

**Application  
for a  
Certificate of Environmental Compatibility**

**Selma Energy Center  
Interconnection Project**

Prepared for:  
**State of Arizona  
Power Plant and Transmission Line Siting Committee**

Submitted by:  
**Selma Energy Center, LLC**

**September 2024**





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# INTRODUCTION

Pursuant to Arizona Revised Statutes (ARS) 40-360 et seq., Selma Energy Center, LLC (Applicant), an indirect, wholly owned subsidiary of NextEra Energy Resources, LLC (NEER), is seeking a Certificate of Environmental Compatibility (CEC) for its proposed Selma Energy Center Interconnection Project (Interconnection Project). The Interconnection Project is a proposed 230-kilovolt (kV) alternating current generation intertie transmission line (gen-tie). The gen-tie will be located above- and underground and connect the proposed Selma Energy Center, an up to 150-megawatt (MW) solar photovoltaic facility with an up to 150-MW battery storage system (Energy Facility), to the existing Salt River Project (SRP) Vah Ki Substation. The Interconnection Project is designed to deliver power from the Energy Facility project substation (Project Substation) to the regional electric grid.

The Interconnection Project will be located on private lands within the city of Coolidge and unincorporated Pinal County, except for three canal rights-of-way (ROWs) and one highway ROW. The Energy Facility will be located on private lands within the city of Coolidge and unincorporated Pinal County, except for one canal ROW. The Applicant proposes to construct and operate the Interconnection Project to connect the Energy Facility to the regional electrical grid.

The Energy Facility and Project Substation are noted in this CEC application for contextual purposes only. The Applicant is not requesting a CEC for the Energy Facility or the Project Substation. Additionally, as further detailed in the “Interconnection Project Overview” section of this Application, a portion of the Interconnection Project may be underground. Any portion of the gen-tie that is constructed underground would not be subject to the jurisdiction of the Arizona Power Plant and Transmission Line Siting Committee.

The Applicant is a wholly owned indirect subsidiary of NEER, which is a subsidiary of NextEra Energy, Inc. NEER is a global leader in renewable energy and is the largest generator of renewable energy in wind and solar resources in North America.

The Interconnection Project was included in the Applicant’s Ten-Year Plan filed on January 31, 2024, in Docket E-99999A-23-0016. Project construction is anticipated to begin in late 2026, with an expected commercial operations date in late 2027.

## Interconnection Project Overview

The Interconnection Project consists of a 230-kV alternating current gen-tie. The Interconnection Project will connect a proposed new Project Substation, located adjacent to the up to 150-MW Energy Facility, to the existing Vah Ki Substation located northeast of the Energy Facility along State Route 87 (SR 87) (Figure 1).

The Applicant requests approval of a CEC Corridor that is generally 1,000 feet wide for the southern portion of the gen-tie and up to 2,134 feet wide for the northern end of the gen-tie, as described below (CEC Corridor). An approximately 150-foot-wide ROW will be established within the CEC Corridor. Should the Applicant need to underground a segment of the Interconnection Project, an approximately 75-foot-wide temporary ROW and a 50-foot-wide permanent ROW will be needed within the 150-foot-wide ROW that will be located in the CEC Corridor. The requested CEC Corridor extends 500 feet to each side of the Interconnection Project centerline. The CEC Corridor is described in more detail below and includes private property along with ROWs from the Arizona Department of Transportation (ADOT), San Carlos Irrigation and Drainage District (SCIDD), and Hohokam Irrigation and Drainage District (HIDD).

The Applicant anticipates that structures for the Interconnection Project will be spaced between 100 and 1,000 feet apart (maximum span length will be 1,000 feet), depending on structure type, terrain, turns, transitions from and to underground, connections into the Project Substation and Vah Ki Substation, and other factors. The transmission structures for the Interconnection Project are expected to be approximately

60 to 110 feet tall and will be made of weathering steel and either self-supporting or guyed. The structure types proposed for the Interconnection Project are anticipated to include tangent monopoles, dead-end monopoles, riser dead-end monopoles, and A-frame dead end. The Applicant may, depending on final engineering design, install up to 1.1 miles of the gen-tie underground. Where the underground segment is necessary, the Applicant will install overhead-to-underground transition structures (riser and/or A-frame dead end) at each end of the underground segment. Because the underground segment has not been fully designed and the extent of the underground portion is not known, the CEC Corridor requested is for the full length of the Interconnection Project route (from the Project Substation to the Vah Ki Substation). The Applicant also notes that minor design characteristics for the Interconnection Project may be refined during the final engineering phase. Representative diagrams of the anticipated Interconnection Project structures are included in Exhibit G.

The Interconnection Project is sited adjacent to existing linear features, including roadways (SR 87 and East Selma Highway), a railroad (Union Pacific Railroad), existing energy (solar) facilities (Saint Solar and Storey Energy Center, both owned and operated by affiliates of the Applicant), and other distribution and high-voltage transmission lines. The Interconnection Project will parallel East Selma Highway on the south side of the highway and an existing, up to 69-kV distribution line located on the north side of the highway for approximately 3,200 feet (100% of the alignment along East Selma Highway). Along SR 87, the Interconnection Project will parallel SR 87, the existing Saint Solar Project, and an existing, up to 69-kV distribution line for up to approximately 2,500 feet, depending on the Interconnection Project route selected, which is described in greater detail below.

## ***Interconnection Project Route***

The proposed route for the Interconnection Project starts at the Project Substation within the Energy Facility. The Project Substation will be located approximately 0.6 mile west of SR 87, on the south side of East Selma Highway.

From the Project Substation, the Interconnection Project will proceed east for approximately 0.6 mile before crossing SR 87 at an angle (northeast) as coordinated with ADOT and then turning north at the intersection of East Selma Highway and SR 87. The Interconnection Project will cross a SCIDD irrigation canal and proceed north for approximately 1 mile along the east side of SR 87. From here, the Interconnection Project has a route preferred by the Applicant (Interconnection Project – Preferred Route) and a potential subroute option (Interconnection Project – Subroute Option). Only one of these routes will be constructed. Both the Interconnection Project – Preferred Route and Interconnection Project – Subroute Option could use either Option A or Option B described further below.

## **INTERCONNECTION PROJECT – PREFERRED ROUTE**

After the Interconnection Project route proceeds north for approximately 1 mile along the east side of SR 87, the Interconnection Project – Preferred Route will continue to proceed north along the east side of SR 87 for approximately 0.5 mile. The Interconnection Project – Preferred Route will cross a HIDD irrigation canal and the proposed SunZia Transmission, LLC (SunZia) ROW (see Exhibit A-2 for SunZia ROW location) and the existing ROW for TEP’s Pinal Central – Tortolita 500-kV line along this segment of the Interconnection Project. The Interconnection Project – Preferred Route from this point includes two options (Option A and Option B) for entering the existing Vah Ki Substation (the Interconnection Project point of interconnection [POI]) that are described in greater detail below. The Applicant is working closely with SRP to determine the interconnection details for connecting into the existing Vah Ki Substation for both options. Of the two options described below, only one option will be selected and built by the Applicant.

The Applicant proposes to cross the SR 87 ADOT ROW at Selma Highway as an overhead line and is working closely with ADOT to identify an acceptable engineering solution for crossing the state highway. The Applicant also proposes to cross existing SCIDD and HIDD canals and their ROWs. The Applicant is



working closely with these irrigation districts to identify acceptable engineering solutions for crossing these facilities. Additionally, the Interconnection Project – Preferred Route will cross the SunZia ROW. The Applicant is working with SunZia to identify an acceptable engineering solution for this crossing (which may include undergrounding the Applicant’s gen-tie as it crosses the SunZia ROW).

As noted previously, a portion of this Interconnection Project – Preferred Route may be installed underground depending on final engineering design and coordination with SunZia. Figure 1 shows the Interconnection Project – Preferred Route.

## **INTERCONNECTION PROJECT – SUBROUTE OPTION**

After the Interconnection Project route proceeds north for approximately 1 mile along the east side of SR 87, the Interconnection Project – Subroute Option will then turn east. From SR 87, the Interconnection Project – Subroute Option will extend east for 0.25 mile and then extend north for 0.1 mile across HIDD and SCIDD irrigation canals. From there, the Interconnection Project – Subroute Option will extend northwest at roughly a 45-degree angle for approximately 0.3 mile across the proposed SunZia ROW (see Exhibit A-2 for SunZia ROW location) and the existing ROW for TEP’s Pinal Central – Tortolita 500-kV line and then back to a point near the east side of SR 87 and back onto the Interconnection Project – Preferred Route alignment. Next, the route will extend north along SR 87, along the east side of the highway, for approximately 0.25 mile. The Interconnection Project – Subroute Option route from this point includes two options (Option A and Option B) for entering the existing Vah Ki Substation (the Interconnection Project POI) that are described in greater detail below. The Applicant is working closely with SRP to determine the interconnection details for connecting into the existing Vah Ki Substation for both options. Of the two options described below, only one option will be selected and built by the Applicant.

The Applicant proposes to cross the SR 87 ADOT ROW at Selma Highway as an overhead line and is working closely with ADOT to identify an acceptable engineering solution for crossing the state highway. The Applicant also proposes to cross existing SCIDD and HIDD canals and their ROWs. The Applicant is working closely with these irrigation districts to identify acceptable engineering solutions for crossing these facilities. Additionally, the Interconnection Project will cross the SunZia ROW. The Applicant is working with SunZia to identify an acceptable engineering solution for this crossing (which may include undergrounding the Applicant’s Interconnection Project as it crosses the SunZia ROW).

As noted previously, a portion of this Interconnection Project – Subroute Option route may be installed underground depending on final engineering design and coordination with SunZia. Figure 1 shows the Interconnection Project – Subroute Option.

## **INTERCONNECTION PROJECT ROUTE – OPTION A**

The proposed route for the Interconnection Project route – Option A (Option A) starts at SR 87, just north of the proposed SunZia Transmission ROW and existing ROW for TEP’s Pinal Central – Tortolita 500-kV line. Option A extends north along the east side of SR 87 for approximately 0.5 mile before turning east into the Saint Solar field. Option A will extend east for approximately 0.25 mile before turning south for approximately 0.1 mile to connect into the Vah Ki Substation.

The Applicant will need to enter the Saint Solar property, property that Applicant’s affiliate owns for the purpose of operating the Saint Solar project. As noted previously, a portion of the Option A route may be installed underground depending on final engineering design. Figure 1 shows the Option A route.

## **INTERCONNECTION PROJECT ROUTE – OPTION B**

The proposed route for the Interconnection Project route – Option B (Option B) starts at SR 87, just north of the proposed SunZia ROW and existing ROW for TEP’s Pinal Central – Tortolita 500-kV line. Option B extends north along the east side of SR 87 for approximately 0.25 mile before turning east into the Saint

Solar field. Option B weaves into the Saint Solar field, extending towards the Vah Ki Substation; the route will extend approximately 0.1 mile northeast and then approximately 0.1 mile east, turning north and extending north for 0.1 mile. From the northwest corner of the Vah Ki Substation, the route will extend east for approximately 0.05 mile to connect into the Vah Ki Substation.

As with Option A, the Applicant will need to enter the Saint Solar property. As noted previously, a portion of the Option B route may be installed underground depending on final engineering design. Figure 1 shows the Option B route.

**Requested CEC Corridor**

The Applicant requests approval of a CEC Corridor that is generally 1,000 feet wide, extending 500 feet on either side of the Interconnection Project centerline (including Interconnection Project – Preferred Route, Interconnection Project – Subroute Option, and Options A and B). For the aboveground portion of the Interconnection Project, an approximately 150-foot-wide ROW will be established within the CEC Corridor. For the potentially underground portion of the Interconnection Project, an approximately 75-foot-wide temporary ROW and a 50-foot-wide permanent ROW will be needed within the 150-foot-wide ROW that will be located in the CEC Corridor. Since the potentially underground portion of the Interconnection Project will not be finalized until final engineering design, the Applicant is requesting approval of the entire Interconnection Project (including Interconnection Project – Preferred Route, Interconnection Project – Subroute Option, and Options A and B).

At its southern terminus, the CEC Corridor begins as the Interconnection Project exits the Project Substation near the northeastern portion of the Energy Facility. The CEC Corridor begins as an approximately 1,000-foot-wide corridor (with 500 feet being on each side of the Interconnection Project centerline) on privately owned land on parcel 40148001A. The CEC Corridor continues for approximately 2,620 feet east before heading northeast for approximately 753 feet. Then, the CEC Corridor heads north for approximately 4,833 feet, continuing to be approximately 1,000 feet wide. At this point, the CEC Corridor expands to a total of 2,134 feet wide for approximately 5,034 feet. This expansion is inclusive of Options A and B, providing siting flexibility for the Interconnection Project as well as proper siting as it enters into the Vah Ki Substation. Additionally, the expanded CEC Corridor provides flexibility for the Applicant to safely site the Interconnection Project around and through the existing Saint Solar Project, which the Applicant’s affiliate currently owns and operates.

The requested CEC Corridor is in the Township, Range, and Sections identified in Table 1. In total, the requested CEC Corridor is approximately 418 acres, all of which is private property. Regarding land jurisdiction, approximately 241 acres (58%) are in the city of Coolidge and 177 acres (42%) are in unincorporated Pinal County. The requested CEC Corridor is displayed in Figure 2.

**Table 1. Requested CEC Corridor Location**

Township	Range	Section
7S	8E	3
7S	8E	4
6S	8E	27
6S	8E	28
6S	8E	33
6S	8E	34

## ***Proposed Interconnection***

The POI for the Interconnection Project is the existing Vah Ki Substation. The existing Vah Ki Substation will require modification or addition of equipment to allow for the Interconnection Project. The Applicant will ensure this work is performed in accordance with applicable electric utility standards. In addition, the Applicant is working closely with SRP to identify modifications, additions, and specific interconnection needs.

The Vah Ki Substation is owned and operated by SRP. To interconnect to the regional electric grid, the Applicant must execute a Large Generator Interconnection Agreement with SRP. As part of the interconnection agreement process, SRP completed a system impact study (SIS) to assess the need for transmission system upgrades triggered by the Interconnection Project. A facilities study (FAS) is anticipated to be completed by November 2024. The Applicant filed an interconnection request with SRP in December 2023. The Large Generator Interconnection Agreement will require the Applicant to support an appropriate share of system upgrades identified through the SIS and FAS that are deemed necessary to ensure the safe and reliable operation of the regional transmission system. Any new equipment and other upgrades required at the Vah Ki Substation will be performed in accordance with applicable utility standards.

The Vah Ki Substation is in Township 6S, Range 8E, Section 27.

## ***Energy Facility Description***

The Energy Facility is a renewable energy generating station that includes an approximately up to 150-MW solar photovoltaic generating station and approximately up to 150-MW battery energy storage system. The Energy Facility is proposed on approximately 1,053 acres of private property located within the city of Coolidge and unincorporated Pinal County. A conditional use permit has already been issued for the portion of the Energy Facility in the city of Coolidge (793 acres). A non-major comprehensive plan amendment, zone change, and Planned Area Development (PAD) will be required from Pinal County for the 260 acres within unincorporated Pinal County. The Applicant is currently pursuing a non-major comprehensive plan amendment, zone change, and PAD for the unincorporated Pinal County portion of the Energy Facility.

The Energy Facility will include arrays of solar photovoltaic panels on fixed support structures or trackers, lower-voltage (e.g., 34.5-kV) collection lines, inverter stations, and transformers. The battery energy storage system will involve steel enclosures housing lithium-ion battery cells. The enclosures will also involve cooling systems and intelligent fire detection systems. Final specifications for the Energy Facility will ultimately be determined by off-taker preference and contract terms.

The Energy Facility does not require a CEC because it is not a “plant” as defined in ARS 40-360(9). Therefore, the Applicant is describing the Energy Facility for contextual purposes only.

## ***Project Substation***

The purpose of the Project Substation is to increase the voltage of electricity generated by the Energy Facility to match the POI. The electricity generated or stored by the Energy Facility will travel through lower-voltage (e.g., 34.5-kV) collector lines to the Project Substation, where power transformers will increase the voltage for delivery onto the SRP system via the Interconnection Project. The Project Substation will include major equipment such as step-up power transformers, buses and circuit breakers, disconnect switches, control house, and riser structures (e.g., an H-frame or A-frame structure). All collector lines will terminate at the Project Substation.

The Project Substation is proposed on private property in Township 7S, Range 8E, Section 4. The Applicant is not requesting authorization for the Project Substation due to the current interpretation of the Commission

and the Siting Committee that a substation does not require a CEC under ARS 40-360(10). Therefore, the Applicant is describing the Project Substation for contextual purposes only.

## **Purpose and Need**

The Interconnection Project is needed to deliver renewable energy from the Energy Facility to the regional electric transmission grid. The purpose of this CEC application is to secure approval for the Interconnection Project that will connect the Energy Facility to the regional transmission system at the existing Vah Ki Substation. Adding renewable energy projects meets several objectives at the local, state, and federal levels, including the need for additional energy supplies to serve the region and the priority placed on meeting this need with clean, renewable energy.

The Interconnection Project has been identified as an optimal location based on the recognized need to interconnect renewable energy sources to local electrical utilities, the existence of compatible adjacent and nearby land uses, and the proximity to the existing Vah Ki Substation. The location reduces the need for a long gen-tie and sites the proposed facilities in an area of existing compatible land uses.

## **Environmental and Public Siting Process**

### ***Siting Process***

The Applicant's siting process for the Interconnection Project focused on identifying a reasonably direct route between the Energy Facility and the SRP Vah Ki Substation. The Applicant sought to minimize environmental impacts and expenses by choosing direct routing where possible, while accounting for existing land use and infrastructure. The Interconnection Project – Preferred Route and Interconnection Project – Subroute Option, with either Option A or Option B, are all sited entirely on previously disturbed private land with existing or planned compatible land uses.

The Interconnection Project is proposed to be sited adjacent to existing infrastructure, including roadways, canals, a railroad (Union Pacific Railroad), distribution and high voltage transmission lines, and within an existing solar facility (Saint Solar) that is owned by the Applicant's affiliate. The construction of the Interconnection Project adjacent to existing facilities and other existing renewable energy developments will help consolidate energy infrastructure and minimize the overall impact of the Interconnection Project.

### ***Public Outreach Process***

The Applicant coordinated with property owners, agencies, and other stakeholders to present information about the Interconnection Project and Energy Facility. The Applicant provided multiple ways to submit comments during the outreach process. In summary, outreach activities included an informational mailing to stakeholders, establishing a project website and dedicated points of contact for the project team, running newspaper and digital advertisements for the Interconnection Project, and hosting an in-person open house. Additional information regarding the Applicant's public outreach is provided in Exhibit J of this Application.

### ***Summary of Environmental Compatibility***

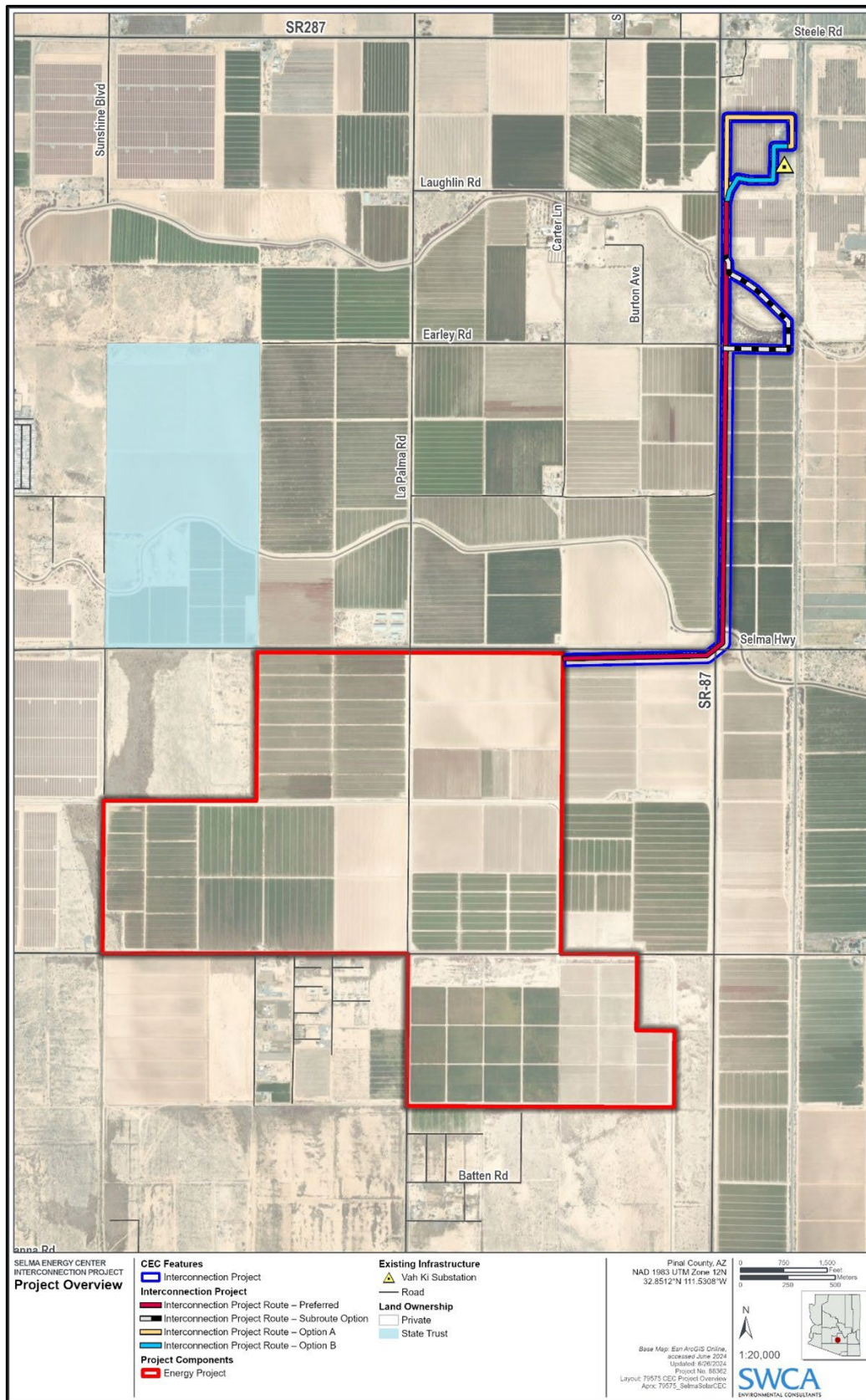
After conducting an environmental analysis and minimizing or avoiding environmental impacts based on the factors outlined in ARS 40-360.06, the Applicant believes the Interconnection Project to be environmentally compatible. The Interconnection Project will use little water and will produce no carbon or other emissions while working to meet Arizona's growing electricity demand.

Additionally, as discussed in the following sections, the Interconnection Project:

- will be compatible with existing plans in the vicinity of the proposed site,
- will not disturb any areas of unique biological wealth and will not impact special-status species,
- will have limited visual effects,
- will not disturb any known archaeological or historical sites of significance,
- will not affect any recreation opportunities in the area, and
- is not anticipated to result in significant impacts associated with noise or signal interference.

