 in the Little Colorado River and associated tributaries. Any potential subsequent
 10 effects upon aquatic and terrestrial biota should be included in the study. Particular
 11 attention should be given to define how surface flow, water quality, and biota will be
 12 impacted during drought cycles. Because of the close proximity of certain wellfields
 13 to Coyote Creek, expansion plans for this area should seek to minimize ground
 14 disturbance. Expansion plans should also seek to prevent pollutants associated with
 15 expansion activities from entering areas connected to outside drainages.

16 We also recommend the implementation of breeding bird surveys for the TEP
 17 SGS. Surveys should be coordinated with AGFD and conducted prior to construction
 18 activities.

19 The Trust's witness Dr. Stevens recommended, in addition to HEG's recommendations, the
 20 development of a clear understanding of the distribution and condition of biologically rich nearby
 21 ecosystems (e.g., Salado Springs, other springs, Coyote Creek, and the Little Colorado River), as well
 22 as the distribution and abundance of endemic species and cacti; and the extension to those sites of
 23 avian baseline analysis and monitoring, to include both breeding and winter waterbirds as well as
 24 passerine birds. Dr. Stevens also recommended that a mitigation plan be put in place that provides
 25 certainty that water levels in the Salado Springs cienega do not decline, because Salado Springs is
 26 one of the last, relict cienegas of its type in northern Arizona, and that even a short-term loss of water
 27 can eliminate many of the wetland species found in the cienega. He further recommended habitat
 28 mitigation of the SGS evaporating ponds to help offset other regional habitat and biodiversity losses.

29 D. Discussion/Resolution

30 We find that the HEG review addresses the effect of the SGS expansion on endangered
 31 species and that its scope meets the requirements stipulated to by the parties. The recommendations

1 appearing in the Biological Review Report are reasonable and as a condition of construction of Unit
2 4, the Developers should be required to abide by them, in conjunction with the development and
3 implementation of the surface water and groundwater monitoring program as discussed in Section III
4 above.

5 **V. The Impact of Units 3 and 4 on the Mt. Baldy Wilderness Area and the Petrified Forest**
6 **National Park**

7 ENSR conducted computerized air dispersion modeling to determine the impacts of the
8 proposed SGS expansion in three nearby protected PSD Class I areas, the Mt. Baldy Wilderness
9 Area, the Petrified Forest National Park, and the Gila Wilderness Area, which are located wholly or
10 partially within 100 kilometers of the SGS. ENSR's PSD increment modeling analysis included
11 receptors within the Petrified Forest National Park and the Gila Wilderness Area, on an arc out to 30
12 degrees on either side of a line connecting the SGS site with those two areas, and within the Mt.
13 Baldy Wilderness area, which is closest to the SGS. The PSD analysis showed no predicted
14 increment violations for PM-10 and short-term SO₂ concentrations in those areas.
15

16 ENSR also conducted a screening plume blight analysis using VISCREEN, and a CALPUFF
17 regional haze analysis to assess the visibility impact of the proposed project on visibility at the Mt.
18 Baldy Wilderness Area, and a CALPUFF regional haze analysis to assess the visibility impact of the
19 proposed project on visibility at the Petrified Forest National Park, and the Gila Wilderness Area.
20 Based on those analyses, ENSR determined that the impacts on visibility would be small enough to
21 ensure that the proposed project would not have an adverse impact on the PSD Class I areas. Mr.
22 Paine testified that the result of the reduction in total SO₂ pollutant loading and no increase in
23 emissions of NO_x with the proposed addition of Units 3 and 4, will be a net improvement of ambient
24 air quality and visibility in and around the Petrified Forest National Park, the Mt. Baldy Wilderness
25 Area and the Gila Wilderness Area.
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1 Mr. Moore testified on behalf of the Trust that SO₂ and NO_x emissions play a significant role
2 in visibility degradation. He stated that while impacts at the Petrified Forest National Park and the
3 Mt. Baldy Wilderness Area may be small, the haze blanketing those areas is caused by cumulative
4 impacts, so the Trust is concerned about all sources that contribute to visibility degradation. The
5 Trust disagreed with the ENSR conclusions that there would be no predicted increment violations for
6 short-term SO₂ concentrations and that there would be no perceptible change in visibility at Mt.
7 Baldy Wilderness Area. The Trust believes that increment-consuming SO₂ emissions of other
8 sources, such as the Cholla, San Juan, Escalante, and Four Corners power plants, are significant
9 sources of SO₂ emissions and are likely having an impact that should be considered along with SGS'
10 projected emissions. The Trust believes that if they were included in the ENSR model, TEP's two
11 new units could be shown to cause a Class I increment violation.
12

13 Regarding visibility at the Mt. Baldy Wilderness Area, the Trust disagrees with ENSR's
14 modeling analysis because it did not include SO₂ emissions, because it did not analyze maximum
15 short-term emission rates for NO_x and PM-10, but analyzed only annual emission rates, and finally,
16 because it only examined impacts from Units 3 and 4, and not from all four units.
17

18 Mr. Moore also disagreed with TEP witness Mr. Paine's statement that there will be a net
19 improvement in ambient air quality, pointing out that Units 3 and 4 as proposed will add 2,700 tons
20 per year of PM-10 emissions, 5,500 tons per year of CO emissions, 125 tons per year of VOC
21 emissions, 1,760 pounds per year of lead emissions, and over 100,000 pounds per year of other toxic
22 emissions to the ambient air. He pointed out that because NO_x annual emissions are staying the same,
23 no improvement will occur for NO_x, and that short-term emission rates of SO₂ and NO_x will greatly
24 increase under TEP's proposal. Mr. Moore asserted that the overall SGS hourly emissions of SO₂
25 can virtually double what Units 1 and 2 are currently emitting, but that TEP did no analysis to ensure
26 no adverse impacts on visibility and PSD increments in the nearby Class I areas from those increases.
27
28