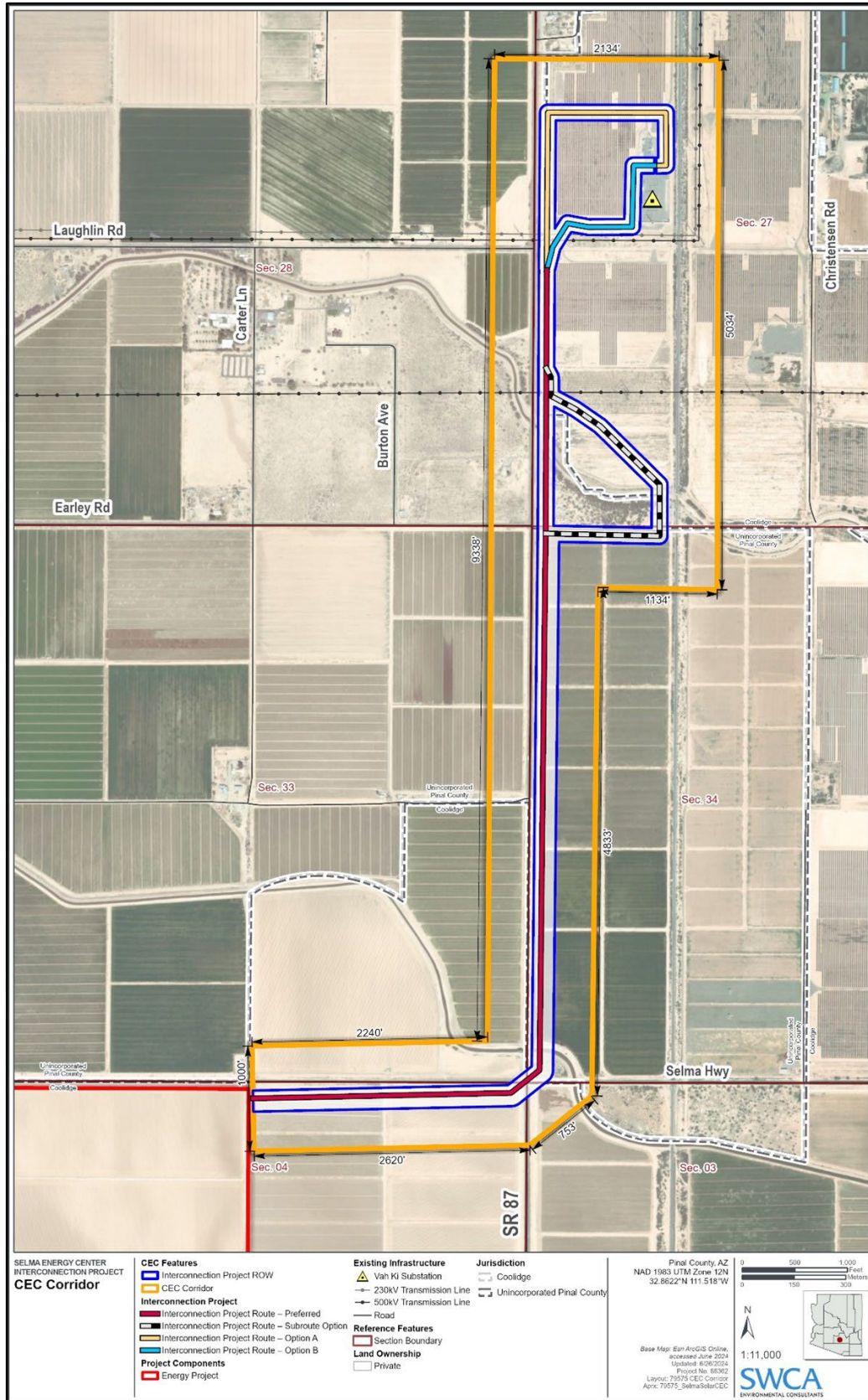
## Conclusion

This Application includes the environmental analysis and documentation relevant to the Interconnection Project as specified by Arizona Administrative Code Rule R 14-3-219. This Application includes the environmental analysis and documentation relevant to the Interconnection Project and minimizing environmental impacts, and the Applicant believes the Interconnection Project is environmentally compatible. The Applicant further believes that the Interconnection Project is in the public interest because the Energy Facility's contribution to meeting the need for an adequate, economical, and reliable supply of electric power outweighs the impact of the Interconnection Project on the environment and ecology of the state. The Applicant therefore respectfully requests that the Arizona Power Plant and Transmission Line Siting Committee grant, and the Arizona Corporation Commission approve, a CEC for the Interconnection Project.



**Figure 1. Interconnection Project.**





**Figure 2. Requested CEC Corridor.**

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## Application For Certificate of Environmental Compatibility

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**1. Name and address of the Applicant**

Selma Energy Center, LLC  
700 Universe Boulevard  
Juno Beach, FL 33408

**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**

Ashley Johnson  
Project Manager, Development  
Selma Energy Center, LLC  
700 Universe Boulevard  
Juno Beach, FL 33408  
561-601-7072  
Ashley.Johnson@nexteraenergy.com

**3. Date on which the applicant filed a Ten Year Plan in compliance with A.R.S. § 40-360.02, in which the facilities for which this application is made were described**

The Applicant filed a Ten Year Plan in Docket E-99999A-23-0016 on January 31, 2024.

**4. Description of the proposed facility, including:**

**a. With respect to an electric generating plant:**

The Interconnection Project does not include an electrical generating plant as defined in ARS 40-360(9).

**b. With respect to a proposed transmission line:**

**i. Nominal voltage for which the line is designed; description of the proposed structures and switchyards or substations associated therewith; and purpose for constructing said transmission line**

**(1) Nominal voltage:**

The nominal voltage for the proposed Interconnection Project is 230-kV alternating current, single circuit.

**(2) Description of the proposed structures:**

The Interconnection Project will be constructed using weathering steel monopole and multipole structures, with an estimated 28 feet of ground clearance. Near the Vah Ki Substation, the Interconnection Project will use dead-end structures. The transmission structures are expected to have an aboveground height of 60 to 110 feet and will be spaced 100 to 1,000 feet apart. The estimated structure count for this project is approximately 30 structures, which is subject to change pending detailed design. Conceptual drawings for typical structure types can be found in Exhibit G.

**(3) Description of proposed switchyards and substations:**

The approximately 30-acre Project Substation will be located at the northeast corner of the Energy Facility. The Project Substation will convert power from 34.5 kV to 230 kV. The Project Substation will include a control enclosure, 34.5-kV switchgear, two step-up power transformers to increase the voltage to 230 kV, disconnect switches, bus and line bay, and an A-frame or H-frame dead-end structure. Consistent with the positions of the Commission and the Siting Committee that a substation does not require a CEC under ARS 40-360(10), the Applicant is not requesting authorization for a CEC for the Project Substation.

The switchyard will be located in the existing Vah Ki Substation.

**(4) Purpose for constructing said transmission line:**

The purpose of the Interconnection Project is to deliver electrical power generated by a new approximately 150-MW photovoltaic solar energy generating facility and stored by a new approximately 150-MW battery energy storage facility to the regional transmission grid for customer use.

**ii. Description of geographical points between which the transmission line will run the straight-line distance between such points and the length of the transmission line for each alternative route for which the application is made**

**(1) Description of geographical points between which the transmission line will run:**

**Interconnection Project Route**

The Project Substation is proposed to be in the northeast corner of parcel 40148002A, in the northwest quarter of Section 4, Township 7 South, Range 8 East. The Interconnection Project will originate at the Project Substation within the Energy Facility, located approximately 1 mile west of the intersection of SR 87, south of Selma Highway. The Interconnection Project will proceed east for approximately 0.6 mile before crossing SR 87 at an angle and then turn north at the intersection of East Selma Highway and SR 87. The Interconnection Project will cross a SCIDD irrigation canal and proceed north for approximately 1 mile along the east side of SR 87. From here, the Interconnection Project has a route preferred by the Applicant (Interconnection Project – Preferred Route) and a potential subroute option (Interconnection Project – Subroute Option). Only one of these routes will be constructed. Both the Interconnection Project – Preferred Route and Interconnection Project – Subroute Option could use either Option A or Option B described further below.

**Interconnection Project – Preferred Route**

After the Interconnection Project route proceeds north for approximately 1 mile along the east side of SR 87, the Interconnection Project – Preferred Route will continue to proceed north along the east side of SR 87 for approximately 0.5 mile. The Interconnection Project – Preferred Route will cross a HIDD irrigation canal and will cross the proposed SunZia Transmission ROW and the existing ROW for TEP's Pinal Central – Tortolita 500-kV line along this segment of the Interconnection Project. The Interconnection Project – Preferred Route from this point includes two options for entering the existing Vah Ki Substation (the Interconnection Project POI) that are described in greater detail below. Of the two options described below, only one option will be selected and built by the Applicant.

### **Interconnection Project – Subroute Option**

After the Interconnection Project route proceeds north for approximately 1 mile along the east side of SR 87, the Interconnection Project – Subroute Option will then turn east. From SR 87, the Interconnection Project – Subroute Option will extend east for 0.25 mile and then extend north for 0.1 mile across HIDD and SCIDD irrigation canals. From there, the Interconnection Project – Subroute Option will extend northwest at roughly a 45-degree angle for approximately 0.3 mile across the proposed SunZia Transmission ROW and the existing ROW for TEP's Pinal Central – Tortolita 500-kV line and then back to a point near the east side of SR 87 and back onto the Interconnection Project – Preferred Route alignment. Next, the route will extend north along SR 87, along the east side of the highway, for approximately 0.25 mile. The Interconnection Project – Subroute Option route from this point includes Option A and Option B for entering the existing Vah Ki Substation (the Interconnection Project POI) that are described in greater detail below. Of the two options described below, only one option will be selected and built by the Applicant.

### **Interconnection Project Route – Option A**

The proposed route for Option A starts at SR 87, just north of the proposed SunZia Transmission ROW and existing ROW for TEP's Pinal Central – Tortolita 500-kV line. Option A extends north along the east side of SR 87 for approximately 0.5 mile before turning east into the Saint Solar field. Option A extends east for approximately 0.25 mile before turning south for approximately 0.1 mile to connect into the Vah Ki Substation.

### **Interconnection Project Route – Option B**

The proposed route for Option B starts at SR 87, just north of the proposed SunZia Transmission ROW and existing ROW for TEP's Pinal Central – Tortolita 500-kV line. Option B extends north along the east side of SR 87 for approximately 0.25 mile before turning east into the Saint Solar field. Option B weaves into the Saint Solar field, extending towards the Vah Ki Substation; the route extends approximately 0.1 mile northeast and then approximately 0.1 mile east before turning and extending north for 0.1 mile. From the northwest corner of the Vah Ki Substation, the route extends east for approximately 0.05 mile to connect into the Vah Ki Substation.

### **(2) Straight-line distance between such points:**

For the Interconnection Project, the straight-line distance between the Energy Facility and the existing Vah Ki Substation is approximately 1.7 miles.

### **(3) Length of the transmission line for each alternative route:**

The length of the Interconnection Project – Preferred Route with Option A is approximately 2.6 miles.

The length of the Interconnection Project – Preferred Route with Option B is approximately 2.3 miles.

The length of the Interconnection Project – Subroute Option with Option A is approximately 2.9 miles.

The length of the Interconnection Project – Subroute Option with Option B is approximately 2.6 miles.

**iii. Nominal width of right-of-way required, nominal length of spans, maximum height of supporting structures and minimum height of conductor above ground**

**(1) Nominal width of right-of-way required:**

The Interconnection Project ROW will be up to 150 feet wide within the requested CEC Corridor. The ROW is being requested to facilitate landowner coordination, allow for minor adjustments to the location of structures to achieve site-specific mitigation objectives, and meet site-specific engineering requirements.

**(2) Nominal length of spans:**

The span length between structures will vary depending on terrain, constraints, and other factors but will be approximately 100-1,000 feet.

**(3) Maximum height of supporting structures:**

The maximum height above existing grade of the supporting structures is anticipated to be approximately 110 feet.

**(4) Minimum height of conductor above ground:**

The minimum height of conductor above the existing grade will be 28 feet.

**iv. To the extent available, the estimated costs of proposed transmission line and route, stated separately. (If application contains alternative routes, furnish an estimate for each route and a brief description of the reasons for any variations in such estimates.)**

The estimated cost of the Interconnection Project – Preferred Route with Option A is approximately \$14.5 to \$18 million.

The estimated cost of the Interconnection Project – Preferred Route with Option B is approximately \$14.5 to \$18 million.

The estimated cost of the Interconnection Project – Subroute Option with Option A is approximately \$20.5 to \$25 million.

The estimated cost of the Interconnection Project – Subroute Option with Option B is approximately \$20.5 to \$25 million.

**v. Description of proposed route and switchyard locations. (If application contains alternative routes, list routes in order of applicant's preference with a summary of reasons for such order of preference and any changes such alternative routes would require in the plans reflected in (i) through (iv) hereof.)**

The Interconnection Project routes are described generally in (ii) above and are depicted in Figure 1. The Applicant's most preferred route is the Interconnection Project – Preferred Route with Option A as it is the most direct path between the Energy Facility and the Vah Ki Substation that minimizes conflicts with existing and planned utility ROW while requiring the least amount of engineering solutions to design. The Applicant's second most preferred route is the Interconnection Project – Preferred Route with Option B as it is the second most direct path between the Energy Facility and the Vah Ki Substation that still minimizes conflicts with existing and planned utility ROW, but would require some engineering solutions to design. The Applicant's third most preferred route is the Interconnection Project – Subroute Option with Option A as it is the least direct path between the Energy Facility and the Vah Ki Substation but would still minimize some conflict with existing and planned utility ROW and would require engineering solutions to design. The Applicant's least preferred route is the Interconnection Project – Subroute Option with Option B as it has the most potential conflicts

conflicts with existing and planned utility rights-of-way and would require the most engineering solutions to design.

The Interconnection Project route descriptions may vary if up to 1.1 miles of the gen-tie were installed underground. However, the underground portion of the gen-tie will stay within the CEC Corridor..

**vi. For each alternative route for which application is made, list the ownership percentages of land traversed by the entire route (federal, state, Indian, private, etc.).**

The Interconnection Project will traverse privately owned land. Any necessary state or local road crossings and canal crossings will be coordinated with the appropriate agency.

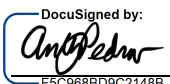
**5. List the areas of jurisdiction [as defined in A.R.S. § 40-360(1)] affected by each alternative site or route and designate those proposed sites or routes, if any, which are contrary to the zoning ordinances or master plans of any of such areas of jurisdiction.**

The Interconnection Project is on private land under the jurisdiction of Pinal County and the City of Coolidge, Arizona. The Interconnection Project in unincorporated Pinal County is zoned as General Rural (GR). The Interconnection Project in Coolidge is zoned as Agricultural (AG). The proposed route of the Interconnection Project does not violate any current zoning ordinances of the relevant jurisdictions.

**6. Describe any environmental studies applicant has performed or caused to be performed in connection with this application or intends to perform or cause to be performed in such connection, including the contemplated date of completion.**

The Applicant has evaluated publicly available desktop data and field data related to biological resources, visual resources, cultural resources, recreational resources, land use, noise levels, and communications signals to assess the potential impacts that may result from the construction, operation, and maintenance of the Interconnection Project. These evaluations are included in Exhibits B, C, D, E, F, H, and I of this Application.

Selma Energy Center, LLC

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By Anthony Pedroni, Vice President

I HEREBY CERTIFY that on this fourth day of September 2024, I have delivered to the Arizona Corporation Commission twenty-five (25) copies of this Application for a Certificate of Environmental Compatibility.

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## EXHIBIT A. LOCATION MAP AND LAND USE MAPS

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In accordance with Arizona Administrative Code Rules of Practice and Procedure R14-3-219, Exhibit 1, the applicant provides the following location maps and land use information:

*Where commercially available\*\*, 1) a topographic map, 1:250,000 scale, showing any proposed transmission line route longer than 50 miles and the adjacent area; and 2) a topographic map, a scale of 1:62,500, for routes shorter than 50 miles showing any proposed transmission line route and the adjacent area.*

*Where commercially available, a topographic map, 1:62,500 scale, of each proposed transmission line route longer than 50 miles showing that portion of the route within two miles of any subdivided area. The general land use plan within the area shall be shown on a 1:62,500 map required for Exhibit A-3, and for the map required by this Exhibit A-4, which shall also show the areas of jurisdiction affected and any boundaries between such areas of jurisdiction. If the general land use plan is uniform throughout the area depicted, it may be described in the legend in lieu of an overlay.*

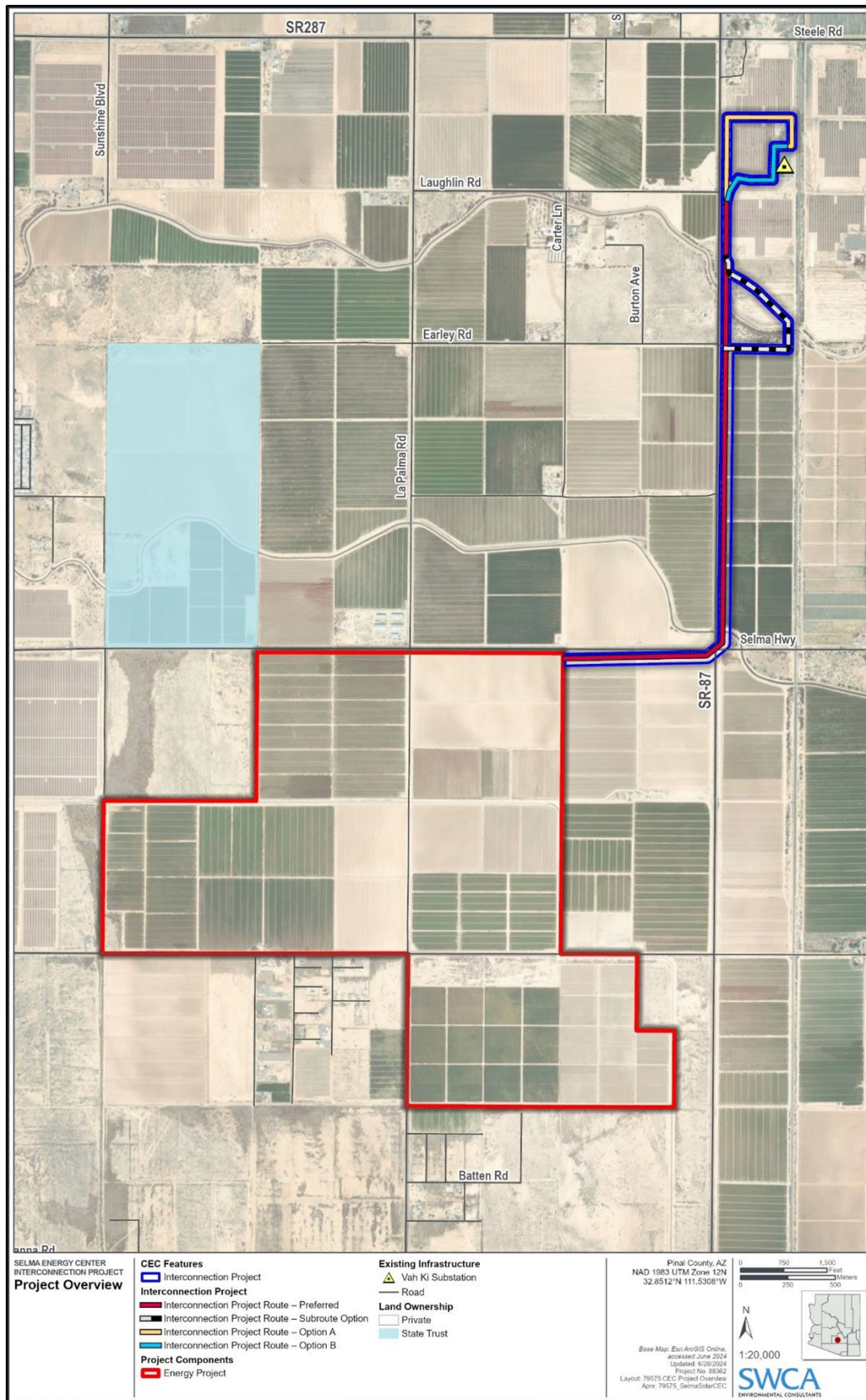
*\*\*If a topographic map is not commercially available, a map of similar scale, which reflects prominent or important physical features of the area in the vicinity of the proposed site or route, shall be substituted.*

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### Land Use Overview

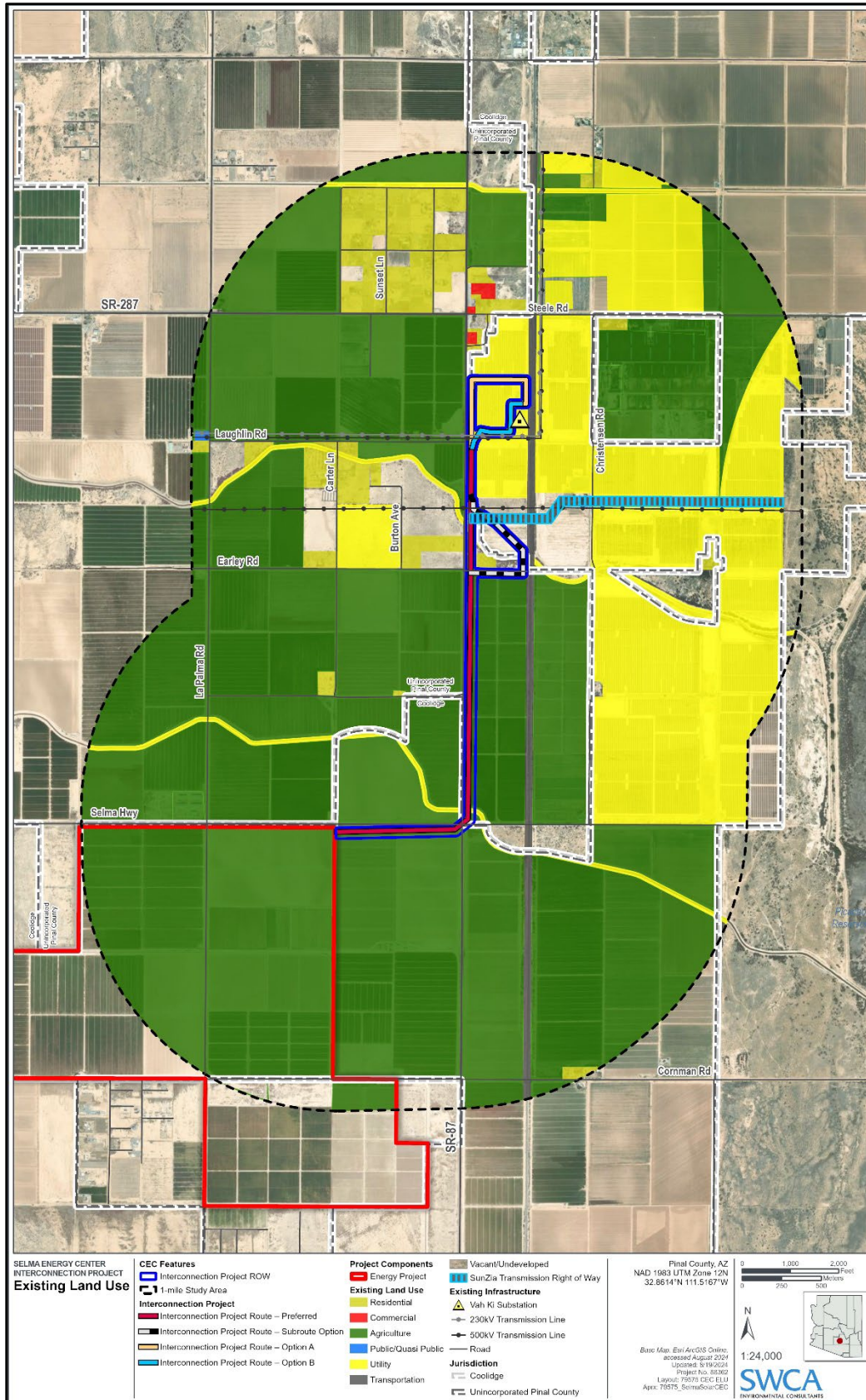
The following exhibits are required by the Arizona Corporation Commission's *Rules of Practice and Procedure* R14-3-219 to support the land use studies conducted for this Application:

- Exhibit A-1 illustrates the land ownership and surface jurisdiction for the location of proposed Interconnection Project and land within 1 mile of the CEC Corridor (Study Area).
- Exhibit A-2 illustrates existing land use within the Study Area.
- Exhibit A-3 illustrates future land use within the Study Area.
- Exhibit A-4 illustrates Interconnection Project on a topographic map.



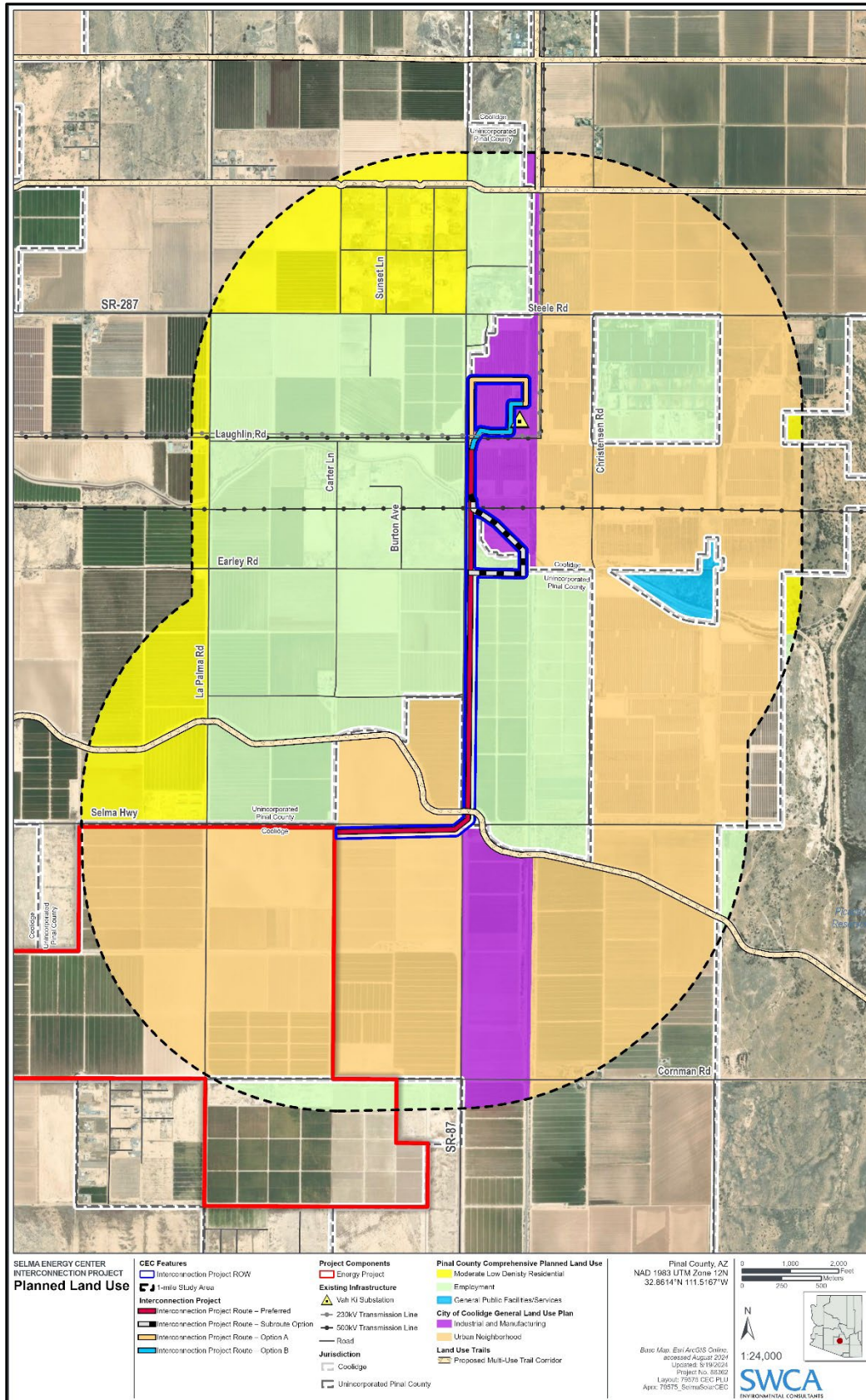
**Exhibit A-1. Land ownership and surface jurisdiction.**



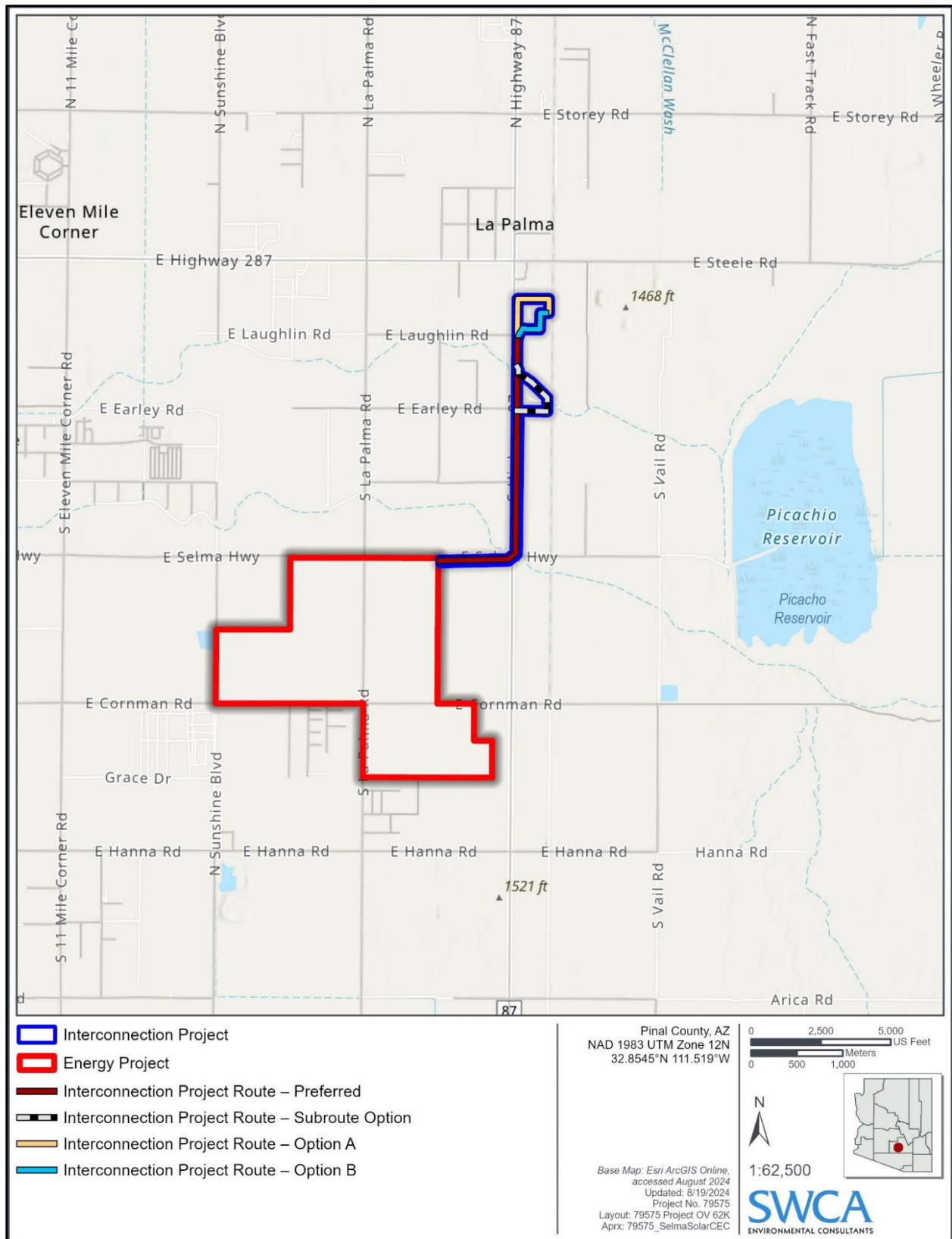


**Exhibit A-2. Existing land use.**





**Exhibit A-3. Future land use.**



**Exhibit A-4. Interconnection Project topographic map.**

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## EXHIBIT B. ENVIRONMENTAL STUDIES

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As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219, Exhibit 1:

*Attach any environmental studies which applicant has made or obtained in connection with the proposed site(s) or route(s). If an environmental report has been prepared for any federal agency or if a federal agency has prepared an environmental statement pursuant to Section 102 of the National Environmental Policy Act, a copy shall be included as a part of this exhibit.*

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### Introduction

SWCA Environmental Consultants (SWCA) was retained by Selma Energy Center, LLC (Applicant) to complete environmental analyses for the proposed Interconnection Project, including the evaluation of land use and the biological, visual, cultural, and recreation resources within the requested CEC Corridor and the 1-mile-radius buffer around the CEC Corridor (Study Area). The Interconnection Project is located within unincorporated Pinal County, Arizona, and the city of Coolidge, Arizona. The 1-mile Study Area includes lands in unincorporated Pinal County and the city of Coolidge, Arizona. Land ownership within the Study Area consists of privately owned land and Arizona State Land Department-administered lands. This exhibit provides a detailed inventory and evaluation of existing and planned land use within the Study Area. Biological, visual, cultural resource, recreational, and noise evaluations are discussed in Exhibits C, D, E, F, and I.

### Land Use

#### *Inventory*

The methodology used for this land use inventory included field verification and a review of desktop data, such as maps, aerial imagery, general plans, and other supportive documents, including the Pinal County *We Create Our Future: Pinal County Comprehensive Plan* (Comprehensive Plan) (Pinal County 2021) and the City of Coolidge *2025 General Plan: The Future Today* (2025 General Plan) (City of Coolidge 2014), and the Pinal County interactive mapping service (Pinal County 2023a). The inventory also included communication with government agencies, municipalities, and other stakeholders within the Study Area to gather information regarding further development plans or known development projects. Additional information regarding coordination with these entities can be found in Exhibit H.

#### *Jurisdiction and Land Ownership*

Land ownership within the Study Area consists of privately-owned land and Arizona State Lands Department-administered lands, as shown in Exhibit A-1. The Arizona State Land Department has jurisdiction over Arizona State Land Department-administered lands. The private lands in the Study Area are under the jurisdiction of unincorporated Pinal County and the City of Coolidge. The Interconnection Project is entirely on private land under the jurisdiction of unincorporated Pinal County and the City of Coolidge.

#### *Existing Land Use*

The primary existing land uses within the Study Area are agricultural, residential, utilities, and vacant land. Other land uses in the Study Area include commercial, public, and transportation. Overall, the Study Area can be described as mixed-use, with utilities, agriculture, public facilities, residential, and vacant land being

the primary uses. There is one 500-kV transmission line, a double circuit 230-kV / 500-kV transmission line, and one 230-kV transmission line within the Study Area. The existing land uses within the Study Area are displayed on Exhibit A-2 and described in detail below.

**Agricultural** – Agriculture, consisting primarily of irrigated row crops, is largely present throughout the Study Area.

**Residential** – Rural residences are scattered throughout the Study Area, with some more dense residential areas near the northern and central portion of the Study Area.

**Vacant** – Vacant lands are scattered throughout the Study Area, with most vacant land in the central portion of the Study Area.

**Commercial** – Commercial uses within the Study Area include, but are not limited to: an autobody shop, a dairy, a barn store, and a storage facility.

**Utility** – This land use is associated with solar facilities, including the Saint Solar and Storey Energy Center energy facilities, one 500-kV transmission line, a double circuit 230-kV / 500-kV transmission line, and one 230-kV transmission line within the Study Area.

**Public Facilities** – This land use is associated with electrical infrastructure located on the western border of the Study Area.

**Transportation** – This land use is associated with several major named roadways, including, but not necessarily limited to: State Route (SR) 87, Steele Road, SR 287, Laughlin Road, Earley Road, Arizona Western Blvd, Selma Highway, Cornman Road, Vail Road, Hanna Road, and Christensen Road. Other paved and unpaved roadways are also associated with this land use throughout the Study Area. Additionally, a railroad (Union Pacific Railroad) is associated with this land use as well.

**Water** – The main water facilities in the Study Area are two irrigation canals. The Casa Grande Canal intersects the central portion of the Interconnection Project along East Earley Road, and the other is the Florence–Casa Grande Extension Canal to the south, paralleling the Casa Grande Canal. The Florence–Casa Grande Extension Canal intersects the southern portion of the Interconnection Project.

## ***Future Land Use***

The data discussed in this section were derived from the Comprehensive Plan (Pinal County 2021), 2025 General Plan (City of Coolidge 2014), and the Pinal County interactive mapping service (Pinal County 2023a).

Planned land uses within the Study Area are mapped on Exhibit A-3 and are residential, employment, general public facilities/services, and industrial and manufacturing.

On May 30, 2024, the Applicant sent letters to the relevant jurisdictions to provide information about the Interconnection Project and request new or additional information on plans or planned developments within the Study Area. Table H-1 provides a list of recipients. Exhibits H-1a and H-1b provide a copy of the letter, and Exhibits H-2a through H-2c include the written response received.

## ***Impact Assessment and Results***

Land use impacts may be defined as restrictions on land use that would result from the construction or operation of the Interconnection Project or incompatibility with existing land use plans. Typically, restrictions on a land use would result from right-of-way (ROW) or easement acquisition across a property. To minimize land use impacts, the Interconnection Project was sited to generally follow existing linear features, such as existing transmission lines and roadways.

The Interconnection Project will be entirely on privately owned land in unincorporated Pinal County and the city of Coolidge, Arizona. It will parallel existing linear features (such as existing roads and transmission lines) to the extent practicable and will cross parcels with existing agricultural, vacant, and utility land uses. All these existing land uses are compatible with the Interconnection Project.

The Comprehensive Plan identifies the Interconnection Project in unincorporated Pinal County as being within the Employment land use designation. One of the overarching goals in the Comprehensive Plan is to “Encourage, coordinate and support commercial and industrial land uses in appropriate areas to maximize adequate services including transportation, water, sewer, fire suppression and utilities” (Pinal County 2021). The Employment designation is defined as “areas that can support a variety of employment-generating business activities such as industrial, office, business park, and warehousing and distribution. Power plants are also included in this category.” (Pinal County 2021). Therefore, the Interconnection Project is compatible with the existing Comprehensive Plan land use designation. The Interconnection Project in unincorporated Pinal County is zoned as General Rural (GR). The list of permitted uses in the GR zoning district include “Public and quasi-public uses: ...public or private utility and facilities...” (Pinal County 2023b). Therefore, the Interconnection Project is compatible with the existing unincorporated Pinal County zoning district.

The 2025 General Plan identifies the Interconnection Project within the city of Coolidge as being within the Industrial and Manufacturing and Urban Neighborhood land use designations. Industrial and Manufacturing includes land uses (such as manufacturing, industrial, and production activities and transportation related activities) that would implicitly require electrical transmission infrastructure to construct and operate (City of Coolidge 2014). Urban Neighborhood land uses include “commercial services, professional office, single family and multifamily residential at varying densities, community facilities including churches and schools, public utility installations and parks and open space” (City of Coolidge 2014). Therefore, the Interconnection Project is compatible with the existing 2025 General Plan land use designations. The Interconnection Project in the city of Coolidge is zoned as Agricultural (AG) and General Industrial (I-2). The Applicant is still evaluating what local permits are required for the Interconnection Project in the City of Coolidge. If a permit is required from the city of Coolidge for the Interconnection Project, the Applicant will apply for the applicable permits.

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## EXHIBIT C. AREAS OF BIOLOGICAL WEALTH

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As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219, Exhibit 1:

*Describe any areas in the vicinity of the proposed site or route which are unique because of biological wealth or because they are habitats for rare and endangered species. Describe the biological wealth or species involved and state effects, if any, the proposed facilities will have thereon.*

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### Introduction

SWCA conducted a biotic resource review to identify areas of biological wealth and the rare and endangered species that may occur at or in the vicinity of the Interconnection Project. The Study Area buffer is the 1-mile radius beyond the CEC Corridor, encompassing all route options and considering both overhead and potential underground impacts. SWCA consulted data sources that included:

- topographic maps, aerial photographs, and land use, land cover, and elevation data,
- the U.S. Fish and Wildlife Service (USFWS) species list for the proposed Interconnection Project obtained from the USFWS online Information for Planning and Consultation (IPaC) system (Exhibit C1) (USFWS 2024a),
- species information obtained from the USFWS Environmental Conservation Online System (ECOS) (USFWS 2024b),
- species information obtained from the Arizona Game and Fish Department (AZGFD) Online Environmental Review Tool (ERT) (Exhibit C-2) (AZGFD 2024a), and
- species information obtained from other relevant online sources.

SWCA conducted a desktop analysis supplemented with field surveys to identify rare and endangered species habitat and likelihood of occurrence within the Interconnection Project or Study Area as well as to determine whether any areas of biological wealth occur in the Interconnection Project or Study Area. Areas of biological wealth can be defined as any habitat, feature, or location that might serve to provide important, unique, or concentrated resources for wildlife or plants in a landscape context, and where adverse impacts to these areas might have higher magnitude of impacts on wildlife or plants as compared to impacts occurring in the surrounding areas. Areas of biological wealth can include unique habitat features (e.g., riparian corridors, wetlands, or rock outcrops); conceptual, unprotected areas that have been delineated by an agency or nongovernmental organization (e.g., wildlife corridors, Important Bird Areas [IBAs], and Conservation Opportunity Areas [COAs]); and features or areas (e.g., designated critical habitat) that are protected by a federal agency (e.g., USFWS, National Parks, National Wildlife Refuges, Wilderness Areas, or National Forests), state agency (e.g., Arizona State Parks), or local government (e.g., parks or other areas protected by local ordinance).

The AZGFD Online ERT database query establishes a predetermined buffer beyond the Study Area to search for occurrence records and the presence of modeled habitat. The size of the buffer depends on the type of project being considered and cannot be edited by the user. For the Interconnection Project, the buffer is 3 miles beyond the Interconnection Project, fully encompassing the 1-mile-radius Study Area. The analysis in this exhibit is limited whenever possible to the 1-mile Study Area, except in cases where ERT species results cannot be refined to a range narrower than the predetermined buffer.

In addition, an SWCA biologist with expertise in the biology of flora and fauna of the region completed field surveys for the Interconnection Project. All plant and wildlife species observed in the Interconnection

Project and portions of the Study Area during the March 27, 2024, site visit were recorded (see Exhibit D for a complete list). The field surveys were conducted to determine whether habitat features for species protected under federal, state, or local regulations are present in the Interconnection Project or portions of the Study Area.

## Laws and Policies

Applicable laws and policies regarding special-status species in Arizona include the following:

- The USFWS administers the **Endangered Species Act of 1973 (ESA)**, as amended (16 United States Code [USC] 1531 et seq.), which protects wildlife species listed as endangered (or as threatened if a 4(d) rule applies) from “take” (generally, directly, or indirectly harming or disturbing listed species). However, the ESA does not provide the same take protections for listed plant species, except on federal land. The ESA also allows for the designation of critical habitat for listed species, although designation of critical habitat is not required. Critical habitat is an administrative designation of a defined area with specific characteristics important to the survival and recovery of a listed species. Designation of critical habitat can affect federal actions but not state or private actions without a federal nexus.
- The **Migratory Bird Treaty Act of 1918 (MBTA)** (16 USC 703–712) provides for the protection of migratory birds and prohibits their unlawful take or possession. The act bans “taking” any native birds; “taking” can mean killing a wild bird or possessing parts of a wild bird, including feathers, nests, or eggs. Exceptions are allowed for hunting game birds and for research purposes, both of which require permits.
- The **Bald and Golden Eagle Protection Act of 1940 (BGEPA)** (16 USC 668–668d or 50 Code of Federal Regulations 22) prohibits any form of possession or taking of bald eagles (*Haliaeetus leucocephalus*) or golden eagles (*Aquila chrysaetos*). A 1962 amendment to the MBTA created a specific exemption for possession of an eagle or eagle parts (e.g., feathers) for religious purposes of Native American tribes. The amendment provided for not only the preservation of the golden eagle but also the preservation of Native American cultural practices.
- The AZGFD manages and conserves wildlife in Arizona. Arizona does not have a counterpart to the federal ESA, but nearly all take of wildlife is regulated in some manner through the **AZGFD hunting and fishing license system**. A list of rare species (**Wildlife Species of Concern [WSC]**) was created in 1996 without creating any specific statutory protections for those species (AZGFD 1996); however, hunting regulations are used to provide some protection. Although WSC is no longer a valid category, AZGFD continues to track these species because of an existing Memorandum of Understanding between the USFWS and AZGFD. Generally, no hunting or capture of WSC is allowed, with some exceptions for managed recreational fisheries of native fish (AZGFD 2017) and recreational capture of certain reptiles (AZGFD 2015).
- Arizona prepared a Comprehensive Wildlife Conservation Strategy in 2006 (AZGFD 2006), later renamed to the **Arizona Wildlife Conservation Strategy (AWCS)** (2022–2032), through a state–federal partnership and grant program. The AWCS was updated in 2022 (AZGFD 2022). The AWCS, which serves as the official State Wildlife Action Plan (SWAP), identifies **Species of Greatest Conservation Need (SGCN)** in several tiers. Tier 1 species are those that the AZGFD has deemed vulnerable and fall into a category of either federally listed as endangered or threatened under the ESA; those that have been recently removed from the ESA and require post-delisting monitoring; those specifically covered under a signed agreement such as a Candidate Conservation Agreement (CCA), Candidate Conservation Agreement with Assurances (CCAA), Conservation Strategy and Assessment, or Strategic Conservation Plan; or those for which the AZGFD has determined the protection of a closed season is warranted. Tier 2 represents the remainder of the

species meeting the AZGFD vulnerability criteria, including species that are not listed but are regionally rare or declining, species with a U.S. range primarily in Arizona that are dependent on conservation efforts within the state, and other species with identified conservation issues that may warrant management action and do not meet the criteria for Tier 1 listing. Tier 3 species are those for which existing data were insufficient to score one or more vulnerability criteria because of substantial data gaps or unknown conservation status but where conservation concern may be warranted. Species identified as WSC in 1996 are included as SGCNs in the SWAP and are addressed as SGCNs in Table C-1 and the Species of Greatest Conservation Need section below.

- For the first time, in December 2022, the **AWCS identified Conservation Opportunity Areas (COAs)** (AZGFD 2022). The COAs were created to help implement the AWCS and should be considered voluntary guidance for specific areas where conservation efforts would be most effective, based on species and habitat expertise, as well as wildlife and spatial data. These COAs are specific areas that show strong potential for substantial improvements for wildlife and associated habitats. COAs are divided into categories of terrestrial and aquatic. Terrestrial COAs focus on geographic areas determined to have high conservation value and strong potential for successful conservation efforts. Aquatic COAs are focused strictly on conservation of aquatic resources, particularly native fish species (AZGFD 2024b). COAs reflect the best areas for conservation and were determined without regard to jurisdiction or landownership. In addition, COAs will not be subject to any new regulation nor do they have any regulatory effect (AZGFD 2022).
- Native plants in Arizona are managed by the Arizona Department of Agriculture (AZDA) under the **Arizona Native Plant Law (ANPL)** (Arizona Revised Statutes 3-903; Arizona Administrative Code [AAC] R3-3-208), which regulates harvest, salvage, and transport of plants on nonfederal lands. Harvest or salvage of most plant species may be permitted or required, and fees may be assessed. Plants listed in the Highly Safeguarded category may be taken or salvaged only for scientific or conservation purposes. The ANPL identifies a lengthy list of plant species—largely cacti, agave, yucca, and desert trees—that are susceptible to removal for collection, landscaping, sale, or other commercial uses. The ANPL states that these plants shall not be taken, transported, or possessed from any land without permission and a permit from the AZDA; it also requires notification before land clearing even if the plants will be destroyed.
- The AZDA administers the **state noxious weed law** under AAC R3-4-245. Arizona maintains a list of noxious weeds in three categories: Class A, Class B, and Class C (AZDA 2024). Class A species are those that are not known to occur in Arizona and are of limited distribution and are of high priority for quarantine, control, or mitigation. Class B noxious weeds are species known to occur but are of limited distribution in Arizona and may be high-priority pests for quarantine, control, or mitigation if a significant threat to crop, commodity, or habitat exists. Class C noxious weeds are plant species that are widespread but may be recommended for active control based on risk assessment.