1 The Trust believes that due to this lack of analysis, it is unknown whether any air quality standards or
2 increments will be violated, or whether visibility will be noticeably impaired as a result of the
3 addition of Units 3 and 4. The Trust is also concerned that ENSR's modeling for visibility impacts
4 and the PSD increments was based on a single year of meteorological data, instead of the minimum
5 five years of data that the Trust understands to be required by the EPA.

6 Mr. Paine responded that under TEP's proposal, prior to 2011, SO₂ and NO_x emissions will be
7 reduced by 50 percent, and after 2011, SO₂ emissions will be reduced another 30 percent per
8 megawatt. Mr. Paine added that the proposed reductions exceed the Western Regional Air
9 Partnership plan for the voluntary SO₂ emission reductions needed to meet 2018 targets for reducing
10 regional haze impacts. With regard to the effects of short-term emissions, Mr. Paine emphasized that
11 TEP cannot and does not intend to operate the units for an extended period at the short-term
12 emissions rate.¹⁰ Regarding NO_x emissions, he stated that Units 1 and 2 will be retrofitted with new
13 Low NO_x Burners and are expected to achieve emissions below 0.25 pounds per mmBtu as opposed
14 to the current limit of 0.697 pounds per mmBtu and the current actual emissions of 0.38 pounds per
15 mmBtu, and that Units 3 and 4 will be equipped with both Low NO_x Burners and SCR to meet the
16 new requirement proposed in the application of 0.16 pounds per mmBtu.
17
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19 Mr. Paine stated that the regional haze analysis addresses daily averaging times rather than
20 periods as short as one or three hours, and did not address SO₂ and NO_x emissions for this averaging
21 time because they are not expected to be normally above current permitted levels. The regional haze
22

23
24 ¹⁰ Mr. Paine explained that the units could only operate for approximately 4,431 hours per year before they
25 would reach the emissions cap of 18,717 tons (prior to 2011) or 3,148 hours per year before reaching the emissions cap of
26 13,300 tons (post 2011). He stated that this equates to a capacity factor of 50 percent and 36 percent, respectively, which
27 is below TEP's plans. The witness stated that in actuality, the SO₂ emission rate will need to be 4,273 pounds per hour
28 averaged over a year, which is about 30 percent lower than the current peak emission rate of 5,520 pounds per hour. He
stated that having the flexibility of a short-term limit of 3,448 pounds per hour, which is higher than the long-term
(yearly) average of 4,273 pounds per hour, will allow TEP to manage the units in the event of a short-term sulfur content
increase in the coal and to operate the facility in the most efficient way by controlling emissions while minimizing the use
of limestone. For an averaging period of a full day, the 24-hour average SO₂ emission rate is expected to rarely, if ever,
exceed the current peak short-term emission rate of 5,520 pounds per hour over the course of a year, in order to preserve
the annual emissions cap.

1 analysis focused on PM-10 emissions because they were expected to increase as a result of the
2 proposed expansion.

3 Mr. Pignatelli testified that because the proposed expansion will result in no increase in SO₂
4 or NO_x emissions, it will result in no degradation of ambient air quality or visibility in the Petrified
5 Forest National Park or Mt. Baldy Wilderness Area. He further testified that because TEP will
6 voluntarily reduce SO₂ emissions from all four SGS units after 2010, thereby achieving a net
7 reduction approaching 30 percent from the current SO₂ emissions at the site, the expansion will result
8 in a net improvement of SGS' effect on ambient air quality and visibility in the Petrified Forest
9 National Park and Mt. Baldy Wilderness Area.
10

11 Dr. Stevens testified on behalf of the Trust that there may be HAP fallout impacts in the Mt.
12 Baldy Wilderness Area or in the Petrified Forest National Park. Dr. Harris testified on behalf of TEP
13 that she does not believe that there will be any detrimental impact on special status species in the Mt.
14 Baldy Wilderness Area or in the Petrified Forest National Park as a result of the construction and
15 operation of SGS proposed Units 3 and 4.
16

17 **VI. The Need for Springerville Unit 4, and Alternatives that TEP Studied but Did Not**
18 **Pursue**

19 A. Positions of the Parties

20 1. TEP's Position

21 TEP states that the evidence in the record is that the power from Unit 4 will serve TEP's
22 customers as soon as it is placed in commercial operation. Mr. Pignatelli testified on behalf of TEP
23 that Unit 4 would not be built without firm contracts. TEP presented detailed studies and testimony
24 regarding the potential impact of the expansion of the SGS on air quality, groundwater, surface water
25 and special status species. TEP submits that the construction of Units 3 and 4 will not result in any
26 significant adverse effect on the environment and ecology of Arizona that override the need for Unit
27 4.
28