## Inventory

An SWCA biologist with expertise in the biology of flora and fauna of the region surveyed the Interconnection Project and portions of the Study Area on March 27, 2024. All plants and wildlife observed within the Interconnection Project were recorded during the survey efforts. In addition, the biologist documented existing conditions and noted any habitat features that may be important to special-status species or related to areas of biological wealth in the Interconnection Project or larger Study Area.

On May 17, 2024, SWCA queried the USFWS IPaC database to generate an unofficial list of ESA-listed species that have the potential to occur in the Study Area (see Exhibit C-1) (USFWS 2024a). In addition, the AZGFD Online ERT database was queried on May 17, 2024, to generate a list of special-status species

with records within 3 miles of the Interconnection Project (predetermined ERT buffer) and a list of SGCNs with modeled suitable habitat intersecting the Interconnection Project (see Exhibit C-2) (AZGFD 2024a).

## Summary of Occurrence

The USFWS and AZGFD identified several endangered, threatened, candidate, and other special-status species that are known to occur or could occur in the region (i.e., within the Study Area for USFWS and within the Interconnection Project plus a 3-mile buffer for AZGFD). These special-status species and the likelihood of their being present in the vicinity of the Interconnection Project are addressed below in six sections: 1) Areas of Biological Wealth, 2) Federally Listed Threatened and Endangered Species, 3) Bald and Golden Eagles 4) Other Special-Status Species, 5) State-Protected Native Plants, and 6) Noxious Weeds (AZGFD 2024a; USFWS 2024a).

### ***Areas of Biological Wealth***

No designated or proposed critical habitat occurs within the Interconnection Project or Study Area (USFWS 2024a).

No IBAs occur within the Interconnection Project or Study Area. The closest IBA, the Boyce Thompson Arboretum/Arnett-Queen Creeks IBA, is approximately 32 miles northeast of the Study Area near Picketpost Mountain (Audubon 2024).

No COAs or wildlife corridors/linkages occur within the Interconnection Project or Study Area.

Pinal County riparian areas are characterized by an abundance and diversity of vegetation and wildlife within and directly adjacent to them. Wildlife is dependent upon riparian areas not only as dependable sources of water but also for breeding, migration, shelter, seasonal foraging, and movement. As such, riparian areas act as important linkages in the landscape to facilitate daily, seasonal, and annual movements of individuals and populations of species (AZGFD 2019).

Pinal County provides nonregulatory guidelines intended to aid in identifying, protecting, and reducing impacts to riparian areas throughout the county in the *Pinal County Riparian Area Guidelines* (County guidelines) (AZGFD 2019). According to the County guidelines, “riparian areas can be considered the natural areas including and adjacent to rivers, streams, washes, and other bodies of water. These areas possess surface water year-round, part of the year, or only following rain events. Riparian areas include the stream channel itself, as well as the immediately adjacent area of vegetation that acts as a transition zone between the channel and the upland area.” To aid in the identification of potential riparian areas, Pinal County used remote sensing data to prepare a geospatial dataset, which is included in the AZGFD ERT query results (AZGFD 2024a).

A review of aerial imagery and the results of the site reconnaissance confirmed that no naturally occurring riparian habitat is present within the Study Area; however, the ERT query results indicated that a small area within both the Project and Study Areas was modeled as potential riparian habitat, a constructed feature in association with the Casa Grande and Florence–Casa Grande Extension Canals. The potential riparian habitat may represent an area of biological wealth present within the Study Area.

The proposed Project and Study Areas are within Area 10(j), Zone 2 for the Mexican Wolf Experimental Population (*Canis lupus baileyi*). Under ESA section 10(j), the USFWS may designate a population of a listed species as experimental if it will be released into suitable natural habitat outside the species’ current range. An experimental population is a special designation for a group of plants or animals that will be reintroduced in an area that is geographically isolated from other populations of the species. With the experimental population designation, the specified population is treated as proposed for listing under the ESA (except on National Wildlife Refuge System or National Park System lands, where they are treated as threatened species), regardless of the species’ designation elsewhere in its range (USFWS 2018).

## **Federally Listed Threatened and Endangered Species**

Two species listed as endangered, two species listed as threatened, and one candidate species were identified in the USFWS species list for the Study Area (USFWS 2024a). Two additional species are protected under both the MBTA and BGEPA. The ESA-listed endangered species are the southwestern willow flycatcher (*Empidonax traillii extimus*) and Gila topminnow (*Poeciliopsis occidentalis*). The ESA-listed threatened species are the cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*) and yellow-billed cuckoo (*Coccyzus americanus*). The candidate species identified in the USFWS species list is the monarch butterfly (*Danaus plexippus*). Although the USFWS species list did not identify Yuma Ridgway's rail (*Rallus obsoletus yumanensis*), this species has occurrence records within proximity of the Interconnection Project; therefore, potential for occurrence of this species is addressed below (see Exhibit C-2). The MBTA and BGEPA-protected species are bald eagle and golden eagle (see discussion below).

The federal status and potential for occurrence in the vicinity of the Interconnection Project for these species are included in Table C-1.

### **Bald Eagle (*Haliaeetus Leucocephalus*) and Golden Eagle (*Aquila Chrysaetos*)**

Both bald eagle and golden eagle are protected under both the MBTA and BGEPA.

Bald eagles are an SGCN Tier 1 species. Nests are generally placed in large deciduous or coniferous trees or cliffs, with a commanding view of the area, less than 1 mile from appropriate aquatic foraging conditions (e.g., perennial rivers or lakes containing fish) (Buehler 2000). The species communally roosts in the winter in large (15–60 meters [m] in height) deciduous or coniferous trees, which tend to be near aquatic foraging sites (<50 m) but may be more than 6 miles from aquatic foraging sites, particularly in areas sheltered from adverse weather conditions with unusually high prey or carcass availability (Buehler 2000; USFWS 2007, 2013). Wintering/nonbreeding individuals and juveniles are typically associated with breeding habitats; however, they may range widely in search of food, shelter, and reduced human presence (Buehler 2000).

The Interconnection Project and Study Area are within the nonbreeding range of the species. Neither the Interconnection Project nor the Study Area contain characteristic nesting or roosting habitats, and there are no ERT records of bald eagle within or near the Interconnection Project (AZGFD 2024a). No suitable aquatic foraging habitat (e.g., flowing rivers or lakes containing fish) is present in the Interconnection Project itself; however, small-mammal prey is present across the site, and bald eagles may forage within the Interconnection Project or travel through the area while foraging. The nearest and most recent sighting of an individual bald eagle was in February 2024, 0.28 mile east of the Study Area at Picacho Reservoir (eBird 2024). The nearest documented nesting areas are over 35 miles away on the north side of the Gila River, near Arizona State Route 347 on the Gila River Indian Reservation (Southwestern Bald Eagle Management Committee 2022).

Golden eagles are an SGCN Tier 2 species. They require large, open hunting grounds adjacent to mountainous canyonland and rimrock terrain of open desert, grassland, and forested areas (Katzner et al. 2020; Marzluff et al. 1997). The presence of sizable shrub (e.g., sagebrush [*Artemisia* spp.], rabbitbrush [*Chrysothamnus* spp.]) patches is an essential component of golden eagle home ranges (Marzluff et al. 1997). Nests are placed in rugged terrain (e.g., cliffs), less often in tall trees and on human-made structures (e.g., transmission towers) (Katzner et al. 2020).

Wintering/nonbreeding individuals and juveniles are typically associated with breeding habitats; however, they may range widely in search of food (Katzner et al. 2020). The nearest known breeding areas for the golden eagle are along the Gila River near Kearny to the northeast and in the Tortolita Mountains to the southeast, both approximately 35 miles from the Interconnection Project. The Picacho Mountains

10.3 miles southeast are mapped as a potential breeding area (McCarty et al. 2020). Although the Interconnection Project and Study Area do not contain suitable nesting habitat for golden eagle and are outside the species' predicted year-round range (AZGFD 2002), individuals may forage in or move through the areas.

The federal status and potential for occurrence in the vicinity of the Interconnection Project for bald and golden eagle are included in Table C-1

**Table C-1. Evaluation of Federally Listed and MBTA/BGEPA Species within the Study Area**

Common Name ( <i>Scientific Name</i> )	Status*	Range or Habitat Requirements	Occurrence Status
<b>Birds</b>			
Bald eagle ( <i>Haliaeetus leucocephalus</i> )	BGEPA MBTA	Occur in aquatic habitats with open water or Southwest arid regions with available food and roost sites. The range for nonbreeding bald eagles extends throughout Arizona, except for the south-central portion of the state; breeding eagles occur in limited, fragmented locations of central, east-central, and west-central portions of the state.	May occur. The Interconnection Project and Study Area do not contain preferred breeding or roosting habitats but are within nonbreeding range with forage potential occurring in the agricultural fields throughout the Study Area. Occurrence records exist within 1 mile of the Study Area (eBird 2024).
Golden eagle ( <i>Aquila chrysaetos</i> )	BGEPA MBTA	Found in mountainous canyon land, rimrock terrain of open desert, grassland, and forested areas. Year-round range includes all of Arizona.	May occur. Although suitable nesting habitat is not present in the Interconnection Project or Study Area, eagles may forage or move through the area to nearby nesting locales. Occurrence records exist within 1 mile of the Study Area (eBird 2024).
Cactus ferruginous pygmy-owl ( <i>Glaucidium brasilianum cactorum</i> )	T	Found in heavily wooded xeroriparian washes with large saguaros ( <i>Carnegiea gigantea</i> ) or trees with suitable cavities in Sonoran desertscrub or semidesert grassland. This species' distribution is currently limited to portions of Pima County in Arizona. In addition, "pygmy-owls continue to be absent from Pinal County and around Tucson where they were found as recently as the early 2000s" (USFWS 2023). This species still occupies historical locations in the Altar Valley, Avra Valley, and Organ Pipe Cactus National Monument, and it is known to occur on the Tohono O'odham Nation.	Unlikely to occur. The Interconnection Project does not contain suitable grassland-associated saguaro or tree habitat, and the Interconnection Project is not within the species' current range (USFWS 2022; USFWS 2024b).
Southwestern willow flycatcher ( <i>Empidonax traillii extimus</i> )	E	Found in dense riparian habitats along streams, rivers, and other wetlands where cottonwood, willow, boxelder ( <i>Acer negundo</i> ), saltcedar ( <i>Tamarix</i> spp.), Russian olive ( <i>Elaeagnus angustifolia</i> ), buttonbush ( <i>Cephalanthus</i> spp.), and arrowweed ( <i>Pluchea sericea</i> ) are present. Nests are found in thickets of trees and shrubs, primarily those that are 13 to 23 feet tall, among dense, homogeneous foliage. Habitat occurs at elevations below 8,500 feet above mean sea level (amsl).	Unlikely to occur. The Interconnection Project and Study Areas do not contain riparian habitat suitable for species occurrence. Records of the species within the vicinity of the Interconnection Project (AZGFD 2024a) are likely historical sightings from Picacho Reservoir 0.28 mile to the east, where stands of salt cedar and willow are present on the lakebed and along the levee bank (Maricopa Audubon Society 2024).

Common Name (Scientific Name)	Status	Range or Habitat Requirements	Occurrence Status
Yellow-billed cuckoo ( <i>Coccyzus americanus</i> )	T	Typically found in riparian woodland vegetation (cottonwood, willow, or saltcedar) at elevations below 6,600 feet amsl. Dense understory foliage appears to be an important factor in nest site selection. The highest concentrations in Arizona are along the Agua Fria, San Pedro, upper Santa Cruz, and Verde River drainages and Cienega and Sonoita Creeks.	Unlikely to occur. The Interconnection Project and Study Areas do not contain riparian habitat suitable for species occurrence. Records of the species within the vicinity of the Interconnection Project (AZGFD 2024a) are likely historical sightings from Picacho Reservoir 0.28 mile to the east, where stands of salt cedar and willow are present on the lakebed and along the levee bank (Maricopa Audubon Society 2024).
Yuma Ridgway's rail ( <i>Rallus obsoletus yumanensis</i> )	E	Found in dense freshwater and brackish marshes and riparian areas below 4,500 feet amsl. This species typically migrates overland, including large expanses of desert upland, rather than along river corridors (Harrity and Conway 2020).	Unlikely to occur. The Interconnection Project and Study Areas do not contain riparian habitat suitable for species occurrence. Records of the species within the vicinity of the Interconnection Project (AZGFD 2024a) are likely historical sightings from Picacho Reservoir 0.28 mile to the east, where mudflats and riparian vegetation are present (Maricopa Audubon Society 2024).
<b>Fish</b>			
Gila topminnow (including Yaqui) ( <i>Poeciliopsis occidentalis</i> )	E	Occurs in small streams, springs, and ciénegas at elevations below 4,500 feet amsl, primarily in shallow areas with aquatic vegetation and debris for cover. In Arizona, most of the remaining native populations are in the Santa Cruz River system.	Unlikely to occur. No suitable natural aquatic habitats are in or adjacent to the Interconnection Project or Study Area.
<b>Insects</b>			
Monarch butterfly ( <i>Danaus plexippus</i> )	C	A migratory species found in a variety of habitats; monarchs require milkweed (family Asclepiadaceae) for breeding (USFWS 2020). During fall migration in Arizona, monarchs favor nectar from a variety of native and garden plants (Morris et al. 2015). Populations in Arizona can migrate either to California or Mexico for winter (USFWS 2020) or may overwinter in the low deserts in California or Arizona (Morris et al. 2015). In the southwestern United States, migrating monarchs often occur near water sources (e.g., rivers, creeks, riparian corridors, roadside ditches, irrigated gardens) (USFWS 2020). In the low deserts of Arizona, monarchs breed from late August to early September (Morris et al. 2015).	May occur. This species may be present as transients during migration or as occasional individuals passing through the Study Area enroute to larval food plants or nectar resources. No plants in the milkweed family were observed in the Interconnection Project for larval use, but nectar sources are available for foraging and migration (Western Monarch Milkweed Mapper 2024).

Source: AZGFD (2024a); eBird (2024); USFWS (2024b). This table lists the species named in the USFWS official species list (USFWS 2024a) and the Arizona Online ERT (AZGFD 2024a). Notes regarding documentation within 3 miles of the Interconnection Project are from AZGFD (2024a).

Notes:

BGEPA = Bald and Golden Eagle Protection Act

C = candidate; E = endangered; T = threatened, EXPN = experimental non-essential population.

## Other Special-Status Species

Other special-status species include the following:

- Birds of Conservation Concern (BCC), which are bird species beyond those designated as federally threatened or endangered that represent the USFWS's highest conservation priorities. The relevant BCC for this analysis are those identified by the USFWS (2021) as occurring in Bird Conservation

Region (BCR) 33. The BCC list is nonregulatory, although some agencies may give special consideration to these species.

- SGCN in Arizona, which are species identified by the AZGFD as warranting heightened attention because of low and declining populations, as described in the Laws and Policies section above.

Some species in these categories (other than those also designated as federally threatened or endangered, candidate, experimental non-essential population (EXPN), or BGEPA, which are addressed above) have occurrence records within 3 miles of the Interconnection Project or predicted habitat modeled within the Interconnection Project (AZGFD 2024a). These species are discussed below and listed in Table C-2, where they are evaluated for potential occurrence based on the results of Interconnection Project surveys, familiarity with the vicinity, and additional freely available information sources, including the following:

- AZGFD's Heritage Data Management System (AZGFD 2024c),
- *Reptiles and Amphibians of Arizona* online field guide (Brennan 2012),
- *The Breeding Bird Atlas* (Corman and Wise-Gervais 2005),
- *All About Birds* online field guide (Cornell Lab of Ornithology 2024),
- eBird (2024),
- Google Earth (2024), and
- USFWS ECOS website (USFWS 2024b).



**Table C-2. Other Special-Status Species with Potential to Occur in the Vicinity of the Study Area**

Common Name ( <i>Scientific Name</i> )	Habitat and Notes	Status*		Occurrence Status	
		Federal	State (Tier)	Interconnection Project	Study Area
Amphibians					
Lowland leopard frog ( <i>Lithobates yavapaiensis</i> )	Found in rocky streams, canyon habitats surrounded by conifer forests, or ponds and stream pools. Usually found in areas with desert scrub biotic communities. Greatest threats to species continuation include habitat alteration, fragmentation, and introduction of nonnative competitor fish, crayfish, and frogs. Species dispersal has been shown to remain within a few kilometers of aquatic breeding sites.	–	SGCN (1)	Unlikely to occur. Suitable habitat is not present within the Interconnection Project.	Unlikely to occur. Suitable habitat is not present within the Study Area.
Sonoran Desert toad ( <i>Incilius alvarius</i> )	Found in Sonoran desertscrub, semidesert grasslands, oak, and occasionally pine-oak woodland habitats up to about 5,800 feet amsl. Associated with major rivers, and edges of agriculture; although often tied to permanent water, can be found miles from water during summer monsoon season, in some areas.	–	SGCN (2)	May occur. Suitable habitat (i.e., agricultural edge habitat) for species occurrence and potential breeding occurs within the Interconnection Project.	May occur. Suitable habitat (i.e., agricultural edge habitat) for species occurrence and potential breeding occurs within the Study Area.
Birds					
Abert's towhee ( <i>Melozone aberti</i> )	Common in riparian woodlands or mesquite bosques near water and in agricultural settings.	–	SGCN (2)	May occur. Mesquite trees and agricultural land are within the Interconnection Project.	May occur. Mesquite trees and agricultural land are within the Study Area. Occurrence records exist within the Study Area (eBird 2024).
American avocet ( <i>Recurvirostra americana</i> )	Prefers shorelines of ponds, wetlands, marshes, and lakes.	MBTA BCC	–	Unlikely to occur. No habitat is present in the Interconnection Project.	May occur. The Study Area contains suitable habitat for foraging at the Goldman Dairy sludge ponds, and occurrence records exist within the Study Area (eBird 2024).
American kestrel ( <i>Falco sparverius</i> )	Found in open and semi-open habitats, frequently found in prairies, deserts, wooded streams, burned forest, and agricultural areas. Known to nest in natural holes in trees, abandoned woodpecker cavities, cavities in buildings or cliffs, and similar sites.	MBTA BCC†	SGCN (2)	May occur. The Interconnection Project contains suitable habitat for foraging; however, no suitable nesting sites are present in the Interconnection Project.	May occur. The Study Area contains suitable habitat for foraging and occurrence records exist in the vicinity of the Interconnection Project (AZGFD 2024a).*

Common Name (Scientific Name)	Habitat and Notes	Status*		Occurrence Status	
		Federal	State (Tier)	Interconnection Project	Study Area
American peregrine falcon ( <i>Falco peregrinus anatum</i> )	Found in various habitats including tundra, moorlands, steppe, seacoasts, forests, and urban areas. Nests on ledges of rocky cliffs or crags.	MBTA	SGCN (1)	May occur. The Interconnection Project contains suitable habitat for foraging; however, no suitable nesting sites are present in the Interconnection Project.	May occur. The Study Area contains suitable habitat for foraging. Potential for nesting is unlikely because of the lack of suitable structures.
Bendire's thrasher ( <i>Toxostoma bendirei</i> )	Found in desert habitats with a mix of relatively large scrubs/cacti and open ground or open woodland with scattered shrubs and trees. Not typically found in riparian woodland areas, the species avoids continuous shrublands and grasslands. Commonly found in areas with desert scrub biotic communities. Nesting is known to occur in low trees, shrubs, and cacti including mesquite ( <i>Prosopis</i> spp.), cholla ( <i>Cylindropuntia</i> spp.), yucca ( <i>Yucca</i> sp.), paloverde ( <i>Parkinsonia</i> sp.), and saltbush ( <i>Atriplex</i> sp.).	MBTA BCC	SGCN (2)	May occur. The Interconnection Project contains suitable habitat for species occurrence, foraging and potential nesting.	Known to occur. The Study Area contains suitable habitat for species occurrence, foraging and potential nesting. The species was observed in the Study Area during the site visit in March 2024, and occurrence records exist in the vicinity of the Interconnection Project (AZGFD 2024a).*
Brewer's sparrow ( <i>Spizella breweri</i> )	A shrub obligate species strongly associated with sagebrush ( <i>Artemisia</i> sp.) over most of its range. Found in areas with scattered shrubs and short grasses. Known to nest in sagebrush or cacti from a few centimeters to roughly 1 m from the ground. During its nonbreeding migratory season, frequently found in low desert, arid-adapted vegetation including desert scrub, sagebrush, and creosotebush ( <i>Larrea tridentata</i> ).	MBTA	SGCN (2)	May occur. The Interconnection Project contains suitable habitat for species occurrence, foraging and potential nesting sites.	May occur. The Study Area contains suitable habitat for species occurrence, foraging and potential nesting sites. Occurrence records exist within the Study Area (eBird 2024).
Broad-billed Hummingbird ( <i>Cynanthus latirostris</i> )	Found in arid scrub, open deciduous forest, semidesert, and other open situations in arid habitats in the Southwest and Mexico. In the Southwest, the species is mostly limited in summer to rocky canyons in desert-like mountain habitats. Foothills, canyons, arroyos, along streams, in or near desert habitat. Breeds April through July in Arizona. Partially migratory; found year round in all but the most northern portion of its range; northern breeding populations move southward for winter. Generally arrives in Arizona by March; departs by September–October. A few individuals winter occasionally at feeders in southern California, southern Arizona, New Mexico, southern Texas, and southern Louisiana.	MBTA	SGCN (2)	Unlikely to occur. The Interconnection Project does not contain appropriate habitat for species occurrence.	May occur. The Study Area contains suitable foraging habitat, and occurrence records exist within 1 mile of the Study Area (eBird 2024).

Common Name (Scientific Name)	Habitat and Notes	Status*		Occurrence Status	
		Federal	State (Tier)	Interconnection Project	Study Area
Bullock's Oriole ( <i>Icterus bullockii</i> )	Found in open woodland, deciduous forest edge, riparian woodland, brushy areas, and among scattered trees and orchards. Arrives in the northern United States. and Canada in April–May; males precede females by a few days. Birds from most of breeding range apparently migrate to the Southwest for late summer, then continue later in fall southward into Mexico. Nests in trees, average of 8–9 m above ground, usually at end of drooping branch.	MBTA	SGCN (2)	Unlikely to occur. The Interconnection Project does not contain appropriate habitat for species occurrence.	May occur. The Study Area contains suitable foraging habitat, and occurrence records exist within 1 mile of the Study Area (eBird 2024).
Cactus wren ( <i>Campylorhynchus brunneicapillus</i> )	Nonmigratory species often found in arid desert habitat with biotic communities including cholla, mesquite, and sage scrub. Nesting is known to occur in thorny trees and shrubs, although they have been observed nesting in buildings in the past.	MBTA BCC†	SGCN (2)	May occur. The Interconnection Project does contain suitable habitat for species occurrence, foraging, and nesting within the Interconnection Project.	May occur. The Study Area contains suitable habitat for species occurrence, foraging, and potential nesting. Occurrence records exist within the Study Area (eBird 2024).
Chestnut-collared longspur ( <i>Calcarius ornatus</i> )	Found in the Great Plains in native prairie habitat consisting of mixed-grass and shortgrass uplands. Has also been observed in riparian areas in more arid habitats.	MBTA BCC†	SGCN (2)	Unlikely to occur. The Interconnection Project is outside of the species' known range and does not contain suitable habitat for species occurrence.	Unlikely to occur. The Study Area is outside of the species known range and does not contain suitable habitat for species occurrence.
Costa's hummingbird ( <i>Calypte costae</i> )	Found in Sonoran and Mojave desertscrub near washes of native desert vegetation or rocky slopes of saguaros ( <i>Carnegiea gigantea</i> ) and creosotebush lowlands.	MBTA BCC	SGCN (2)	May occur. The Interconnection Project contains suitable habitat for species occurrence, foraging, and potential nesting.	May occur. The Study Area contains suitable habitat for species occurrence, foraging, and potential nesting. Occurrence records exist within 1 mile of the Study Area (eBird 2024).
Elf owl ( <i>Micrathene whitneyi</i> )	Known to occupy diverse habitats. In the Sonoran Desert, they are known to use desert ironwood ( <i>Olneya tesota</i> ), ocotillo ( <i>Fouquieria splendens</i> ), paloverde, and saguaro. Nesting most often occurs saguaro and other columnar cacti, Fremont cottonwood ( <i>Populus fremontii</i> ), honey mesquite, and Goodding's willow ( <i>Salix gooddingii</i> ).	MBTA	SGCN (3)	Unlikely to occur. The Interconnection Project does not contain suitable habitat for species occurrence.	Unlikely to occur. The Study Area does not contain suitable habitat for species occurrence.

Common Name ( <i>Scientific Name</i> )	Habitat and Notes	Status*		Occurrence Status	
		Federal	State (Tier)	Interconnection Project	Study Area
Ferruginous hawk ( <i>Buteo regalis</i> )	Favors open scrublands, woodlands, and grasslands.	MBTA BCC†	SGCN (2)	May occur. Winter foraging habitat is present in the Interconnection Project. Occurrence records exist within the Interconnection Project (eBird 2024).	May occur. Winter foraging habitat is present within the Study Area. Occurrence records exist within the Study Area (eBird 2024).
Gila woodpecker ( <i>Melanerpes uropygialis</i> )	Occurs in Sonoran desertscrub with saguaros present, or riparian woodlands with mature trees.	MBTA BCC	SGCN (2)	May occur. Suitable habitat for species occurrence and foraging is present within the Interconnection Project.	May occur. Suitable habitat for species occurrence and foraging is present within the Study Area. Occurrence records exist within the Study Area (eBird 2024).
Gilded flicker ( <i>Colaptes chrysoides</i> )	Found in Sonoran desertscrub with saguaros present, or riparian woodlands with mature trees.	MBTA BCC	SGCN (2)	Unlikely to occur. No suitable habitat is present within the Interconnection Project.	May occur. The Study Area contains suitable foraging habitat, and occurrence records exist in the vicinity of the Interconnection Project (AZGFD 2024a).*
Gray flycatcher ( <i>Empidonax wrightii</i> )	Commonly found in pinyon-juniper woodlands, less frequently observed in open ponderosa or pine-oak woodland. Breeding habitat also distinctive: lower, more open habitat than other flycatchers, usually in sagebrush or open juniper forest. In migration and winter, habitat overlaps more with other flycatchers but still tends to prefer more open areas.	MBTA	SGCN (2)	May occur. Winter foraging habitat is present in the Interconnection Project. Occurrence records exist within the Interconnection Project (eBird 2024).	May occur. Winter foraging habitat is present within the Study Area. Occurrence records exist within the Study Area (eBird 2024).
Harris's hawk ( <i>Parabuteo unicinctus</i> )	Found in savannas, open woodlands, and semidesert habitats. Frequently observed near water sources, both natural and human-made. Often uses saguaro for nesting sites.	MBTA BCC†	SGCN (2)	May occur. The Interconnection Project contains suitable habitat for foraging.	May occur. The Study Area contains suitable habitat for foraging. Occurrence records exist within the Study Area (eBird 2024).
Inca dove ( <i>Columbina inca</i> )	Found in open country with scattered trees or shrubs, most frequently in arid or semiarid conditions, and around cultivated areas including farmlands, parks, and gardens.	MBTA	SGCN (2)	May occur. The Interconnection Project contains suitable habitat for foraging.	May occur. The Study Area contains suitable habitat for foraging. Occurrence records exist within the Study Area (eBird 2024).
Lincoln's sparrow ( <i>Melospiza lincolni</i> )	Found near bogs, wet meadows, riparian areas, predominantly in northern and montane habitats. Winters in central Arizona; prefers dense, brushy areas, often near water.	MBTA	SGCN (2)	May occur. The Interconnection Project contains suitable habitat for foraging. Occurrence records exist within the Interconnection Project (eBird 2024).	May occur. The Interconnection Project contains suitable habitat for foraging. Occurrence records exist within the Study Area (eBird 2024).

Common Name (Scientific Name)	Habitat and Notes	Status*		Occurrence Status	
		Federal	State (Tier)	Interconnection Project	Study Area
Loggerhead shrike ( <i>Lanius ludovicianus</i> )	Found in open areas with scattered trees and shrubs. Frequently observed in savannas and desert scrub biotic communities.	MBTA BCC <sup>†</sup>	SGCN (2)	May occur. Suitable habitat for species occurrence, foraging, and potential nesting is present within the Interconnection Project. Occurrence records exist within the Interconnection Project (eBird 2024).	Known to occur. Suitable habitat for species occurrence, foraging, and potential nesting is present within the Study Area. The species was observed in the Study Area during the site visit in March 2024, and occurrence records exist within the Study Area (eBird 2024).
Marbled godwit ( <i>Limosa fedoa</i> )	Nonbreeding visitor to central Arizona, prefers wetlands and marshes with shorelines.	MBTA BCC-nb	–	Unlikely to occur. No habitat is present in the Interconnection Project.	May occur. The Study Area contains suitable habitat for foraging at the Goldman Dairy sludge ponds. Occurrence records exist within 1 mile of the Study Area (eBird 2024).
Mountain plover ( <i>Charadrius montanus</i> )	Nonbreeding visitor to Arizona; in winter prefers dry plains and agricultural fields.	MBTA BCC-nb	SGCN (2)	May occur. The Interconnection Project contains dry plains and agricultural areas suitable for species occurrence and winter foraging.	May occur. The Study Area contains agricultural areas suitable for species occurrence and winter foraging at the Goldman Dairy sludge ponds. Occurrence records exist within the Study Area (eBird 2024).
Prairie falcon ( <i>Falco mexicanus</i> )	Found in open areas, predominantly in mountainous areas, steppes, plains, or prairies. Nonbreeding wintering individuals have been known to forage in agricultural fields	MBTA BCC <sup>†</sup>	SGCN (2)	May occur. The Interconnection Project contains agricultural lands suitable for species occurrence and winter foraging. Occurrence records exist within the Interconnection Project (eBird 2024).	May occur. The Study Area contains agricultural lands suitable for species occurrence and winter foraging. Occurrence records exist within the Study Area (eBird 2024).

Common Name ( <i>Scientific Name</i> )	Habitat and Notes	Status*		Occurrence Status	
		Federal	State (Tier)	Interconnection Project	Study Area
Red-winged blackbird ( <i>Agelaius phoeniceus</i> )	Nests near water. During migration and wintering can also occur in cultivated lands, pastures, and prairies. May be year round or migratory.	MBTA	SGCN (2)	May occur. The Interconnection Project contains agricultural lands suitable for species occurrence and winter foraging. Occurrence records exist within the Interconnection Project (eBird 2024).	Known to occur. The Study Area contains agricultural lands suitable for species occurrence and winter foraging. The species was observed in the Study Area during the site visit in March 2024, and occurrence records exist within the Study Area (eBird 2024). In addition, a record of occurrence exists in the vicinity of the Interconnection Project (AZGFD 2024a). <sup>‡</sup>
Rufous-winged sparrow ( <i>Peucaea carpalis</i> )	Prefers Sonoran desertscrub, characterized by scattered spiny trees and shrubs.	MBTA BCC	SGCN (2)	May occur. The Interconnection Project contains suitable habitat for foraging.	May occur. The Interconnection Project contains suitable habitat for foraging. Occurrence records exist within 1 mile of the Study Area (eBird 2024).
Sagebrush sparrow ( <i>Artemisiospiza nevadensis</i> )	Found in shrubby, open flats and sagebrush plains.	MBTA	SGCN (3)	May occur. The Interconnection Project contains habitat suitable for species occurrence, foraging, and potential nesting.	May occur. The Study Area contains habitat suitable for species occurrence, foraging, and potential nesting. Occurrence records exist within the Study Area (eBird 2024).
Savannah sparrow ( <i>Passerculus sandwichensis</i> )	Nonbreeding winter visitor to Arizona. Use fields, pastures, and golf courses.	MBTA BCC <sup>†</sup>	SGCN (2)	May occur. The Interconnection Project contains suitable habitat for species occurrence and winter foraging in the form of agricultural fields. Occurrence records exist within the Interconnection Project (eBird 2024).	May occur. Suitable habitat for species occurrence and winter foraging is present in the form of agricultural fields within the Study Area. Occurrence records exist within the Study Area (eBird 2024).
Sprague's pipit ( <i>Anthus spragueii</i> )	Prefers open sandy coastal beaches and barren shores of inland saline lakes or river bars.	MBTA BCC	SGCN (2)	Unlikely to occur. No suitable habitat is present in the Interconnection Project.	Known to occur. The species was observed in the Study Area during the site visit in March 2024, and recent occurrence records exist within the Study Area (eBird 2024).

Common Name (Scientific Name)	Habitat and Notes	Status*		Occurrence Status	
		Federal	State (Tier)	Interconnection Project	Study Area
Swainson's hawk ( <i>Buteo swainsoni</i> )	Found in savanna, open pine-oak woodland, and cultivated lands with scattered trees. Typically nests in solitary trees, bushes, or small groves.	MBTA	SGCN (2)	May occur. The Interconnection Project contains suitable habitat for species occurrence and foraging. Occurrence records exist within the Interconnection Project (eBird 2024).	May occur. The Study Area does contain suitable habitat for species occurrence and foraging. Occurrence records exist within the Study Area (eBird 2024).
Swainson's thrush ( <i>Catharus ustulatus</i> )	Found in coniferous forests, mixed hardwood-conifer forests, riparian woodlands, aspen forests, and occasionally coastal scrub.	MBTA	SGCN (2)	Unlikely to occur. Suitable habitat is not present in the Interconnection Project.	Unlikely to occur. Suitable habitat is not present in the Study Area.
Verdin ( <i>Auriparus flaviceps</i> )	Found in arid, desert habitats, frequently observed in mesquite and creosotebush vegetation. Known to nest in shrubs, small trees, and cacti.	MBTA BCC	SGCN (2)	May occur. The Interconnection Project contains suitable habitat for species occurrence, foraging, and potential nesting. Occurrence records exist within the Interconnection Project (eBird 2024).	Known to occur. The Study Area does contain suitable habitat for species occurrence, foraging, and potential nesting. The species call and an inactive nest were observed during the site visit in March 2024, and occurrence records exist within the Study Area (eBird 2024).
Vesper sparrow ( <i>Poocetes gramineus</i> )	Found in open areas with short, sparse grass and scattered shrubs. Uncommon wintering occurrence in central and southern Arizona.	MBTA BCC <sup>†</sup>	SGCN (2)	May occur. The Interconnection Project contains suitable habitat for nonbreeding individual occurrence and foraging.	May occur. The Study Area contains suitable habitat for nonbreeding individual occurrence and foraging. Occurrence records exist within the Study Area (eBird 2024).
Western burrowing owl ( <i>Athene cunicularia hypugaea</i> )	Found in open areas with low brush cover, including grasslands, agricultural margins and desert scrub. Year-round resident or migratory.	MBTA BCC	SGCN (2)	Known to occur. Agricultural land with irrigation canals and desert scrub provides suitable habitat for species occurrence, foraging, and potential for burrow nesting in the Interconnection Project. This species was observed during species-specific survey of the Interconnection Project in March 2024.	Known to occur. Agricultural land with irrigation canals and desert scrub provides suitable habitat for species occurrence in the Study Area. This species was observed during species-specific survey of the Study Area in March 2024, and additional occurrence records exist within the Study Area (eBird 2024). In addition, a record of occurrence exists in the vicinity of the Interconnection Project (AZGFD 2024a).*

Common Name (Scientific Name)	Habitat and Notes	Status*		Occurrence Status	
		Federal	State (Tier)	Interconnection Project	Study Area
Western grebe ( <i>Aechmophorus occidentalis</i> )	Aquatic habitats with open water such as lakes, marshes, ponds, and oceans.	MBTA BCC	SGCN (2)	Unlikely to occur. No habitat is present in the Interconnection Project.	May occur. The Study Area contains suitable habitat for foraging at the Goldman Dairy sludge ponds. Occurrence records exist within 1 mile of the Study Area (eBird 2024).
Western screech-owl ( <i>Megascops kennicottii</i> )	Commonly found in broadleaf and riparian woodland, particularly within deciduous forests that border canyons and other drainages.	MBTA BCC†	SGCN (2)	Unlikely to occur. The Interconnection Project does not provide suitable habitat for species occurrence.	May occur. The Study Area provides suitable habitat for foraging, and occurrence records exist within 1 mile of the Study Area (eBird 2024).
Willet ( <i>Tringa semipalmata</i> )	Nonbreeding visitor to Arizona, prefers shorelines of marshes, rivers, and lakes.	MBTA BCC-nb	–	Unlikely to occur. No habitat is present in the Interconnection Project.	May occur. The Study Area contains suitable habitat for foraging at the Goldman Dairy sludge ponds. Occurrence records exist within the Study Area (eBird 2024).
<b>Reptiles</b>					
Regal horned lizard ( <i>Phrynosoma solare</i> )	Found in valley bottoms in Sonoran desertscrub and desert grasslands, avoids the lowest elevations.	–	SGCN (2)	May occur. Suitable habitat for species occurrence is present within the Interconnection Project.	May occur. Suitable habitat for species occurrence is present within the Study Area.
Sonoran Desert tortoise ( <i>Gopherus morafkai</i> )	Occurs primarily on rocky, and often steep, hillsides and bajadas of Mohave and Sonoran desertscrub, typically at elevations below 7,800 feet amsl. May occur, but is less likely to occur, in desert grassland, juniper woodland, and interior chaparral habitats and even pine communities.	CCA	SGCN (1)	Unlikely to occur. The Interconnection Project does not provide suitable habitat for species occurrence.	Unlikely to occur. The Study Area does not provide suitable habitat for species occurrence.
Variable sandsnake ( <i>Chilomeniscus stramineus</i> )	Found in sandy, sandy-gravelly, or loamy soils of flats, dunes, hummocks, and arroyos. Found in deserts, uplands with paloverde and saguaro, and thornscrub habitats.	–	SGCN (2)	May occur. Suitable foraging and breeding habitat is present within the Interconnection Project.	May occur. Suitable foraging and breeding habitat is present within the Study Area.
<b>Mammals</b>					
Antelope jackrabbit ( <i>Lepus alleni</i> )	Found in arid grassy areas with scattered large shrubs, foothills, mesas, and bajadas.	–	SGCN (2)	May occur. The Interconnection Project is within the range of this species and contains suitable habitat for occurrence.	May occur. Suitable habitat is present within the Study Area.



Common Name (Scientific Name)	Habitat and Notes	Status*		Occurrence Status	
		Federal	State (Tier)	Interconnection Project	Study Area
Brazilian (Mexican) free-tailed bat ( <i>Tadarida brasiliensis</i> )	Found in a variety of habitats with ranges across the United States. Often found roosting in caves, mines, and cliff crevices. Known to forage in agricultural land.	–	SGCN (2)	May occur. The Interconnection Project contains suitable foraging habitat although no suitable roosting habitat was observed.	May occur. The Study Area contains suitable foraging habitat although no suitable roosting habitat is present.
California leaf-nosed bat ( <i>Macrotus californicus</i> )	Known from caves, mines, and rockshelters, mostly in Sonoran desertscrub between elevations of 160 and 3,980 feet amsl. Roost sites are usually located near foraging areas. This species mostly forages on insects but is also known to forage on the fruits of cacti species, such as prickly pear. Summer and winter range essentially the same.	–	SGCN (2)	May occur. Although suitable roosting habitat is not present within the Interconnection Project, suitable forage materials are present.	May occur. Although suitable roosting habitat is not present within the Study Area, suitable forage materials are present.
Cave myotis ( <i>Myotis velifer</i> )	Typically found in desert scrub with creosotebush, brittlebush ( <i>Encelia</i> sp.), paloverde, and cacti, but sometimes found up to pine-oak communities, between 300 and 5,000 feet amsl. Roosts in caves, tunnels, mine shafts, and under bridges, and occasionally in buildings within a few miles of water.	–	SGCN (2)	May occur. The Interconnection Project contains suitable foraging habitat although no suitable habitat for roosting was observed.	May occur. The Study Area contains suitable foraging habitat and limited roosting habitat in the form of buildings.
Gray-collared chipmunk ( <i>Neotamias cinereicollis</i> )	Found in high mountains, clearings, and pine, spruce, and fir forest edges. Most common where pine and Douglas-fir overlap.	–	SGCN (2)	Unlikely to occur. The Interconnection Project is not within range of this species and does not contain suitable habitat for occurrence.	Unlikely to occur. The Study Area is not within range of this species and does not contain suitable habitat for occurrence.
Greater western bonneted (mastiff) bat ( <i>Eumops perotis californicus</i> )	Occurs in lower and upper Sonoran desertscrub near cliffs. Prefers rugged, rocky canyons with abundant crevices at elevations from 240 to 8,475 feet amsl. Prefers crowding into tight crevices at least 1 foot deep × at least 2 inches wide. Colonies prefer deeper crevices, to 10 or more feet. Prefers to forage over large open bodies of water.	–	SGCN (2)	Unlikely to occur. No suitable habitat for roosting or foraging occurs within the Interconnection Project.	Unlikely to occur. No suitable habitat for roosting or foraging occurs within the Study Area.
Pocketed free-tailed bat ( <i>Nyctinomops femorosaccus</i> )	Found in desert scrub. Roosts in rock crevices and caves and in buildings at times.	–	SGCN (2)	May occur. The species may use the Interconnection Project for foraging. No roosting habitat is present.	May occur. The species may use the Study Area for foraging. Limited roosting habitat is present in the form of buildings.

Common Name (Scientific Name)	Habitat and Notes	Status*		Occurrence Status	
		Federal	State (Tier)	Interconnection Project	Study Area
Western red bat ( <i>Lasiurus blossevillii</i> )	A summer resident, preferred habitat includes riparian and wooded areas. Generally distributed in south-central to southern and southeastern Arizona, with a few observations along the Colorado River near Bill Williams, and occasionally in The Grand Canyon. Roosts in dense foliage of cottonwood trees, in fruit orchards; sometimes in leafy shrubs or herbs, saguaro boots, buildings, or cave-like situations. They are commonly drawn to feed around city streetlights and floodlights on barns.	–	SGCN (2)	May occur. The species may use the Interconnection Project for foraging. No roosting habitat is present.	May occur. The species may use the Study Area for foraging. Limited roosting habitat is present in the form of buildings.
Western yellow bat ( <i>Lasiurus xanthinus</i> )	A year-round Arizona resident found in arid habitats along riparian corridors. Known to roost in Washington fan palm trees ( <i>Washingtonia robusta</i> ), cottonwood, sycamores ( <i>Platanus wrightii</i> ), and hackberry ( <i>Celtis reticulata</i> ). Forages over open water.	–	SGCN (2)	Unlikely to occur. The Interconnection Project does not provide suitable roosting or foraging habitat.	Unlikely to occur. The Study Area does not provide suitable roosting or foraging habitat.
Yuma myotis ( <i>Myotis yumanensis</i> )	Found in a variety of habitats including riparian, desert scrub, moist woodlands, and forests. Prefer cliffs and rocky walls near water. Known to roost in caves, mines, cliff crevices, and buildings. Foraging occurs along forested edges of streams, ponds, and lakes.	–	SGCN (2)	Unlikely to occur. The Interconnection Project does not provide suitable roosting or foraging habitat.	Unlikely to occur. The Study Area does not provide suitable roosting or foraging habitat.

Source: Range or habitat information is from AZGFD (2024a, 2024c); Brennan (2012); Corman and Wise-Gervais (2005); Cornell Lab of Ornithology (2024); eBird (2024); NatureServe (2024); and USFWS (2024a, 2024b). Notes regarding documented occurrences, other than observations made during SWCA's project-specific surveys, are from AZGFD (2024a, 2024c)

Notes:

\* Federal Status Definitions

BCC = Bird of Conservation Concern.

BCC<sup>†</sup> = Bird of Conservation Concern for regions other than BCR 33. Included in table because they are also Arizona SGCN.

BCC-nb = Bird of Conservation Concern with nonbreeding status.

BGEPA = Bald and Golden Eagle Protection Act.

CCA = Candidate Conservation Agreement.

ESA = Endangered Species Act.

MBTA = Migratory Bird Treaty Act.

– = No federal status.

State Status Definitions

SGCN = Species of Greatest Conservation Need.

SGCN (1) = Tier 1 species identified by AZGFD (2022) as having conservation priority.

SGCN (2) = Tier 2 species are those categorized as "vulnerable" but do not fit the Tier 1 criteria for highest priority.

SGCN (3) = Tier 3 species are those for which existing data were insufficient to score one or more vulnerability criteria.

<sup>†</sup>The Heritage Data Management System record of occurrence was within 3 miles of the Interconnection Project (AZGFD 2024a); thus, it is unknown if that record is within the Study Area. Therefore, we use "in the vicinity of the Interconnection Project" for clarity.

## BIRDS OF CONSERVATION CONCERN

The Interconnection Project and Study Area are within BCR 33 (USFWS 2021), for which 27 BCC species are listed. A query of the AZGFD Online ERT found modeled habitat for 19 of these species in the Interconnection Project (AZGFD 2024a) (see Exhibit C-2), and the IPaC query identified an additional four BCC species not returned in the ERT query (USFWS 2024a) (see Exhibit C-1). Of these 23 species, nine may occur in the Interconnection Project and/or Study Area but were not observed during field studies: American avocet (*Recurvirostra americana*), Costa's hummingbird (*Calypte costae*), Gila woodpecker (*Melanerpes uropygialis*), gilded flicker (*Colaptes chrysoides*), marbled godwit (*Limosa fedoa*), mountain plover (*Charadrius montanus*), rufous-winged sparrow (*Peucaea carpalis*), western grebe (*Aechmophorus occidentalis*), and willet (*Tringa semipalmata*) (see Table C-2). Marbled godwit, mountain plover, and willet would only potentially occur within the Study Area as nonbreeding species during winter months (see Table C-2).

BCC species western burrowing owl (*Athene cunicularia hypugaea*) is known to occur in the Interconnection Project and Study Area and was observed during species-specific surveys on March 25–26, 2024 and during the general biological surveys on March 27, 2024. BCC species Bendire's thrasher (*Toxostoma bendirei*), Sprague's pipit (*Anthus spragueii*), and verdin (*Auriparus flaviceps*) are known to occur in the Study Area and were observed during the biological site visit.