2. The Trust's Position

1
2 The Trust believes that a determination of the need for Unit 4 should rest on three key
3 questions: 1) Whether the electric energy to be produced by Unit 4 is necessary in order for TEP to
4 provide an adequate, economical, and reliable supply of electric power to its retail customers; 2)
5 Whether the generation capacity to be supplied by Unit 4 is necessary to serve end-use customers in
6 Arizona; and 3) If resources are needed to serve TEP retail and/or Arizona end-use customers,
7 whether there are alternative resources, including energy efficiency, that achieve a more appropriate
8 balancing of the broad public interest, in that they would provide an adequate, economical, and
9 reliable supply of resources without the adverse environmental impacts of building new generation
10 and related transmission. The Trust contends that TEP has not met its burden of demonstrating the
11 need for additional power from the SGS, and that even if there is some need, that TEP has failed to
12 pursue alternative means of addressing that need that would be less harmful to the environment than
13 the proposed expansion. The Trust believes that when Decision No. 55477 was issued, that the
14 Commission could not possibly have intended that TEP's "customers" meant anything other than
15 TEP's retail customers in its own service territory. The Trust claims that TEP is focused only on the
16 construction of new generating units that will produce profits for its parent company, Unisource. The
17 Trust also asserts that if a competitive market is ever to be developed, that incumbent utilities should
18 at least be required to explore purchases from non-affiliated companies before they are allowed to
19 install additional generating capacity, and that it is senseless to require competition on the one hand
20 but allow incumbent utilities to perpetuate vertical integration on the other.

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23
24 The Trust believes that if TEP needs power, even if it is only to sell on the competitive
25 market, then it should be required to explore and implement energy efficiency options that can
26 provide an adequate, economical and reliable supply of power without adverse environmental
27 impacts. The Trust's witness Mr. Jeffrey Schlegel testified that energy efficiency as compared with
28

1 building new generation is less costly, more cost effective, cleaner, is a distributed resource with no
2 need for transmission or distribution, is more diverse and less risky and does not consume scarce
3 resources. The Trust believes that the environmental impacts associated with Units 3 and 4, which it
4 describes as degraded air quality, increased contribution to greenhouse gas emissions, and
5 groundwater pumping that jeopardizes significant riparian areas, substantially outweigh the need for
6 the power Units 3 and 4 would produce. The Trust therefore believes that the Commission should
7 initiate proceedings to rescind the CECs for Units 3 and 4.
8

9 3. The LAW Fund's Position

10 The LAW Fund does not believe that TEP has adequately justified the need for Unit 4. Nor
11 does the LAW fund believe that TEP has demonstrated that its proposal properly balances, in the
12 broad public interest, the need for power with the environmental impacts. The LAW Fund also
13 believes that TEP has not adequately evaluated the potential for DSM to reduce the rate of projected
14 retail load growth at a lower cost than meeting that growth through supply-side resource acquisition.
15 The LAW Fund believes that TEP has not established that Unit 4 is needed in the regional wholesale
16 market, stating that TEP did not present any evaluation of the regional demand for electric energy
17 services, the supply of electric generation, uncertainty about the supply and demand situation,
18 alternative resources for meeting the demand for electric energy services, or the cost of those
19 resources. The LAW Fund requests that the Commission find that TEP's application is incomplete
20 and invite TEP to return with a more complete analysis of the need for Unit 4.
21

22 4. Staff's Position

23 Staff does not oppose the building of Units 3 and 4. Staff states that TEP's proposal promotes
24 fuel diversification, which ensures reliable and safe power to Arizona customers, and Staff supports
25 such fuel diversification. Staff believes that a determination of "need" regarding Unit 4 cannot be
26 made until the Commission decides on its definition of "customer." Staff's witness Mr. Olea testified
27
28

1 that under the scenario of looking at TEP as a part of the integrated electric system in the southwest,
2 looking at TEP's load, including current and future retail and wholesale load, and taking into account
3 the Commission's policy of competition in generation, the output from Unit 4 is needed.

4 B. Discussion/Resolution

5 The Trust correctly states that TEP has not attempted in this proceeding to demonstrate that
6 the output of Unit 4 is necessary to meet the needs of its retail customers, that TEP conceded that the
7 output of Units 3 and 4 is not aimed at serving the energy needs of TEP's retail service territory, and
8 that TEP has not pursued or considered executing wholesale contracts with any merchant plants. The
9 Trust acknowledges, however, that wholesale contracts for the majority of the output of Units 3 and 4
10 will be executed, and that TEP testified to plans to use the remainder to serve its retail customers.
11 Based on its own interpretation of the word "customers," the Trust urges the Commission to deny
12 TEP's request that the Commission issue an Order confirming that TEP has demonstrated that the
13 output from Unit 4 is necessary to provide an adequate, economical and reliable supply of electric
14 power to its customers and authorizing TEP to begin construction of Unit 4.
15
16

17 We believe that the scenario described by Staff's witness Mr. Olea accurately reflects the
18 scenario under which the Commission should determine whether Unit 4 is needed. A wholesale
19 customer needs power just as a retail customer needs power. The evidence in the record that Unit 4
20 will not be built without firm contracts in place demonstrates that unneeded generation will not be
21 built. The Trust is concerned with the adverse environmental impacts of building new generation and
22 related transmission. We note that new transmission will not need to be sited for the proposed
23 expansion, that the new output will be achieved without the adverse environmental impacts of a
24 "greenfield" plant siting, and that the increases in emissions are minimal in comparison to such a
25 greenfield siting without the proposed emission control technology upgrades to Units 1 and 2. We
26 therefore believe that the proposed expansion minimizes the environmental effects of siting a new
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1 power plant of this size, and that the environmental impacts of the proposed expansion do not
2 outweigh the need for an adequate, economical and reliable supply of electricity in Arizona.

3 The Trust asserts that if a competitive market is to be developed, that incumbent utilities
4 should be required to explore purchases from non-affiliated companies before being allowed to install
5 additional generating capacity. We believe that this concern is addressed by our requirement, as
6 described in Section VI below, that, as a condition of construction of Unit 4, TEP must transfer
7 ownership of Units 3 and 4 to an affiliate or other entity as referenced in the Joint Development
8 Agreement, and by our clarification that the relevant provisions of Commission Decision No. 65154
9 (September 10, 2002), issued in the generic proceedings concerning electric restructuring issues, will
10 apply to TEP regarding Units 3 and 4.
11

12 C. Discussion/Resolution of Conditions Recommended by the Parties Regarding the
13 Need for Springerville Unit 4

14 The Trust requests that the Commission: 1) Determine that the electricity from Unit 4 is not
15 needed and not issue a CEC for Unit 4; 2) Determine that the environmental impacts of Unit 4 on the
16 ecology of Arizona outweigh any need and not issue a CEC for Unit 4; 3) Require TEP to meet the
17 requirements contained in the current PSD regulations if the Commission issues a CEC for Unit 4;
18 and 4) Initiate a proceeding to rescind, alter or amend the CEC for Units 3 and 4 based on the
19 enormous changes during the past 24 years in the scientific community's understanding of the
20 impacts of fossil-fuel power plants on the environment (particularly global warming) and because of
21 the wide range of new technologies that can offset or reduce the environmental impacts of Units 3
22 and 4.
23

24 Because we find herein that the electric energy to be produced by No. Unit 4 is necessary in
25 order for the Applicant to provide an adequate, economical and reliable supply of electric power to its
26 customers, all in accordance with the requirements of A.R.S. § 40-360.07(B); and because the new
27 emissions controls to be installed on Units 1 and 2 as a condition of the construction of Units 3 and 4
28

1 already offset or reduce the environmental impacts of Units 3 and 4; the conditions recommended by
2 the Trust as set forth above are not necessary.

3 The LAW Fund recommends that if the Commission determines additional coal-fired
4 generation is needed at Springerville Units 3 and 4, it should condition its approval upon TEP
5 performing and filing with the Commission a feasibility study on installing more advanced clean coal
6 technologies at Springerville, including a comparative analysis of the costs and environmental
7 performance of the various alternatives, which study should balance a variety of factors, including
8 reliability, capital costs, emissions characteristics and opportunities for emissions offsets at Units 1
9 and 2. The LAW Fund recommends that along with the filing of the study, TEP should notify the
10 Commission of its intention with respect to the technology to be employed at Units 3 and 4, and that
11 the Commission should reserve the right to reject TEP's proposal if, upon review of the study and
12 after an opportunity for public comment and a hearing, it decides that TEP's study is insufficient or
13 that a more advanced clean coal technology would be preferable under A.R.S. § 40-360.07(B).
14

15 The record in this proceeding includes sufficient evidence regarding the costs and benefits of
16 clean coal technology, including IGCC, to demonstrate that although the use of state-of-the-art
17 combustion technologies for coal, such as IGCC technology, particularly with CO₂ capture and
18 disposal, could reduce the ecological impacts of Units 3 and 4, IGCC is not yet a mature, reliable or
19 economic technology alternative for the SGS. Therefore the condition recommended by the LAW
20 Fund as set forth above is not necessary. It is important to point out that even though TEP may not
21 be installing IGCC technology, TEP's proposed installation of improved emissions control
22 technologies on Units 1 and 2 in conjunction with the installation of new conventional coal Units 3
23 and 4, as described in Section II above, and in conjunction with the use of lower sulfur coal will
24 result in a significant increase in electric supply with little increase in emissions.
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1 The LAW Fund also listed the following conditions that it recommends be imposed on TEP if
2 the Commission approves TEP's proposal for Units 3 and 4: 1) That TEP comply with the [TEP
3 Stranded Cost] Settlement Agreement; that information on the transfer of competitive assets
4 associated with Springerville Units 3 and 4 be explicitly presented in the Settlement Agreement
5 compliance filings; that hearings be held on both the transfer of assets and the potential modification
6 to the competition transition charge ("CTC") to consider, among other things, the impact of
7 construction and operating Springerville Units 3 and 4; and 2) the Commission should state that
8 before TEP may recover any power purchase costs from Springerville Units 3 and 4 through retail
9 rates, it must first demonstrate that Springerville Units 3 and 4 provide the least cost alternative for
10 meeting its retail power needs, including consideration of alternatives such as DSM and long-term
11 wholesale power purchase agreements.
12

13 We believe that our requirement that TEP transfer ownership of Units 3 and 4 to an affiliate or
14 other entity as referenced in the Joint Development Agreement, in conjunction with the requirements
15 of Decision 65154, address the above issues raised by the LAW Fund, and the conditions are
16 therefore not necessary.
17

18 VII. Ownership of Springerville Units 3 and 4

19 Although for the purpose of demonstrating need for Unit 4, it is appropriate to consider the
20 evidence presented that TEP anticipates that its wholesale customers will take power from Units 3
21 and 4, neither the Joint Development Agreement nor the contract arrangements with AEPCO, the
22 NTUA or Tri-State require that TEP be the entity that will own and operate the proposed new units.
23 In fact, the Joint Development Agreement that TEP filed in this case at the Commission's request,
24 and Mr. Pignatelli's testimony, demonstrate that it is not TEP, but a new entity that will develop,
25 finance, construct and own Units 3 and 4. TEP's witnesses Mr. Pignatelli and Mr. DeConcini
26 testified to the benefits of having Salt River Project join in ownership of the proposed expansion,
27 which include creditworthiness, experience in the industry, and the ownership of transmission lines
28 that require no further siting approval. Mr. Pignatelli testified that TEP would not be asking for rate

1 treatment of Units 3 and 4. The record also reflects that it is more cost effective to build Units 3 and
2 4 together.