Ten additional birds that are BCC for regions other than BCR 33 but that are classified as SGCN in Arizona are considered in the following section. Other birds may be attracted to the agricultural areas in the Study Area for nesting, roosting, feeding, or sheltering.

## SPECIES OF GREATEST CONSERVATION NEED

Thirty-nine species categorized as SGCN Tier 1 (n=1), SGCN Tier 2 (n=37), or SGCN Tier 3 (n=1) (excluding those federally listed species that have already been addressed in the previous section) may occur within the proposed Study Area, four of which are known to occur based on field observations or AZGFD occurrence records (see Table C-2).

Of these 39 species, 33 are known to occur or may occur in the Interconnection Project, of which one is an amphibian, 24 are birds, two are reptiles, and six are mammals (see Table C-2).

The amphibian species that may occur in the Interconnection Project is the Sonoran Desert toad (*Incilius alvarius*).

The 24 bird species that are known to occur or may occur in the Interconnection Project are Abert's towhee (*Melospiza aberti*), American kestrel (*Falco sparverius*), American peregrine falcon (*Falco peregrinus anatum*), Bendire's thrasher, Brewer's sparrow (*Spizella breweri*), cactus wren (*Campylorhynchus brunneicapillus*), Costa's hummingbird, ferruginous hawk (*Buteo regalis*), Gila woodpecker, gray flycatcher (*Empidonax wrightii*), Harris's hawk (*Parabuteo unicinctus*), Inca dove (*Columbina inca*), Lincoln's sparrow (*Melospiza lincolnii*), loggerhead shrike (*Lanius ludovicianus*), mountain plover, prairie falcon (*Falco mexicanus*), red-winged blackbird (*Agelaius phoeniceus*), rufous-winged sparrow, sagebrush sparrow (*Artemisiospiza nevadensis*), savannah sparrow (*Passerculus sandwichensis*), Swainson's hawk (*Buteo swainsoni*), verdin (*Auriparus flaviceps*), vesper sparrow (*Pooecetes gramineus*), and western burrowing owl.

In addition, six SGCN bird species are known to or may occur in the Study Area but are unlikely to occur in the Interconnection Project: broad-billed hummingbird (*Cynanthus latirostris*), Bullock's oriole (*Icterus bullockii*), gilded flicker, Sprague's pipit, western grebe, and western screech-owl (*Megascops kennicottii*). Three additional BCC species may occur in the Study Area but are unlikely to occur in the Interconnection Project: marbled godwit, American avocet, and willet.

The reptile species that may occur in the Interconnection Project are the regal horned lizard (*Phrynosoma solare*) and the variable sandsnake (*Chilomeniscus stramineus*).

The mammal species that may occur in the Interconnection Project are antelope jackrabbit (*Lepus alleni*), Brazilian (Mexican) free-tailed bat (*Tadarida brasiliensis*), California leaf-nosed bat (*Macrotus californicus*), cave myotis (*Myotis velifer*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), and western red bat (*Lasiurus blossevillei*).

No SGCN fish species are likely to occur within 3 miles of the proposed Interconnection Project.

## **State-Protected Native Plants**

The ANPL identifies a list of plant species—largely cacti, agave, yucca, and desert trees—that are susceptible to removal for collection, landscaping, sale, or other commercial uses. The ANPL states that these plants shall not be taken, transported, or possessed from any nonfederal lands without permission and a permit from the AZDA; it also requires notification prior to land clearing even if the plants will be destroyed. Two plant species covered under the ANPL were observed in the Interconnection Project and the Study Area during surveys: yellow paloverde (*Parkinsonia microphylla*) and velvet mesquite (*Prosopis velutina*).

## **Noxious Weeds**

Arizona maintains a list of noxious weeds in three categories: Class A, B, and C (AZDA 2024). Class A species are those that are not known to occur in Arizona, are of limited distribution, and are of high priority for quarantine, control, or mitigation. Class B noxious weeds are species known to occur, but with limited distribution in Arizona, and may be high-priority pests for quarantine, control, or mitigation if a significant threat to crop, commodity, or habitat exists. Class C noxious weeds are species of plants that are widespread but may be recommended for active control based on risk assessment. Asian mustard (*Brassica tournefortii*) and stinknet (*Oncosiphon pilulifer*), both Class B noxious weeds, and puncturevine (*Tribulus terrestris*), red broom (*Bromus rubens*), and saltcedar (*Tamarix* spp.), all Class C noxious weeds, were observed in the Interconnection Project and the Study Area during the site visit. Measures will be taken to avoid spreading noxious weeds in the Study Area.

## **Summary of Potential Effects**

### **Areas of Biological Wealth**

Neither the Interconnection Project nor the Study Area intersects any designated or proposed critical habitat, wildlife refuges, wildlife corridors, linkage corridors, or COAs. According to the County guidelines (AZGFD 2019), a small area within the Project and Study Area was modeled as potential riparian habitat, associated with the Casa Grande and Florence–Casa Grande Extension Canals. These riparian areas are characterized by an abundance and diversity of vegetation and wildlife within and directly adjacent to them. Wildlife are dependent upon riparian areas not only as dependable sources of water, but for breeding, migration, shelter, seasonal foraging, and movement. As such, riparian areas act as important linkages in the landscape to facilitate daily, seasonal, and annual movements of individuals and populations of species (AZGFD 2019).

The Interconnection Project will result in minimal disturbance to the landscape, which has already been converted entirely from natural vegetation to agricultural, industrial, and residential land use. The small disturbance footprint and relatively short construction time frame will minimize migratory species avoidance and migratory stopover habitat loss. As such, any loss of vegetation from construction activities would not contribute meaningfully to habitat fragmentation or decrease connectivity between habitats.

## ***Federally Listed Threatened and Endangered Species***

The Interconnection Project and Study Area are within the known range of the monarch butterfly, a candidate species for listing under the ESA. The proposed Interconnection Project and Study Area lie within Area 10J, Zone 2 for the Mexican Wolf Experimental Population.

Mexican wolves are found in a variety of southwestern habitats; however, they are absent from the desert areas and prefer mountain woodlands over 4,000 feet above mean sea level. The Interconnection Project and Study Area are within Zone 2 of the Mexican Wolf Experimental Population Area, a zone in which wolves are allowed to naturally disperse and occupy and into which wolves may be translocated. However, the Interconnection Project and Study Area do not contain suitable mountain woodland habitat and are outside of the species' known range, and there are no suitable habitat areas in the wider vicinity. In addition, because of human activity, Mexican wolf individuals are not likely to wander into the Interconnection Project.

No ESA-listed species are likely to occur within the Interconnection Project or Study Area; however, the proximity of Picacho Reservoir 0.28 mile east of the Study Area warrants mention, as it has yielded occurrence records for ESA-listed southwestern willow flycatcher, yellow-billed cuckoo, and Yuma Ridgway's rail. Suitable habitat exists for all three species adjacent to the Study Area; however, occurrence records are believed to be largely historical, with no recent surveys conducted and no recent occurrences documented (Beatty 2024; Conway 2024; Engelmann 2024; McCarthy 2024).

Habitat in the Study Area may be suitable for use by monarch butterfly, a candidate species; however, no milkweed (family *Asclepiadaceae*) has been recorded in the Study Area, and none was observed in the Study Area during the March 2024 surveys. Monarch butterflies may use other plants found in the Study Area for foraging but not for reproduction (USFWS 2020; Western Monarch Milkweed Mapper 2024). As such, any potential Interconnection Project impacts to the monarch butterfly would be minor. A very small portion of suitable dispersal or foraging habitat would be lost relative to the total amount of habitat in the vicinity. Individuals may experience injury, mortality, change of behavior, or loss of forage as a result of the Interconnection Project, but individuals would largely be expected to shift activity to nearby suitable habitat.

### **BALD EAGLE (*HALIAEETUS LEUCOCEPHALUS*) AND GOLDEN EAGLE (*AQUILA CHRYSAETOS*)**

No suitable bald eagle nesting habitat or tall trees or cliffs suitable for eagle perching are within the Interconnection Project or Study Area; however, there is potential foraging habitat for bald eagles within the irrigation canals and agricultural areas present in the Study Area. Additionally, the Interconnection Project is within the nonbreeding range of the bald eagle, and this species may move through the Interconnection Project and Study Area (see Table C-1). The Interconnection Project does not contain nesting sites for golden eagle (i.e., cliffs), but individuals may fly over the Interconnection Project and Study Area while foraging (see Table C-1). These species were not observed by SWCA during related surveys in the Study Area in March 2024. No significant impacts are expected to bald or golden eagles as a result of this Interconnection Project.

## ***Other Special-Status Species***

The following sections refer to species with special status that are not federally listed or candidates for federal listing.

### **SPECIAL-STATUS MAMMAL SPECIES**

Six special-status mammals may occur within the Study Area: antelope jackrabbit, Brazilian (Mexican) free-tailed bat, California leaf-nosed bat, cave myotis, pocketed free-tailed bat, and western red bat.

The Interconnection Project is unlikely to support suitable roosting habitat for most bat species. No palm trees, large riparian trees, or suitable building structures occur in the Interconnection Project, and therefore, no bat roosts are expected to be removed or destroyed as a result of the Interconnection Project. Bats using trees or buildings as day roosts within the Study Area have the potential to be negatively impacted by noise, leading to behavior changes or loss of fitness for individuals.

Bat species can collide with human-made structures during long-distance migration. Migrating bats often fly high above ground level and do not actively echolocate; however, during normal foraging activity, bats actively use echolocation and are typically able to detect and avoid features such as overhead transmission lines (Arnett et al. 2015). No information suggests that transmission lines in a setting such as the Study Area would pose a risk to bats.

Interconnection Project construction activities could cause death or injury to terrestrial mammal species, particularly individuals that may be sheltering in underground burrows instead of fleeing. Interconnection Project construction could cause behavior changes, as individuals would be expected to flee from an increase of noise, vibration, and human presence within the Interconnection Project vicinity. These behavior changes could increase depredation, decrease foraging success, reduce reproductive success, and result in loss of fitness for that individual from increased metabolic output. Noise, vibration, and human presence will be temporary during construction and will cease with completion of construction.

The loss and degradation of mammal habitat from short- and long-term Interconnection Project activities will be minor, as abundant habitat for small mammals occurs in the vicinity of the Interconnection Project and Study Area. Similarly, because of the available habitat outside the Interconnection Project, any loss of vegetation from construction activities will not contribute meaningfully to habitat fragmentation for special-status mammals or decrease connectivity between habitat patches. Construction of the Interconnection Project will result in an increase of fugitive dust. The fugitive dust during construction could change mammal behavior (e.g., reducing the amount of foraging due to area disturbances). The likelihood and severity of impacts from construction would decrease with increasing distance from the Interconnection Project.

## **SPECIAL-STATUS AMPHIBIAN SPECIES**

One special-status amphibian species may occur within the Study Area: the Sonoran Desert toad. Potential impacts to special-status amphibian species include death, injury, or impacts arising from behavior changes, and will be similar to those described for terrestrial mammals. Potential impacts from the loss, degradation, and fragmentation of amphibian habitat from Interconnection Project activities will be the same as those described for terrestrial mammals. Special-status amphibian individuals are expected to experience similar impacts from increased fugitive dust during construction as mammals.

## **SPECIAL-STATUS BIRD SPECIES**

Bald eagles may forage within the Study Area during the nonbreeding season; however, they will likely be drawn toward the Picacho Reservoir riparian areas approximately 1.2 miles east of the Interconnection Project and not toward the Interconnection Project. Because of the relatively small area of foraging habitat potentially impacted compared with an individual bald eagle's home range and the abundance of similar foraging habitat outside of the Interconnection Project, no significant impacts to bald eagles resulting from the Interconnection Project are expected. Golden eagles may forage in the Interconnection Project and Study Area, but no nesting habitat is present, and they will likely be drawn toward Picacho Reservoir, away from the Interconnection Project. Because of the relatively small area of foraging habitat potentially impacted compared with an individual golden eagle's home range and the abundance of similar foraging habitat outside of the Interconnection Project, no significant impacts to golden eagles resulting from the Interconnection Project are expected.

Other special-status bird species that may occur or are known to occur in the Interconnection Project are Abert's towhee, American kestrel, American peregrine falcon, Bendire's thrasher, Brewer's sparrow, cactus wren, Costa's hummingbird, ferruginous hawk, Gila woodpecker, gray flycatcher, Harris's hawk, Inca dove, Lincoln's sparrow, loggerhead shrike, mountain plover (only for wintering or migration and therefore has no potential for nesting impacts), prairie falcon, red-winged blackbird, rufous-winged sparrow, sagebrush sparrow, savannah sparrow, Swainson's hawk, verdin, vesper sparrow, and western burrowing owl. Potential impacts to special-status bird species could include changes in behavior because of Interconnection Project-related noise, vibration, and the presence of workers and equipment; loss of breeding and foraging habitat; and impacts to nesting species. Potential impacts to nesting birds and their eggs covered under the MBTA, including burrow nests of the western burrowing owl, will be avoided and/or minimized either by limiting ground-clearing/vegetation-removal activities to outside the breeding season (generally March to September, with raptors breeding generally January to June) or through surveys to identify active nests and placement of buffers around those active nests until the young fledge or the nest fails.

Transmission lines can pose a collision risk to birds, including raptors (Avian Power Line Interaction Committee [APLIC] 2012). However, many factors influence whether birds are likely to collide with a specific transmission line. To minimize that risk, the Applicant will design the Interconnection Project to incorporate reasonable measures to minimize collision or electrocution of and impacts to avian species. Such measures will be accomplished through incorporation of APLIC guidelines set forth in *Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006* (Suggested Raptor Protection Practices) (APLIC 2006) and *Reducing Avian Collisions with Power Lines: the State of the Art in 2012* (Reducing Avian Collisions) (APLIC 2012) to the extent feasible.

Transmission and distribution lines can also cause bird electrocution, although the risk is highest with lower voltage lines. Electrocution occurs when a bird simultaneously contacts energized and grounded electrical components. High-voltage lines require spacing between those components that cannot be spanned even by very large birds so that electrocution risk is precluded almost entirely (APLIC 2012).

## **SPECIAL-STATUS REPTILE SPECIES**

Two special-status reptile species may occur within the Study Area: the regal horned lizard and variable sandsnake. Potential Interconnection Project-related impacts to special-status reptile species include changes in behavior due to the presence of workers and equipment, including moving away from sources of noise and vibration; the potential for individuals being crushed or buried during ground-disturbing activities; the loss of habitat; and increased predation due to an increase in perches provided by the additional power poles to be installed. Special-status reptile individuals are expected to experience similar impacts from increased fugitive dust during construction as mammals.

## **SPECIAL-STATUS FISH SPECIES**

There are currently no special-status fish species known or expected to occur within the Study Area.

There is no perennial aquatic habitat in the Interconnection Project or Study Area, aside from the sludge ponds within the Study Area and irrigation canals in both the Interconnection Project and Study Area. The Picacho Reservoir, approximately 0.28 mile east of the Study Area, is an ephemeral water body that is entirely dry some years. The Gila River, approximately 8.6 miles north of the Study Area, which has perennial and intermittent stretches, is the nearest source of water to the Study Area that is not human-made (i.e., a canal, sludge pond, or reservoir). Introduced fish, however, have the potential to occur in the concrete-lined canals within the Interconnection Project and Study Area. Many of these fish represent invasive species that have been released or sportfish that have been stocked into waterways connected to the canals. No native fish species are expected to occur.

The Interconnection Project will not impact special-status fish species because no suitable habitat for special-status fish species is present in the Interconnection Project. Interconnection Project activities will not impact perennial water outside of the Study Area.

## **State-Protected Native Plants**

Plant species protected under the ANPL could be removed in accordance with applicable laws during the Interconnection Project's vegetation-clearing activities. However, as the Interconnection Project will occupy a relatively small area compared with that of nearby disturbances (e.g., agriculture and development), the loss of vegetation in the Interconnection Project area will result in only minor impacts to protected native plants.

## **Noxious Weeds**

Measures will be taken to avoid introducing or spreading noxious weeds in the Interconnection Project, and therefore the Interconnection Project is unlikely to contribute to an increase of noxious weeds, in extent or abundance, in the vicinity of the Interconnection Project.

## **Mitigation Measures**

The following mitigation measures would reduce the potential for impacts to special-status species as a result of the Interconnection Project:

- Transmission lines pose a risk of collisions and electrocution for birds, particularly raptors. To minimize that risk, the Applicant should design the Interconnection Project facilities to incorporate reasonable measures to minimize electrocution of and impacts to avian species following the guidelines outlined in Suggested Raptor Protection Practices (APLIC 2006) and Reducing Avian Collisions (APLIC 2012) to the extent feasible.
- If vegetation-disturbing activities are planned during the migratory bird nesting season (March–September or January–June for raptors), measures to avoid any active bird nests within the Interconnection Project, such as preconstruction surveys for migratory bird nests by a qualified biologist, should be taken to maintain compliance with the MBTA.
- If western burrowing owls are identified in the Interconnection Project, measures to avoid any active burrows should be taken. Because some burrowing owls are year-round residents, surveys for this species should be conducted prior to the initiation of ground-disturbing or vegetation-removal activities. In addition, the AZGFD's *Burrowing Owl Project Clearance Guidance for Landowners* (Arizona Burrowing Owl Working Group 2009) should be followed.
- To reduce the potential of negative effects to terrestrial species through collisions, worker awareness trainings and low speed limits should be implemented.
- If Sonoran Desert tortoises are observed, adherence to the AZGFD (2014) *Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects* would minimize the potential for direct impacts to this species.
- If trenching is included as part of Interconnection Project construction, the following should be considered to minimize injury to wildlife: when trenches cannot be backfilled immediately, the escape ramps, which can be short lateral trenches or wooden planks sloping to the surface, should be constructed at least every 90 m; trench slopes should be less than 45 degrees (1:1); and any trenches left open overnight should be inspected for wildlife prior to backfilling.



- The recommendations in AZGFD’s *Guidelines for Solar Development in Arizona* (AZGFD 2009) and the AZGFD’s *Wildlife Compatible Fencing Guidelines* (AZGFD 2024d) should be reviewed and implemented for the Interconnection Project, as applicable and feasible, to minimize impacts to wildlife and their habitats.
- If native plants listed under the ANPL are present in the Interconnection Project, the AZDA Notice of Intent to Clear Land form should be submitted prior to ground clearing. The submittal time frame depends on the acreage of the area to be cleared, as noted on the form.
- To minimize the introduction and spread of invasive species and noxious weeds, standard best management practices (BMPs) should be used during construction. These BMPs could include measures such as cleaning equipment prior to and following mobilization to the Interconnection Project.

## Conclusion

This biotic resource review analyzed potential impacts to rare and endangered species and biological wealth from both overhead and to-be-determined underground components for the Interconnection Project

The Interconnection Project is not likely to significantly affect any rare, endangered, or special-status species, and no ESA-listed species are likely to occur in the Interconnection Project or Study Area. Therefore, no impacts to rare, endangered, special-status, or ESA-listed species are expected as a result of the Interconnection Project. These impacts will be similar for both overhead or underground components, with no difference resulting from selection of any routes.

The Interconnection Project intersects Pinal County Riparian Areas (associated with the Casa Grande and Florence–Casa Grande Extension Canals), which can act as important linkages in the landscape to facilitate daily, seasonal, and annual movements of individuals and populations of species (AZGFD 2019). The Interconnection Project disturbance footprint will be limited to poles and access roads (some of which will be temporary) with no disturbance to the canal system, and as a result, no effect on these areas of biological wealth is expected.

The Interconnection Project disturbance footprint will be limited to poles and access roads (some of which will be temporary) with minimal disturbance to the landscape, and as a result, no effect on the terrestrial wildlife using these areas is expected. The small disturbance footprint and relatively short construction time frame will minimize impacts to migratory species and migratory stopover habitat loss. As such, any loss of vegetation from construction activities will not contribute meaningfully to habitat fragmentation or decrease connectivity between habitats.

The Interconnection Project has the potential to have minor impacts on non-ESA-listed special-status amphibian, bird, reptile, and mammal species.

The risk that electrical infrastructure poses to birds will be addressed by following the guidelines outlined in Suggested Raptor Protection Practices (APLIC 2006) and Reducing Avian Collisions (APLIC 2012) as design features for the Interconnection Project to the extent feasible, and preconstruction surveys for migratory bird nests will facilitate compliance with the MBTA.

## IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

### Location

Pinal County, Arizona



### Local office

Arizona Ecological Services Field Office

☎ (602) 242-0210

📠 (602) 242-2513

9828 North 31st Ave

**Exhibit C-1a. U.S. Fish and Wildlife Service IPaC report.**

#c3  
Phoenix, AZ 85051-2517

NOT FOR CONSULTATION

**Exhibit C-1b. U.S. Fish and Wildlife Service IPaC report**

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

## Exhibit C-1c. U.S. Fish and Wildlife Service IPaC report.

2. [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.

The following species are potentially affected by activities in this location:

## Birds

NAME	STATUS
<b>Cactus Ferruginous Pygmy-owl</b> <i>Glaucidium brasilianum cactorum</i> Wherever found There is <b>final</b> critical habitat for this species. <a href="https://ecos.fws.gov/ecp/species/1225">https://ecos.fws.gov/ecp/species/1225</a>	Threatened
<b>Southwestern Willow Flycatcher</b> <i>Empidonax traillii extimus</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a>	Endangered
<b>Yellow-billed Cuckoo</b> <i>Coccyzus americanus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a>	Threatened

## Fishes

NAME	STATUS
<b>Gila Topminnow (incl. Yaqui)</b> <i>Poeciliopsis occidentalis</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/1116">https://ecos.fws.gov/ecp/species/1116</a>	Endangered

## Insects

NAME	STATUS
<b>Monarch Butterfly</b> <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

### Exhibit C-1d. U.S. Fish and Wildlife Service IPaC report.

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

## Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act<sup>1</sup> and the Migratory Bird Treaty Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats<sup>3</sup>, 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](#)".

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds  
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC  
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

### Exhibit C-1e. U.S. Fish and Wildlife Service IPaC report.



NAME

BREEDING SEASON

**Golden Eagle** *Aquila chrysaetos*

Breeds Dec 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

#### Exhibit C-1f. U.S. Fish and Wildlife Service IPaC report.

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

#### Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

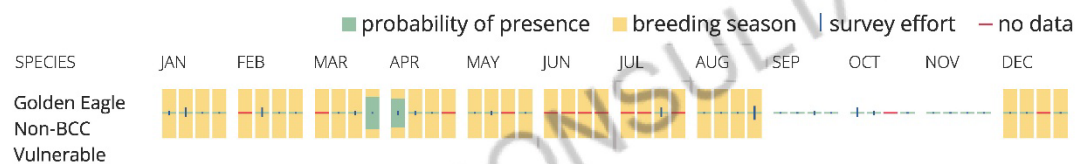
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

#### No Data (—)

A week is marked as having no data if there were no survey events for that week.

#### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



#### What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

#### What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

**Exhibit C-1g. U.S. Fish and Wildlife Service IPaC report.**



Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

#### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats<sup>3</sup> 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"](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC  
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your

### Exhibit C-1h. U.S. Fish and Wildlife Service IPaC report.

list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<b>American Avocet</b> <i>Recurvirostra americana</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 21 to Aug 10
<b>Bendire's Thrasher</b> <i>Toxostoma bendirei</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9435">https://ecos.fws.gov/ecp/species/9435</a>	Breeds Mar 15 to Jul 31
<b>Costa's Hummingbird</b> <i>Calypte costae</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/9470">https://ecos.fws.gov/ecp/species/9470</a>	Breeds Jan 15 to Jun 10
<b>Gila Woodpecker</b> <i>Melanerpes uropygialis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/5960">https://ecos.fws.gov/ecp/species/5960</a>	Breeds Apr 1 to Aug 31
<b>Golden Eagle</b> <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1680">https://ecos.fws.gov/ecp/species/1680</a>	Breeds Dec 1 to Aug 31
<b>Marbled Godwit</b> <i>Limosa fedoa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9481">https://ecos.fws.gov/ecp/species/9481</a>	Breeds elsewhere

**Exhibit C-1i. U.S. Fish and Wildlife Service IPaC report.**

Western Grebe *aechmophorus occidentalis*

Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/6743>

Willet *Tringa semipalmata*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Exhibit C-1j. U.S. Fish and Wildlife Service IPaC report.