3 In order to assure that TEP's ratepayers are protected from the risk of development and
4 operation of Units 3 and 4, we will require, as a condition of construction of Unit 4, that TEP transfer
5 its right to construct Units 3 and 4 to an affiliate or other entity as referenced in the Joint
6 Development Agreement¹¹. In addition, we will clarify in this Decision that the germane provisions
7 of Commission Decision No. 65154 (September 10, 2002) issued in the generic proceedings
8 concerning electric restructuring issues shall apply to TEP regarding Units 3 and 4. We will also
9 require TEP to identify and track all costs and benefits associated with this application, and the costs
10 and benefits of the transfer of its right to construct Units 3 and 4, and will require that TEP provide
11 this information for Commission review and determination of appropriate treatment in TEP's next
12 rate case filing.

13 * * * * *

14 Having considered the entire record herein and being fully advised in the premises, and
15 having balanced, in the broad public interest, the need for an adequate, economical and reliable
16 supply of electric power with the desire to minimize the effect thereof on the environment and
17 ecology of this state, the Commission finds, concludes, and orders that:

18 **FINDINGS OF FACT**

- 19 1. TEP is a public service corporation subject to the jurisdiction of the Commission.
- 20 2. The Springerville Generating Station is located in northeastern Arizona, 15 miles from
21 the town of Springerville, approximately 50 miles from the Petrified Forest National Park, and 33
22 miles from the Mt. Baldy Wilderness area. The Springerville Generating Station facilities currently
23 include two coal-burning steam turbine units, each with a nominal rating of 380 MW for continuous
24 operation. Springerville Units 1 and 2 were constructed pursuant to a CEC granted by Commission
25 Decision No. 48313 (September 26, 1977). That CEC authorized TEP to construct three coal-burning
26 steam electric generating units, each rated at 350 MW, for a total plant capacity of 1050 MW. Unit 1

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28 ¹¹ - - - This docket does not address financing issues.

1 began commercial operation in 1985, and Unit 2 began commercial operation in 1990.

2 3. TEP was conditionally granted a CEC to construct Springerville Unit 4, a coal-fired
3 steam-generating unit rated at 350 MW, in Commission Decision No. 55477 (March 18, 1987). That
4 CEC granted TEP authority to construct Unit 4 in accordance with its application, on the following
5 conditions:

6 a. that, pursuant to the provisions of A.R.S. § 40-360.06, the Applicant comply
7 with all applicable air and water pollution control standards and regulations, and with
8 all applicable ordinances, master plans and regulations of the State of Arizona, and of
9 any county or incorporated city or town with jurisdiction in the premises; and

10 b. that the Applicant comply with conditions set forth in Exhibit B [t]hereto
11 relating to ground water pumping activities associated with the Springerville
12 Generating Station as prescribed by the Arizona Department of Water Resources; and

13 c. that the Applicant obtain from the Arizona Corporation Commission (the
14 "ACC"), within one year prior to Applicant undertaking any preparatory engineering,
15 design or construction efforts pertaining to Unit No. 4, an order, pursuant to hearing,
16 confirming that the electric energy to be produced by No. Unit 4 is necessary in order
17 for the Applicant to provide an "adequate, economical and reliable supply of electric
18 power" to its customers, all in accordance with the requirements of A.R.S. § 40-
19 360.07(B).

20 4. Unisource Energy Development Company, an affiliate of TEP, and the Salt River
21 Project Agricultural Improvement District ("Developers") have entered into a Joint Development
22 Agreement to develop Springerville Units 3 and 4.

23 5. The Joint Development Agreement calls for a special purpose limited liability
24 company or other legal entity to be formed for the purpose of developing, financing, constructing,
25 owning, operating, and maintaining an integrated coal-fired electricity generating facility to be
26 located adjacent to the Springerville Power Plant comprised of two new units, Units 3 and 4, which
27 are to be developed under the terms of the Joint Development Agreement.

28 6. The Developers are preparing to construct two additional coal-burning steam turbine
generating units, Units 3 and 4, each with a nominal rating of up to 400 MW; near the existing
Springerville Generating Station Units 1 and 2. The Developers are preparing to construct Unit 3.

1 pursuant to the CEC granted to TEP for Units 1 through 3 in Decision No. 48313, and to proceed
2 with Unit 4 pursuant to the CEC granted to TEP upon receipt of a Commission Order as required by
3 Decision No. 55447.

4 7. On July 19, 2001, the Trust, through the Arizona Center for Law in the Public Interest,
5 filed with the Commission a Motion to Rescind, Alter or Amend Decision Nos. 48313 and 55477.

6 8. On July 20, 2001, TEP filed a Motion to Dismiss the Trust's Motion to Rescind.

7 9. On July 20, 2001, TEP filed an Application for Hearing.

8 10. On August 3, 2001, the Trust filed its Response to TEP's Motion to Dismiss.

9 11. On August 3, 2001, the Trust filed an Application to Intervene.

10 12. On August 7, 2001, TEP filed a Reply in Support of Motion to Dismiss.

11 13. On August 16, 2001, the Trust filed a Motion to Strike a portion of TEP's August 7,
12 2001 Reply.

13 14. On August 20, 2001, the Commission issued a Procedural Order granting intervention
14 to the Trust and setting a Procedural Conference for August 22, 2001 for the purpose of hearing oral
15 arguments on the motions and to discuss the procedural schedule for these matters.

16 15. On September 19, 2001, TEP and the Trust filed a Joint Stipulation and Motion
17 requesting that a single hearing be held before the Commission regarding the need for Springerville
18 Unit 4 and updated data on certain enumerated environmental factors relating to Springerville Units 3
19 and 4. The Joint Stipulation provided that upon Commission approval of the Joint Stipulation, the
20 Trust's Motion to Rescind would be deemed withdrawn.

21 16. On October 5, 2001, a Procedural Order was issued setting a hearing to address the
22 issues set forth in the Joint Stipulation and establishing a procedural schedule for the filing of direct
23 and rebuttal testimony, and for publication of notice of the hearing.

24 17. On October 24, 2001, the LAW Fund filed a petition for leave to intervene, which was
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1 granted by Procedural Order on October 31, 2001.

2 18. On November 1, 2001, TEP filed its Notice of Filing Affidavits of Publication,
3 verifying that notice of the hearing was published in the Arizona Republic on October 18, 2001, and
4 in the White Mountain Independent on October 19, 2001.

5 19. On November 8, 2001, the Trust filed a Motion to Join Salt River Project as an
6 Indispensable Party. On November 16, 2001, TEP filed its Brief in Opposition to the Motion, and on
7 November 21, 2001, the Trust filed its Brief and Reply regarding the Motion.

8 20. On November 28, 2001, by Procedural Order, the Commission denied the Trust's
9 Motion to Join Salt River Project as an Indispensable Party, finding that the Salt River Project was
10 not an indispensable party to this proceeding.

11 21. On December 3, 2001, the Trust filed notice of its intent not to apply for any
12 subpoenas related to Salt River Project in connection with this proceeding.

13 22. On October 24, 2001, TEP filed the direct testimony and exhibits of its witnesses
14 James S. Pignatelli, Lisa K. Harris, Ronald H. DeWitt, and Robert J. Paine.

15 23. On October 24, 2001, the Trust filed the direct testimony and exhibits of its witnesses
16 Rick Moore, Jeffrey A. Schlegel, and Joel B. Smith.

17 24. On November 8, 2001, the Trust filed the rebuttal testimony and exhibits of its
18 witnesses Rick Moore, Jeffrey A. Schlegel, Reid Bandeen, and Lawrence E. Stevens.

19 25. On November 8, 2001, the LAW Fund filed the rebuttal testimony of its witness David
20 Berry.

21 26. On November 8, 2001, TEP filed the rebuttal testimony and exhibits of its witnesses
22 James S. Pignatelli, Lisa K. Harris, Ronald H. DeWitt, Robert J. Paine and Michael J. DeConcini.

23 27. On November 8, 2001, Staff filed its comments.

24 28. Hearings were held as scheduled in Eagar, Arizona on November 13 and 14, 2001, and
25

1 in Phoenix, Arizona on November 28, 29 and 30, 2001. TEP, the Trust, the LAW Fund and Staff
2 appeared at the hearings and presented testimony.

3 29. Members and leaders of the community in the vicinity of the Springerville Generating
4 Station expressed a great deal of public support for the construction of Units 3 and 4.

5 30. TEP presented testimony on the issue of the cumulative impact of the CO₂ fields and
6 related facilities that are being proposed by Canadian Ridgeway Petroleum and the Springerville
7 Generating Station.

8 31. TEP, the Trust, and the LAW Fund presented evidence on the impact of Units 3 and 4
9 on the air (including CO₂ emissions) in the vicinity of the Springerville Generating Station.

10 32. The record in this proceeding includes evidence regarding the costs and benefits of
11 clean coal technology, including IGCC.

12 33. The use of state-of-the-art combustion technologies for coal, such as IGCC
13 technology, particularly with CO₂ capture and disposal, could reduce the ecological impacts of Units
14 3 and 4.

15 34. IGCC is not yet a mature, reliable or economic technology alternative for the
16 Springerville Generating Station.

17 35. TEP's current base contract with Lee Ranch Mine is for approximately 2.4 million
18 tons of coal annually and runs through approximately 2010.

19 36. The Springerville Generating Station currently burns approximately 3.2 million tons of
20 coal annually.

21 37. Changes to TEP's coal source, including mixing lower-sulfur coal with Lee Ranch
22 Mine coal, and preprocessing coal, can reduce the sulfur content of coal burned at the Springerville
23 Generating Station. These changes would require the addition of separate coal handling facilities and
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1 changes to the boilers associated with Units 1 and 2, at an estimated cost of approximately \$60
2 million.

3 38. As a condition of construction of Unit 4, coal handling facilities that allow lower-
4 sulfur coal to be mixed with coal from the Lee Ranch mine should be operational before the first new
5 unit becomes operational.

6 39. As a condition of construction of Unit 4, the amount of coal taken under the Lee
7 Ranch Mine contract should not exceed the base contract amount from the date the first new unit
8 becomes operational.

9 40. TEP stated that it intends to utilize coal with a lower sulfur content than that currently
10 utilized when it is contractually able to do so.