### Breeding Season (🟡)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

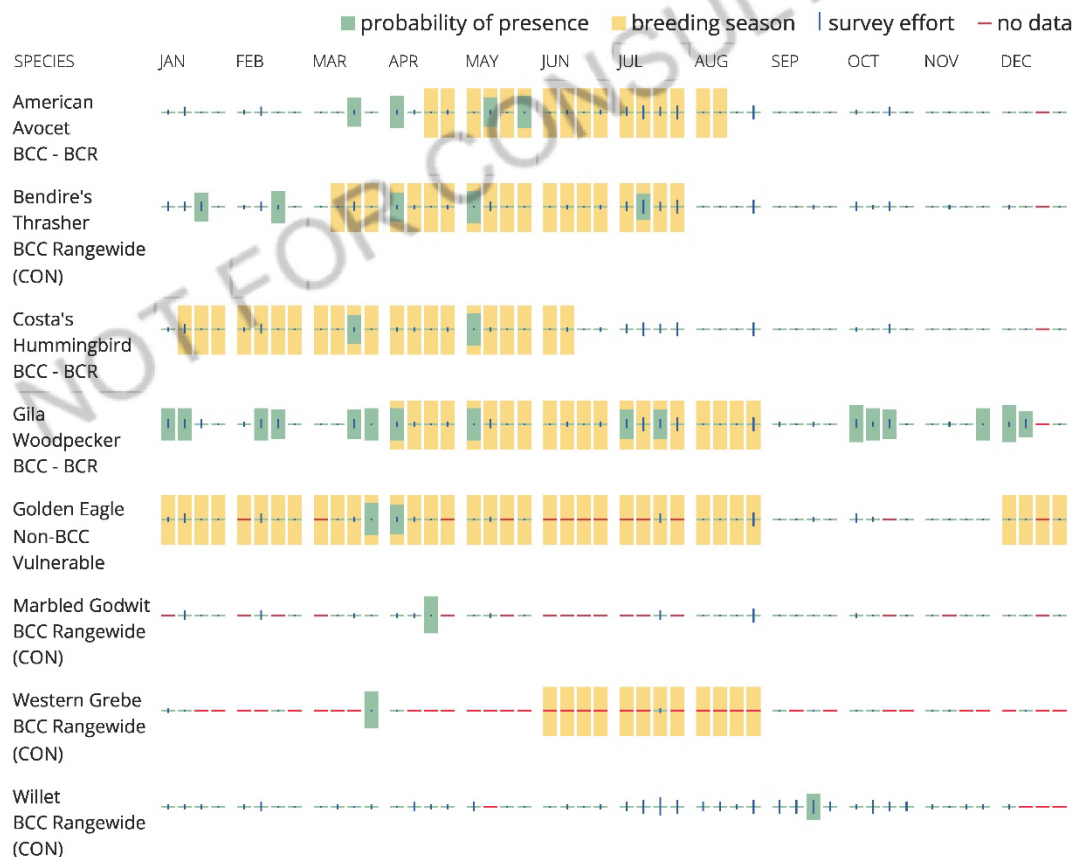


Exhibit C-1k. U.S. Fish and Wildlife Service IPaC report.



**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

**How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

**What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

#### **Exhibit C-11. U.S. Fish and Wildlife Service IPaC report.**

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

#### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

#### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

#### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or

### **Exhibit C-1m. U.S. Fish and Wildlife Service IPaC report.**

minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

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 at this location.

### Fish hatcheries

There are no fish hatcheries at this location.

### Wetlands in the National Wetlands Inventory (NWI)

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.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND

[PSS1Ah](#)

FRESHWATER POND

#### **Exhibit C-1n. U.S. Fish and Wildlife Service IPaC report.**

[PUBHx](#)

RIVERINE

[R2UBHx](#)

[R4SBjx](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

**NOTE:** This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

#### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

### Exhibit C-1o. U.S. Fish and Wildlife Service IPaC report.



# 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.*

**Project Name:**

Selma Energy Center Interconnection Project

**User Project Number:**

00079575-001-TUC-009

**Project Description:**

The Selma Energy Center Interconnection Project is a proposed 230-kilovolt (kV) alternating current generation intertie transmission line (gen-tie) to be located both above and underground, and associated substation facilities, that will connect the proposed Selma Energy Center to an existing (the Vah Ki) substation. The Interconnection Project is designed to deliver power from the 150-megawatt (MW) solar photovoltaic facility with a 150-MW battery storage system, which comprises the Selma Energy Project.

**Project Type:**

Energy Production/Storage/Transfer, Energy Transfer, Power line/electric line (new)

**Contact Person:**

India Hesse

**Organization:**

SWCA Environmental Consultants

**On Behalf Of:**

PRIVATE

**Project ID:**

HGIS-22007

*Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.*

**Exhibit C-2b. Arizona Online Environmental Review Tool report.**

**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.

**Exhibit C-2c. Arizona Online Environmental Review Tool report.**

**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](mailto: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.

**Exhibit C-2d. Arizona Online Environmental Review Tool report.**

Selma Energy Center Interconnection Project  
USA Topo Basemap With Locator Map

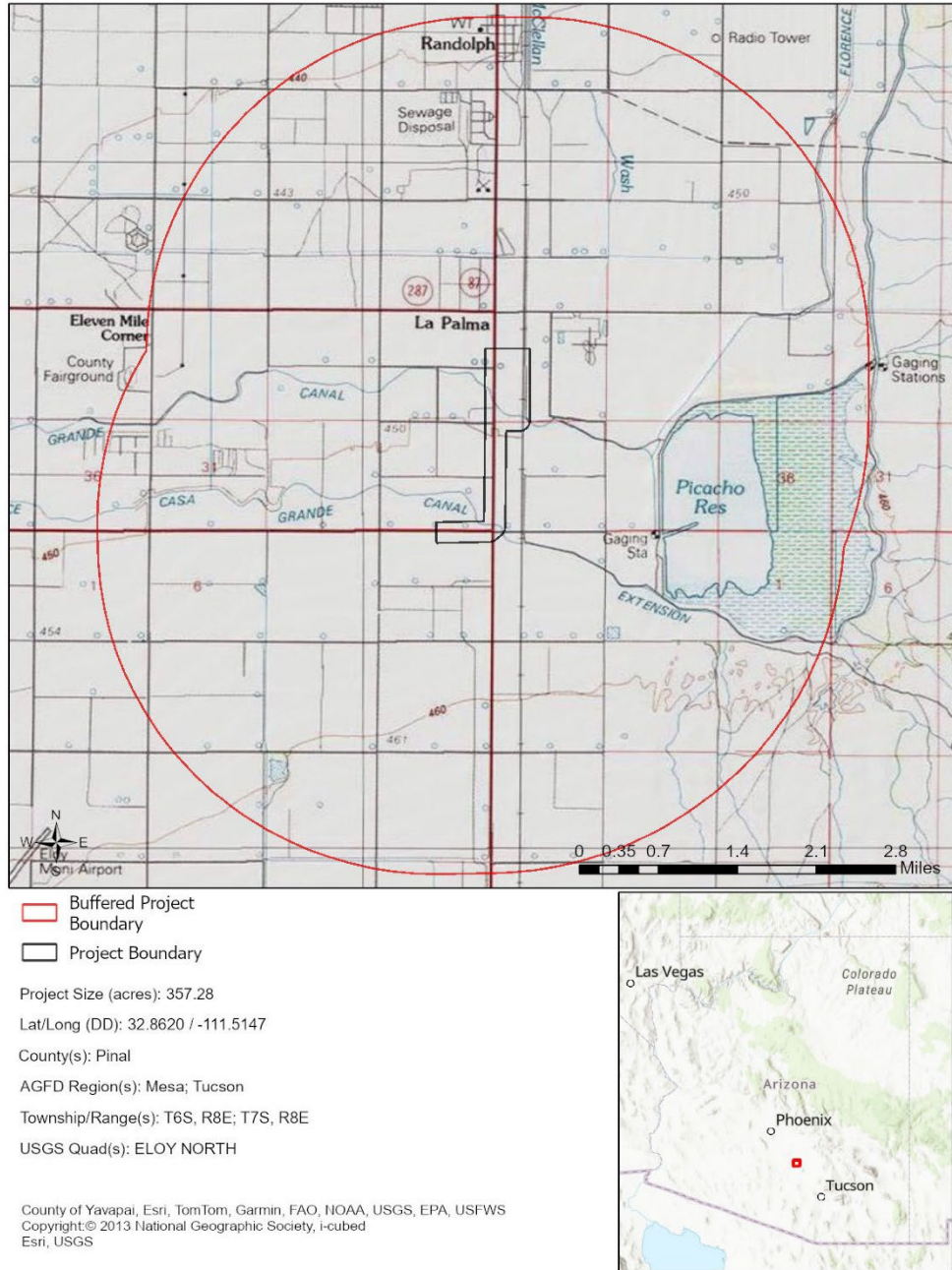
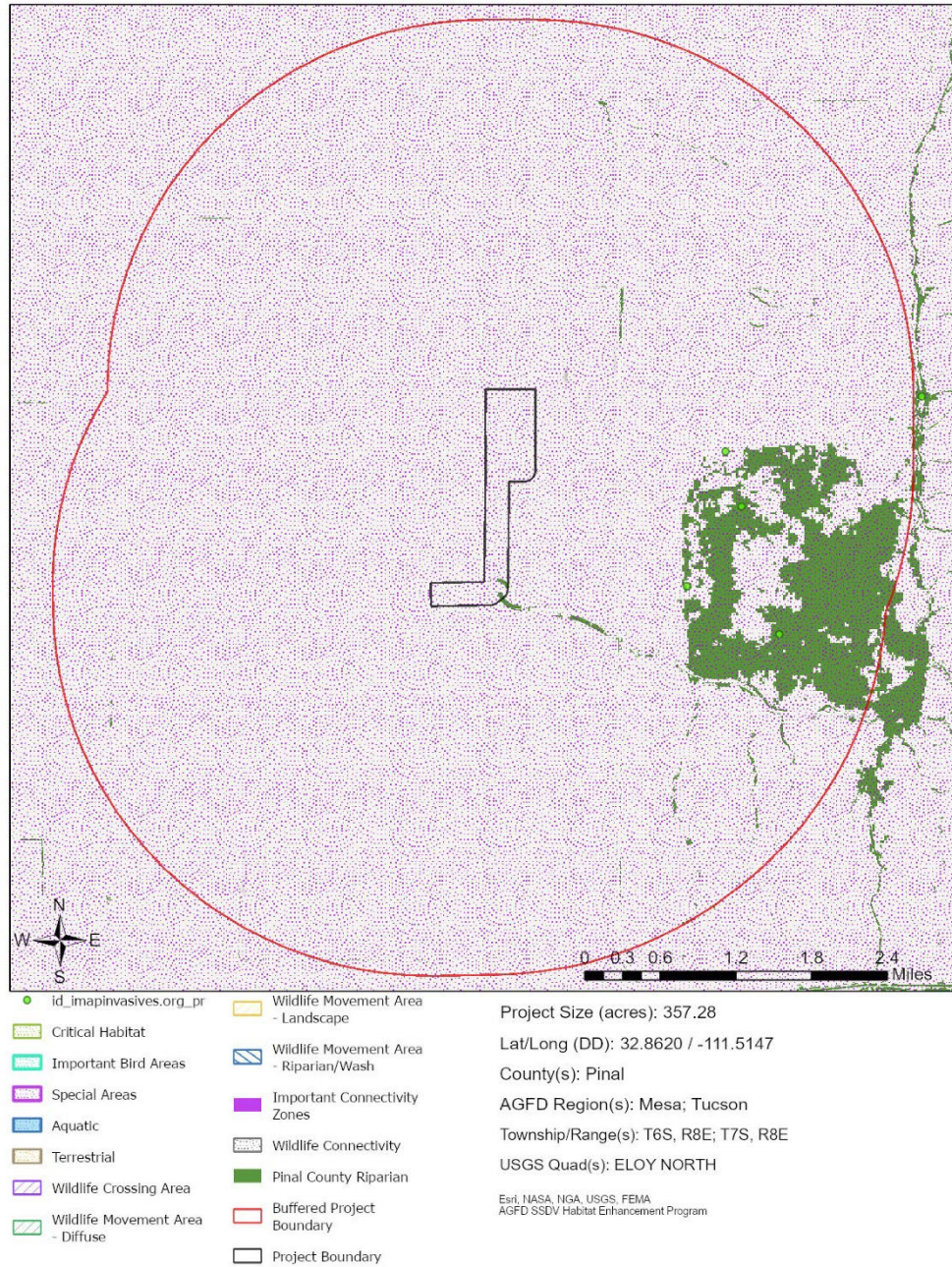


Exhibit C-2e. Arizona Online Environmental Review Tool report.



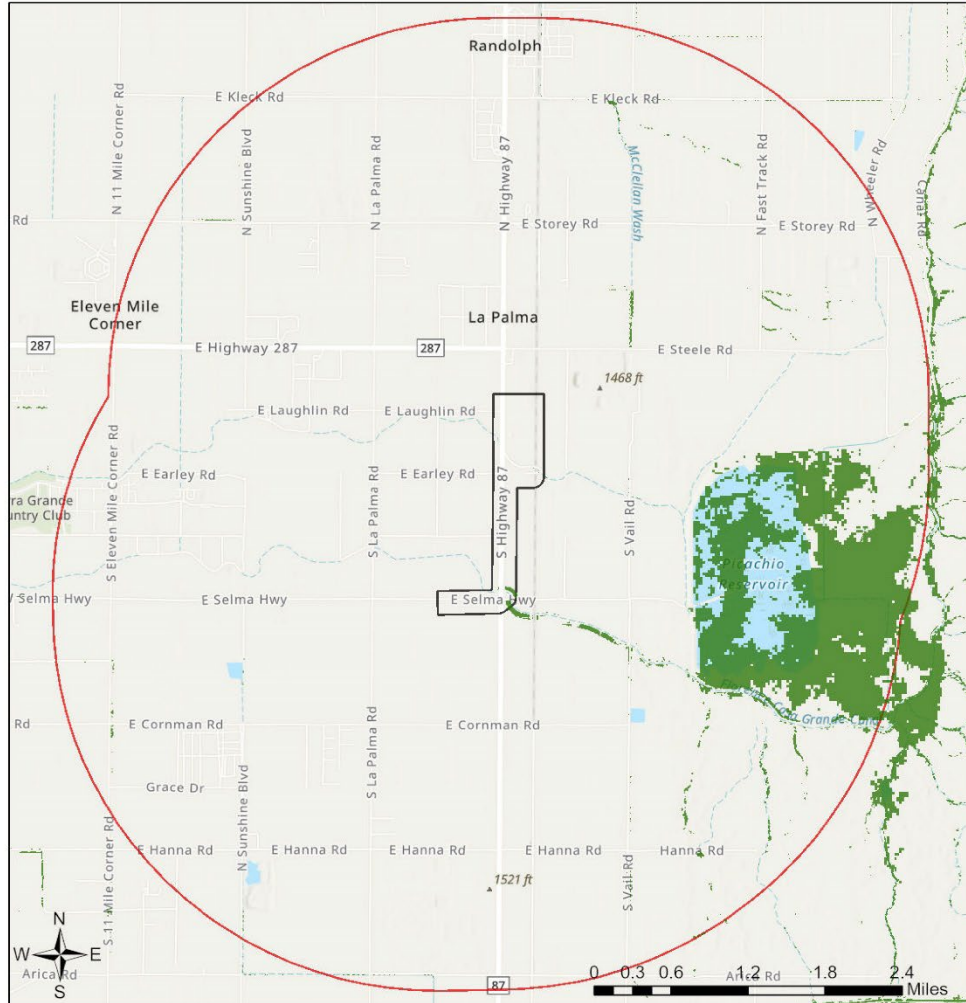
## Selma Energy Center Interconnection Project

Web Map As Submitted By User



**Exhibit C-2f. Arizona Online Environmental Review Tool report.**

## Selma Energy Center Interconnection Project Important Areas



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

Project Size (acres): 357.28

Lat/Long (DD): 32.8620 / -111.5147

County(s): Pinal

AGFD Region(s): Mesa; Tucson

Township/Range(s): T6S, R8E; T7S, R8E

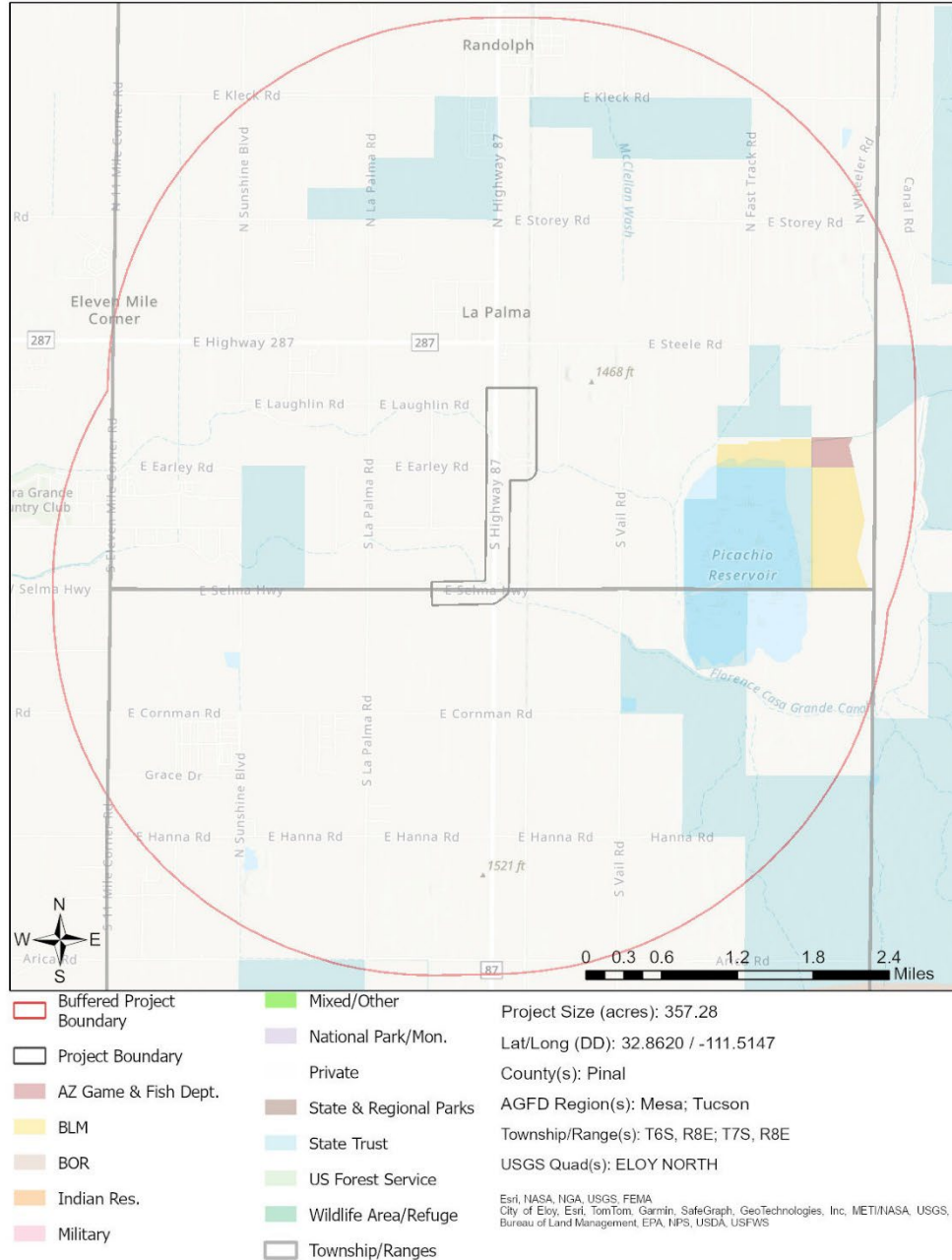
USGS Quad(s): ELOY NORTH

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

### Exhibit C-2g. Arizona Online Environmental Review Tool report.



## Selma Energy Center Interconnection Project Township/Ranges and Land Ownership



### Exhibit C-2h. Online Arizona Environmental Review Tool report.



**Special Status Species Documented within 3 Miles of Project Vicinity**

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Agelaius phoeniceus	Red-winged Blackbird					2
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1
Empidonax traillii extimus	Southwestern Willow Flycatcher	LE		S		1
Falco sparverius	American Kestrel					2
Rallus obsoletus yumanensis	Yuma Ridgway's Rail	LE		S		1
Toxostoma bendirei	Bendire's Thrasher					2

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
Riparian Area	Riparian Area					

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
Anthus spragueii	Sprague's Pipit	SC				2
Aquila chrysaetos	Golden Eagle			S		2
Artemisiospiza nevadensis	Sagebrush Sparrow					
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		2
Auriparus flaviceps	Verdin					2
Buteo regalis	Ferruginous Hawk	SC		S		2
Buteo swainsoni	Swainson's Hawk					2
Calcarius ornatus	Chestnut-collared Longspur					2
Calypte costae	Costa's Hummingbird					2
Campylorhynchus brunneicapillus	Cactus Wren					2
Catharus ustulatus	Swainson's Thrush					2
Charadrius montanus	Mountain Plover	SC				2
Chilomeniscus stramineus	Variable Sandsnake					2
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)					
Colaptes chrysoides	Gilded Flicker			S		2
Columbina inca	Inca Dove					2
Cynanthus latirostris	Broad-billed Hummingbird		S			2
Empidonax wrightii	Gray Flycatcher					2
Eumops perotis californicus	Greater Western Bonneted Bat					
Falco mexicanus	Prairie Falcon					2

**Exhibit C-2i. Arizona Online Environmental Review Tool report.**

**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
Falco peregrinus anatum	American Peregrine Falcon					
Falco sparverius	American Kestrel					2
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1
Icterus bullockii	Bullock's Oriole					2
Incilius alvarius	Sonoran Desert Toad					2
Lanius ludovicianus	Loggerhead Shrike	SC				2
Lasiurus blossevillii	Western Red Bat		S			2
Lasiurus xanthinus	Western Yellow Bat		S			2
Lepus alleni	Antelope Jackrabbit					2
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S		1
Macrotus californicus	California Leaf-nosed Bat	SC		S		2
Megascops kennicottii	Western Screech-owl					
Melanerpes uropygialis	Gila Woodpecker					2
Melospiza lincolnii	Lincoln's Sparrow					2
Melospiza aberti	Abert's Towhee		S			2
Micrathene whitneyi	Elf Owl					
Myotis velifer	Cave Myotis	SC		S		2
Myotis yumanensis	Yuma Myotis	SC				2
Neotamias cinereicollis	Gray-collared Chipmunk					
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					2
Parabuteo unicinctus	Harris's Hawk					2
Passerculus sandwichensis	Savannah Sparrow					2
Peucaea carpalis	Rufous-winged Sparrow					2
Phrynosoma solare	Regal Horned Lizard					2
Poocetes gramineus	Vesper Sparrow					2
Spizella breweri	Brewer's Sparrow					2
Tadarida brasiliensis	Brazilian Free-tailed Bat					
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
Callipepla gambelii	Gambel's Quail					
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Zenaidura macroura	White-winged Dove					
Zenaidura macroura	Mourning Dove					

**Exhibit C-2j. Arizona Online Environmental Review Tool report.**

**Project Type: Energy Production/Storage/Transfer, Energy Transfer, Power line/electric line (new)**

**Project Type Recommendations:**

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/unitedstates/az.shtml> and the Arizona Native Plant Society <https://aznps.com/invas> for recommendations on how to control. 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.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

For any powerlines built, proper design and construction of the transmission line is necessary to prevent or minimize risk of electrocution of raptors, owls, vultures, and golden or bald eagles, which are protected under state and federal laws. Limit project activities during the breeding season for birds, generally March through late August, depending on species in the local area (raptors breed in early February through May). Conduct avian surveys to determine bird species that may be utilizing the area and develop a plan to avoid disturbance during the nesting season. For underground powerlines, trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herpetofauna (snakes, lizards, tortoise) from entering ditches. In addition, indirect affects to wildlife due to construction (timing of activity, clearing of rights-of-way, associated bridges and culverts, affects to wetlands, fences) should also be considered and mitigated.