11 41. As a condition of construction of Unit 4, the coal supply to the plant should be
12 changed to a lower sulfur content coal when contractually feasible.

13 42. The record of this proceeding contains some evidence about the impacts that global
14 warming might have for this state, but the evidence is inconclusive and does not provide a sufficient
15 basis for quantifying local, regional, or global effects of carbon emissions.

16 43. CO₂ is not a regulated emission. If CO₂ regulations are enacted, the compliance
17 actions required will be dependent upon the scope of those regulations.

18 44. TEP and Unisource are aware of the possibility that future regulations limiting CO₂
19 emissions may apply to the Springerville Generating Station and the proposed expansion.

20 45. As a condition of construction of Unit 4, the Developers of Units 3 and 4, and not
21 TEP's ratepayers, should bear any risk of the costs of possible regulation of CO₂ emissions in the
22 future.

23 46. TEP has obtained a Title V Air Quality Permit from ADEQ.
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1 47. The year 2000 actual emission from Units 1 and 2 was 19,047 tons of SO₂ and 11,700
2 tons of NO_x.

3 48. Under the terms of the Title V Air Quality Permit issued to TEP by ADEQ, SO₂ and
4 NO_x emissions are capped according to how many units will be operating. After the first of Units 3 or
5 4 becomes operational, a "Three-Unit Cap" of 9,205 tons per year on SO₂ emissions and 7,947 tons
6 per year of NO_x on emissions goes into effect; after both Units 3 and 4 become operational, a "Four-
7 Unit Cap" of 10,800 tons per year on SO₂ emissions and 9,600 tons per year on NO_x emissions goes
8 into effect; and if neither Unit 3 nor Unit 4 has commenced operation by December 31, 2007, the
9 permittee must notify the EPA that it has elected to subject Units 1 and 2 to the "Two-Unit Cap" of
10 7,550 tons per year on SO₂ emissions and 6,300 tons per year on NO_x emissions. In addition, the
11 permit provides that if neither Unit 3 nor 4 have begun operation by December 3, 2009, the Title V
12 Permit will lapse and the existing Springerville Generating Station permit will remain unaffected.
13

14 49. The new emissions controls to be installed on Units 1 and 2 as a condition of the Title
15 V Air Quality Permit for Units 3 and 4 will reduce the air quality impacts of the Springerville
16 Generating Station.
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18 50. TEP and the Trust presented evidence on the impact of Units 3 and 4 on water,
19 including groundwater (using updated hydrological modeling) in the vicinity of the Springerville
20 Generating Station.

21 51. Based on the evidence presented, construction of Unit 4 should be conditioned upon
22 the Developers taking the following actions, subject to the support of the appropriate landowners:

23 a. Establish a baseline monitoring plan based on historic flow levels of the Little
24 Colorado River and Salado Springs;

25 b. Prepare a detailed monitoring plan for the Little Colorado River below Lyman
26 dam, particularly for Salado Springs, and submit annual monitoring reports to the
27 Apache County Commissioners and Arizona Department of Water Resources. The
28 objective of the monitoring plan should be the ability to detect measurable, real-time
impacts to the surface water features and to mitigate those impacts as they occur;

1 c. Undertake a feasibility study for different options to ensure Salado Springs
2 and the associated wetland is not impacted by groundwater drawdown;

3 d. Prepare and maintain an action plan – including criteria that triggers the plan -
4 for providing water, either surface or through a recharge well, to protect riparian areas
5 along the Little Colorado River that are impacted by drawdown; and

6 e. Submit to the Commission documentation from ADWR demonstrating
7 ADWR's ultimate approval of the hydrological monitoring program required by this
8 Finding of Fact within 180 days of a Decision in this matter or 30 days prior to
9 breaking ground on construction of Units 3 and 4, whichever comes first.

10 52. TEP and the Trust presented evidence on the impact of the water withdrawal required
11 by Units 3 and 4 on endangered species, including any riparian areas affected by the Springerville
12 Generating Station.

13 53. Based on the evidence presented, construction of Unit 4 should be conditioned upon
14 the Developers quantifying the extent to which current, continuing, and escalating groundwater
15 pumping for the Springerville Generating Station will affect aquatic and terrestrial biota in and
16 surrounding the Little Colorado River and associated tributaries, particularly during draught cycles.
17 This quantification should be carried out in association with preparation of and maintenance of the
18 action plan required to protect riparian areas along the Little Colorado River.

19 54. Based on the evidence presented, construction of Unit 4 should be conditioned upon
20 the Developers developing and implementing construction plans that will minimize ground
21 disturbance that could result in transport of sediments into Coyote Creek.

22 55. Based on the evidence presented, construction of Unit 4 should be conditioned upon
23 the Developers developing and implementing construction plans that will prevent pollutants
24 associated with expansion activities from entering areas connected to outside drainages.

25 56. Based on the evidence presented, construction of Unit 4 should be conditioned upon
26 the Developers conducting breeding bird surveys for the Springerville Generating Station, which
27 surveys should be coordinated with AGFD, and conducted prior to construction activities.
28

1 57. TEP and the Trust presented evidence on the impact of Units 3 and 4 on the Mt. Baldy
2 Wilderness Area and the Petrified Forest National Park.

3 58. TEP, the Trust, the LAW Fund, and Staff presented evidence on the need for Unit 4.
4 The Trust and the LAW Fund presented evidence on alternatives to construction of Units 3 and 4.

5 59. TEP's customers include wholesale customers.

6 60. TEP presented evidence that without firm wholesale contracts for substantially all of
7 the power output, Units 3 and 4 will not and could not be built.

8 61. As a condition of construction of Unit 4, firm wholesale contracts for the power output
9 from Units 3 and 4 should be in place prior to commencement of construction.

10 62. In order to assure that TEP's ratepayers are protected from the risk of development
11 and operation of Units 3 and 4, TEP should be required, as a condition of construction of Unit 4, to
12 transfer its right to construct Units 3 and 4 to an affiliate or other entity as referenced in the Joint
13 Development Agreement prior to construction of Units 3 and 4.
14

15 63. Commission Decision No. 65154 (September 10, 2002) ordered that upon
16 implementation of the outcome of the ongoing Track B proceeding in Docket No. E-00000A-02-0051
17 et al., TEP shall acquire, at a minimum, any required power that cannot be produced from its own
18 existing assets, through the competitive procurement process as developed in the Track B proceeding,
19 and that the minimum amount of power, the timing, and the form of procurement shall be determined
20 in the Track B proceeding.
21

22 64. As a condition of construction of Unit 4, the Springerville Generating Station Units 3
23 and 4 should not be counted as TEP assets in determining the amount, timing, and manner of the
24 competitive solicitation process as determined in the Track B proceeding.

25 65. As a condition of construction of Unit 4, TEP should be required to identify and track
26 all costs and benefits associated with this application, and the costs and benefits of the transfer of its
27 right to construct Units 3 and 4, and to provide this information for Commission review and
28 determination of appropriate treatment in TEP's next rate case filing.

1 66. As a condition of construction and operation of Unit 4, beginning upon commercial
 2 operation of the new units, Applicant or assignee shall conduct a review of the Springerville
 3 Generating Station Units 1 and 2 operations and equipment every five years and shall, within 120
 4 days of completing such review, file with the Commission and all parties in this docket, a report
 5 listing all improvements which would reduce plant emissions and the costs associated with each
 6 potential improvement. Commission Staff shall review the report and issue its findings on the report,
 7 which will include an economic feasibility study, to the Commission with 60 days of receipt. The
 8 Commission may, within 24 months of the filing, conduct a hearing to determine whether any or all
 9 of the improvements listed in the economic feasibility study should be implemented for Units 1 and
 10 2.

CONCLUSIONS OF LAW

11
 12 1. TEP is an Arizona public service corporation within the meaning of Article 15 of the
 13 Arizona Constitution and Title 40 of the Arizona Revised Statutes.

14 2. The Commission has jurisdiction over this matter and has authority to issue this Order
 15 pursuant to A.R.S. § 40-360.01 et seq.

16 3. TEP's customers include both retail and wholesale customers.

17 4. TEP has made the requisite showing of need for Unit 4 pursuant to Decision No.
 18 55477.

19 5. In arriving at its Decision herein, the Commission has balanced, in the broad public
 20 interest, the need for an adequate, economical and reliable supply of electric power with the desire to
 21 minimize the effect thereof on the environment and ecology of the state.

22 6. The CEC that the Commission granted to TEP in Decision No. 48313 authorizing the
 23 construction of Springerville Generating Station Unit 3 should be affirmed, subject to the conditions
 24 herein.

25 7. The conditions contained in Commission Decision No. 55477 concerning the
 26 authority to construct Springerville Generating Station Unit 4 have been met, subject to compliance
 27 with the conditions referenced in Findings of Fact Nos. 38, 39, 41, 45, 51, 53, 54, 55, 56, 61, 62, 64,
 28 65, and 66 above.

ORDER

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IT IS THEREFORE ORDERED that the Certificate of Environmental Compatibility granted to Tucson Electric Power Company in Commission Decision No. 48313 (September 26, 1977) authorizing the construction of Springerville Generating Station Unit 3 is hereby affirmed, subject to the conditions referenced in Findings of Fact Nos. 38, 39, 41, 45, 51, 53, 54, 55, 56, 61, 62, 64, 65, and 66 above.

IT IS FURTHER ORDERED that Springerville Generating Station Unit 4 may be constructed, subject to compliance with the conditions referenced in Findings of Fact Nos. 38, 39, 41, 45, 51, 53, 54, 55, 56, 61, 62, 64, 65, and 66 above.

IT IS FURTHER ORDERED that this affirmation and authorization to site and construct the facilities shall expire on December 31, 2009. However, before such expiration the Certificate holder may request that the Commission extend this time limitation.

1 IT IS FURTHER ORDERED that the Certificate holder shall file an annual report, each June
2 30th, detailing how it has complied and/or is complying with each condition of this Decision. This
3 annual report shall be filed with the Directors of the Commission's Utilities Division, the Arizona
4 Department of Water Resources, the Arizona Department of Environmental Quality and the Arizona
5 Department of Commerce.

6 IT IS FURTHER ORDERED that this Decision shall become effective immediately.

7 BY ORDER OF THE ARIZONA CORPORATION COMMISSION.

8   
9 CHAIRMAN COMMISSIONER COMMISSIONER

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12 IN WITNESS WHEREOF, I, BRIAN C. McNEIL, Executive
13 Secretary of the Arizona Corporation Commission, have
14 hereunto set my hand and caused the official seal of the
15 Commission to be affixed at the Capitol, in the City of Phoenix,
16 this 1st day of November, 2002.

17 
18 BRIAN C. McNEIL
19 EXECUTIVE SECRETARY

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