Based on the project type entered, coordination with State Historic Preservation Office may be required (<https://azstateparks.com/>).

Based on the project type entered, coordination with U.S. Fish and Wildlife Service (Migratory Bird Treaty Act) may be required (<https://www.fws.gov/office/arizona-ecological-services>).

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

**The Department requests further coordination to provide project/species specific recommendations, please contact Project Evaluation Program directly at [PEP@azgfd.gov](mailto:PEP@azgfd.gov).**

**Exhibit C-2k. Arizona Online Environmental Review Tool report.**

**Project Location and/or Species Recommendations:**

HDMS records indicate that one or more **Listed, Proposed, or Candidate** species or **Critical Habitat** (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at <https://www.fws.gov/office/arizona-ecological-services> or:

**Phoenix Main Office**

9828 North 31st Avenue #C3  
Phoenix, AZ 85051-2517  
Phone: 602-242-0210  
Fax: 602-242-2513

**Tucson Sub-Office**

201 N. Bonita Suite 141  
Tucson, AZ 85745  
Phone: 520-670-6144  
Fax: 520-670-6155

**Flagstaff Sub-Office**

SW Forest Science Complex  
2500 S. Pine Knoll Dr.  
Flagstaff, AZ 86001  
Phone: 928-556-2157  
Fax: 928-556-2121

This review has identified **riparian areas** within the vicinity of your project. During the planning stage of your project, avoid, minimize, or mitigate any potential impacts to riparian areas identified in this report. Riparian areas play an important role in maintaining the functional integrity of the landscape, primarily by acting as natural drainages that convey water through an area, thereby reducing flood events. In addition, riparian areas provide important movement corridors and habitat for fish and wildlife. Riparian areas are channels that contain water year-round or at least part of the year. Riparian areas also include those channels which are dry most of the year, but may contain or convey water following rain events. All types of riparian areas offer vital habitats, resources, and movement corridors for wildlife. The Pinal County Comprehensive Plan (i.e. policies 6.1.2.1 and 7.1.2.4), Open Space and Trails Master Plan, Drainage Ordinance, and Drainage Design Manual all identify riparian area considerations, guidance, and policies. Guidelines to avoid, minimize, or mitigate impacts to riparian habitat can be found at <https://www.azgfd.com/wildlife-conservation/planning-for-wildlife/planning-for-wildlife-wildlife-friendly-guidelines/>. Based on the project type entered, further consultation with the Arizona Game and Fish Department and Pinal County may be warranted.

HDMS records indicate that **Western Burrowing Owls** have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at <https://www.azgfd.com/wildlife-conservation/conservation-and-endangered-species-programs/burrowing-owl-management/>.

**Exhibit C-21. Arizona Online Environmental Review Tool report.**

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## EXHIBIT D. BIOLOGICAL RESOURCES

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As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219, Exhibit 1:

*List the fish, wildlife, plant life, and associated forms of life in the vicinity of the proposed site or route and describe the effects, if any, the proposed facilities will have thereon.*

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### Introduction

SWCA consulted publicly available data sources to identify the plant and wildlife species that may occur within 1 mile of the CEC Corridor (Study Area), including the following:

- topographical maps and aerial photographs,
- Arizona Game and Fish Department (AZGFD) Online Environmental Review Tool (AZGFD 2024a),
- *Biotic Communities: Southwestern United States and Northwestern Mexico* (Brown 1994), and
- regional checklists, reports, and publications (e.g., Brennan and Holycross 2006; eBird 2024; Hoffmeister 1986; iNaturalist 2024; Kesner and Marsh 2010).

In addition, an SWCA biologist with expertise in the biology of flora and fauna of the region surveyed the Interconnection Project and portions of the Study Area on March 27, 2024. All plant and wildlife species observed in the Interconnection Project and portions of the Study Area during this survey were recorded. The site was assessed to determine whether habitat features for species protected under federal, state, or local regulations were present in the Interconnection Project and Study Area.

### Results

#### *Ecological Setting*

The Interconnection Project and Study Area are within the Lower Colorado River Valley subdivision of the Sonoran Desertscrub biotic community (Brown 1994) at elevations ranging from approximately 1,460 to 1,505 feet above mean sea level (amsl). The Interconnection Project is directly adjacent to State Route 87, between East Selma Highway to the south and the existing Vah Ki Substation to the north, approximately 7.5 miles north of Interstate 10, 5 miles south of the city of Coolidge, and 8.6 miles south of the Gila River. Land uses in the Study Area include active or inactive agriculture fields with low-density residential structures, electrical generation infrastructure, solar arrays, irrigation canals, paved and unpaved roadways, a dairy farm (Ethington Dairy), and light industrial/commercial. The dairy facilities include sludge ponds and sources of water that may attract a diversity of species to the area. The Phoenix metropolitan area lies approximately 25 miles northwest of the Study Area, and the Picacho Reservoir lies approximately 1.2 miles east of the Interconnection Project. The Picacho Reservoir has a highly variable water level, with the lake being entirely dry in some years (Drowley 2021; Federal Emergency Management Agency 2024). Land uses immediately outside of the Study Area include agriculture, solar arrays and electrical generation infrastructure, an RV park, and recreation in undisturbed desert and at the Picacho Reservoir. Central Arizona Irrigation and Drainage District (CAIDD), SCIDD, and HIDD canals are present within the Interconnection Project and Study Area, and the aforementioned waste ponds associated with the Ethington Dairy are also present within the Study Area.

## Vegetation

The Interconnection Project and Study Area have been disturbed by roadways, agricultural fields, canals, residential homes, the existing Vah Ki Substation, and other solar generating facilities. The Interconnection Project and Study Area contain extremely limited exposures of Sonoran desertscrub with rare velvet mesquite (*Prosopis velutina*), yellow paloverde (*Parkinsonia microphylla*), Berlandier's wolfberry (*Lycium berlandieri*), Jerusalem thorn (*Parkinsonia aculeata*), fourwing saltbush (*Atriplex canescens*), desertbroom (*Baccharis sarothroides*), cryptantha (*Cryptantha* sp.), desert Indianwheat (*Plantago ovata*), desert globemallow (*Sphaeralcea ambigua*), flatspine bur ragweed (*Ambrosia acanthicarpa*), creosotebush (*Larrea tridentata*), pepperweed (*Lepidium* sp.), and silverleaf nightshade (*Solanum elaeagnifolium*).

More commonly observed at the time of the field visit were crop plants, including alfalfa (*Medicago sativa*) and common barley (*Hordeum vulgare*), grasses and forbs, including Arizona sandmat (*Chamaesyce arizonica*), bristly fiddleneck (*Amsinckia tessellate*), and introduced weeds, including redstem stork's bill (*Erodium cicutarium*), London rocket (*Sisymbrium irio*), cheeseweed mallow (*Malva parviflora*), annual yellow sweetclover (*Melilotus indicus*), common Mediterranean grass (*Schimus barbatus*), and common sowthistle (*Sonchus oleraceus*).

Five noxious weed species, Asian mustard (*Brassica tournefortii*) and stinknet (*Oncosiphon pilulifer*), both Class B noxious weeds, and puncturevine (*Tribulus terrestris*), red broom (*Bromus rubens*), and saltcedar (*Tamarix* spp.), all Class C noxious weeds, are present in the Interconnection Project. Noxious weed species listed by ADA are discussed in Exhibit C.

No broadleaf deciduous riparian vegetation communities (i.e., communities containing willow [*Salix* sp.], cottonwood [*Populus* sp.], or ash [*Fraxinus* sp.], etc.), were observed during surveys of the Interconnection Project.

## Wildlife Species

Bird species observed in the Study Area during surveys included Bendire's thrasher (*Toxostoma bendirei*), cliff swallow (*Petrochelidon pyrrhonota*), common raven (*Corvus corvax*), Gambel's quail (*Callipepla gambelii*), horned lark (*Eremophila alpestris*), killdeer (*Charadrius vociferus*), lark sparrow (*Chondestes grammacus*), loggerhead shrike (*Lanius ludovicianus*), Lucy's warbler (*Leiothlypis luciae*), mourning dove (*Zenaida macroura*), red-tailed hawk (*Buteo jamaicensis*), red-winged blackbird (*Agelaius phoeniceus*), Sprague's pipit (*Anthus spragueii*), turkey vulture (*Cathartes aura*), verdin (*Auriparus flaviceps*), western burrowing owl (*Athene cunicularia hypugaea*), and white-crowned sparrow (*Zonotrichia leucophrys*). Species of Greatest Conservation Need (SGCN) and/or Birds of Conservation Concern (BCC), including Bendire's thrasher, red-winged blackbird, Sprague's pipit, verdin, and western burrowing owl, are discussed in Exhibit C.

Habitat for bat species or potential temporary bat roost sites (palm trees, abandoned buildings) have the potential to be present in the Study Area. No habitat or potential roost sites for bat species were identified within the Interconnection Project.

Species that may occur in the Study Area are listed in Table D-1 (mammals), Table D-2 (birds), Table D-3 (reptiles), and Table D-4 (amphibians). Species were considered for their potential to occur as follows:

- A list of mammal species typical of the Lower Colorado River Valley subdivision of the Sonoran Desertscrub biotic community evaluated for this report included mammals found in Table 4.1 of *Mammals of Arizona* (Hoffmeister 1986).
- Bird species evaluated in this report include those listed for Sonoran Desertscrub in Appendix II of *Biotic Communities Southwestern United States and Northwestern Mexico* (Brown 1994) and a list of Sonoran Desert Birds in iNaturalist (2024).

- Reptiles and amphibians evaluated in this report were taken from a list of commonly occurring species in the Lower Colorado River Valley subdivision of the Sonoran Desertscrub biotic community in *Amphibians and Reptiles in Arizona* (Brennan and Holycross 2006).
- Finally, fish species evaluated in this report were taken from the list of species in the Central Arizona Project from the *Central Arizona Project Fish Monitoring Final Annual Report* (Kesner and Marsh 2010).

Some species from these lists of typical species overlap special-status species evaluated in Exhibit C, and these species have been removed from consideration in Exhibit D because they have already been addressed. Occurrence records were obtained from the AZGFD Online Environmental Review Tool (AZGFD 2024a), *Mammals of Arizona* (Hoffmeister 1986), eBird (2024), and the *Breeding Bird Atlas* (Corman and Wise-Gervais 2005).

## Mammals

Small, medium-sized, and large terrestrial mammal species may occur in the Interconnection Project and Study Area. Bat species have the potential to disperse, migrate through or forage within the Interconnection Project and Study Area. Palm trees and abandoned buildings were not observed in the portions of the Study Area adjacent to the Interconnection Project; however, these types of potential bat roosts have the potential to occur in the Study Area (Google Earth 2024). Special-status bat species are addressed in Exhibit C.

**Table D-1. Mammal Species that May Occur or Are Known to Occur in the Study Area**

Common Name (Scientific Name)	Habitat
Arizona pocket mouse ( <i>Perognathus amplus</i> )	Found in desert scrub habitats.
Black-tailed jackrabbit ( <i>Lepus californicus</i> )	Occurs in open habitats with scattered patches of shrubs, including plains, fields, and deserts.
Cactus mouse ( <i>Peromyscus eremicus</i> )	Found in deserts and pinyon-juniper ( <i>Pinus</i> spp.- <i>Juniperus</i> spp.) woodland. Occurs in rocky, sandy, or loamy soils. Found in rock heaps, stone walls, burrows, woodrat houses, and brush fences.
Coyote* ( <i>Canis latrans</i> )	Occurs in all habitat types, including agricultural, urban, and suburban areas.
Deer mouse ( <i>Peromyscus maniculatus</i> )	Found in upland and riparian habitats, including open areas, brushlands, and coniferous and deciduous forests.
Desert cottontail* ( <i>Sylvilagus audubonii</i> )	Found in grasslands, brushlands, edges of foothill woodlands, willow thickets, and occasionally in cultivated fields or under buildings.
Desert kangaroo rat ( <i>Dipodomys deserti</i> )	Occurs in low deserts, often sandy soil with sparse vegetation, including alkali sink, shadscale scrub, and creosotebush ( <i>Larrea tridentata</i> ).
Desert pocket mouse ( <i>Chaetodipus penicillatus</i> )	Occurs in sparsely vegetated sandy desert floors.
Javelina (=collared peccary) ( <i>Pecari tajacu</i> )	Found in deserts, shrublands, cities, and agricultural areas.
Merriam's kangaroo rat ( <i>Dipodomys merriami</i> )	Occurs in low deserts in sparsely vegetated areas.
Mule deer ( <i>Odocoileus hemionus</i> )	Occurs in mountains and lowlands, often associated with successional vegetation.
Raccoon ( <i>Procyon lotor</i> )	Occurs in varying habitats, often along streams and shorelines.

Common Name (Scientific Name)	Habitat
Rock pocket mouse ( <i>Chaetodipus intermedius</i> )	Occurs in lower grasslands and deserts. Commonly found in creosotebush, mesquite, saltbush, and creosotebush-lechuguilla areas.
Round-tailed ground squirrel* ( <i>Xerospermophilus tereticaudus</i> )	Found in Sonoran desertscrub, alkali sink, and creosotebush communities in low, flat areas and avoids rocky hills.
Western harvest mouse ( <i>Reithrodontomys megalotis</i> )	Occurs in a wide variety of habitats in places with adequate cover. Often lives in areas with adequate grass cover, along streams, bottomlands, along fences, or around irrigated areas.
White-throated woodrat* ( <i>Neotoma albigula</i> )	Found in brushlands, rocky cliffs, creosotebush scrub, mesquite-yucca ( <i>Prosopis</i> spp.– <i>Yucca</i> spp.), and pinyon-juniper woodland.
<b>Bat Species</b>	
Big brown bat ( <i>Eptesicus fuscus</i> )	Occurs in variable habitat, from ponderosa pine ( <i>Pinus ponderosa</i> ) forests, pinyon-juniper woodlands, the lower edge of spruce-fir ( <i>Picea</i> spp.– <i>Abies</i> spp.) forests, and Lower Sonoran zones. Migratory; found throughout the state in summer and in southern Arizona in the winter. Roosts in buildings, bridge joints, mines, hollow trees, and caves.

Source: Range or habitat information is from AZGFD (2024a, 2024b); Hoffmeister (1986); and NatureServe (2024).

\*Observed in Interconnection Project during field reconnaissance.

## Birds

The Lower Colorado River Valley subdivision of the Sonoran Desertscrub biotic community generally consists of open, sparsely vegetated habitats that do not support a bird community as diverse as those found in other subdivisions of Sonoran Desertscrub (Brown 1994). However, the agricultural areas, canals, and sludge ponds in the Study Area provide additional habitat. Birds have potential to use the Interconnection Project and Study Area for their life-history needs (i.e., foraging, nesting, or perching). Table D-2 lists the bird species that may occur in the Study Area. Birds that are likely to only be attracted to the sludge pond and irrigation canals, as well as those that are just dispersing or migrating through the Study Area, are not included in Table D-2. Special status bird species are addressed in Exhibit C.

**Table D-2. Bird Species that May Occur or Are Known to Occur in the Study Area**

Common Name (Scientific Name)	Habitat
Anna's hummingbird ( <i>Calypte anna</i> )	Occurs in chaparral, coastal scrub, oak savannas, and open woodland. Also common in urban and suburban settings.
Ash-throated flycatcher ( <i>Myiarchus cinerascens</i> )	Occurs in dry scrub, open woodlands, and deserts. Cavity nester that breeds in this part of Arizona.
Black phoebe ( <i>Sayornis nigricans</i> )	Usually found near water, including marshy ponds, streams, near farm ponds, and along irrigation ditches.
Black-throated sparrow ( <i>Amphispiza bilineata</i> )	Found in sparsely vegetated desert scrub; most often found in desert uplands, alluvial fans, and hillsides.
Brewer's blackbird ( <i>Euphagus cyanocephalus</i> )	Often occurs near human habitation. Occurs in shrubby and busy areas near water, riparian woodland, cultivated lands, and marshes. Winters south of Mogollon Rim.
Brown-headed cowbird ( <i>Molothrus ater</i> )	Often associated with human-modified, fragmented landscapes, and are attracted to feedlots, pastures, and fields. Occurs in a variety of habitats, including desert scrub, agricultural lands, and residential areas. Migratory; present in Arizona spring through fall.
Common raven* ( <i>Corvus corax</i> )	Found in most habitat types in select open areas. Regularly encountered in rural, agricultural, and urban settings. Year-round resident.
Cliff swallow* ( <i>Petrochelidon pyrrhonota</i> )	Feeds over pastures, fields, towns, and open areas. Nests in colonies that can be on cliffsides, caves, building eaves, bridges, culverts, dams, or large trees. Nests are created with mud and dried grass at the juncture of a vertical wall and a horizontal overhang.

Common Name (Scientific Name)	Habitat
Cooper's hawk ( <i>Accipiter cooperii</i> )	Occurs in woodlands, parks, neighborhoods, and fields, associated with trees.
Curve-billed thrasher ( <i>Toxostoma curvirostre</i> )	Found in creosotebush desert scrub, grasslands, and residential areas.
Eurasian collared dove ( <i>Streptopelia decaocto</i> )	Found in a variety of habitats from open woodland to desert scrub. Nonnative species, not protected under the MBTA.
European starling† ( <i>Sturnus vulgaris</i> )	Occurs predominantly near human settlements, in rural, urban, and agricultural fields. Year-round resident.
Gambel's quail* ( <i>Callipepla gambelii</i> )	Typically associated with brushy Sonoran Desert uplands and desert washes. Can also occur in residential areas and along the margins of cultivated lands. Year-round resident.
Great horned owl ( <i>Bubo virginianus</i> )	Occurs in a wide variety of habitats including agricultural and residential areas as well as woodlands and orchards.
Great-tailed grackle ( <i>Quiscalus mexicanus</i> )	Occurs in partly open areas with scattered trees around human habitation. Year-round resident.
Greater roadrunner ( <i>Geococcyx californianus</i> )	Occurs in open, arid country with scattered shrubs, trees, or cacti. Also common in agricultural areas and urban and suburban settings. Year-round resident.
Horned lark* ( <i>Eremophila alpestris</i> )	Found in grasslands, sandy regions, areas with scattered low shrubs, desert playas, pastures, and open cultivated areas.
House finch ( <i>Carpodacus mexicanus</i> )	Occurs in arid scrub and brush, open woodland, oak-juniper, and pine-oak habitats, and towns and cultivated lands. Year-round resident.
House sparrow† ( <i>Passer domesticus</i> )	Nonnative, introduced species that occurs abundantly in cities and towns. Occurs in feedlots, agricultural areas, and urban and rural communities. Year-round resident.
Lark Sparrow* ( <i>Chondestes grammacus</i> )	Found in agricultural areas, suburban gardens, oak woodlands, chaparral, and mesquite/acacia grassland.
Lesser goldfinch ( <i>Spinus psaltria</i> )	Occurs in patch open habitats, including thickets, weedy fields, woodland, scrubland, and farmlands.
Lesser nighthawk ( <i>Chordeiles acutipennis</i> )	Found in arid lowlands, deserts, and agricultural areas. Nests on the ground, usually beneath a shrub but sometimes out in the open. Migratory; present in Arizona spring–fall.
Mourning dove* ( <i>Zenaidura macroura</i> )	Occurs in a wide variety of habitats, most regularly in desert scrub, shrubby grasslands, and open woodlands. Also found in rural and urban habitats.
Northern cardinal ( <i>Cardinalis cardinalis</i> )	Occurs in dense shrubby areas including overgrown fields, backyards, mesquite ( <i>Prosopis</i> spp.), thickets, and ornamental landscaping.
Northern mockingbird ( <i>Mimus polyglottos</i> )	Prefers open and partly open situations. Occurs in areas of scattered brush or trees to semidesert, and around towns and cultivated areas.
Phainopepla ( <i>Phainopepla nitens</i> )	Occurs in Arizona during the breeding season. Found in desert washes, where they feed heavily on desert mistletoe berries.
Red-tailed hawk* ( <i>Buteo jamaicensis</i> )	Occurs in a wide variety of open habitats. Elevated perches are important. Year-round resident.
Rock pigeon† ( <i>Columba livia</i> )	Introduced. Closely associated with human settlement, such as towns, parks, and agricultural areas. Year-round resident.
Swainson's hawk ( <i>Buteo swainsoni</i> )	Occurs in open pine-oak woodland and cultivated lands. Migratory, breeds in Arizona.
Turkey vulture* ( <i>Cathartes aura</i> )	Widespread, and uses a variety of habitats. Commonly perches on rocky outcrops, cliffs, canyon walls, transmission towers, telephone poles, and tall trees. Migratory.
Western kingbird ( <i>Tyrannus verticalis</i> )	Prefers open areas in many habitat types including desert, rural, and agricultural areas. Migratory.
White-crowned sparrow* ( <i>Zonotrichia leucophrys</i> )	Occurs in woodlands, shrubland, croplands, suburbs, old fields, and conifer woodlands.

Common Name (Scientific Name)	Habitat
White-winged dove ( <i>Zenaida asiatica</i> )	Habitat generalist, including desert scrub, riparian, urban, and agricultural areas. Year-round resident.

Source: Range or habitat information is from Corman and Wise-Gervais (2005), eBird (2024), and NatureServe (2024).

\*Observed in Interconnection Project during field reconnaissance.

†Nonnative species.

## Reptiles

The Lower Colorado River Valley subdivision of the Sonoran Desertscrub biotic community is home to many reptile species (Brown 1994). Species of this biotic community may occur in the portions of the Interconnection Project and Study Area containing native vegetation, and a small number of species also tolerate developed environments. Table D-3 lists the reptile species that may occur in the Study Area. SGCN species regal horned lizard (*Phrynosoma solare*), Sonoran Desert tortoise (*Gopherus morafkai*), and variable sandsnake (*Chilomeniscus stramineus*) are addressed in Exhibit C.

**Table D-3. Reptile Species that May Occur in the Study Area**

Common Name (Scientific Name)	Habitat
Banded Gila monster ( <i>Heloderma suspectum cinctum</i> )	Ranges from desert scrub to lower reaches of Great Basin Conifer Woodland and Madrean Evergreen Woodland. Commonly found above the flats in rocky drainages and in rugged terrain.
Coachwhip ( <i>Coluber flagellum</i> )	Typically occurs in desert scrub and semidesert grasslands. Uses a wide range of habitats, including desert, prairie, scrubland, woodland, farmland, and creek valleys, generally in dry, open terrain.
Common side-blotched lizard ( <i>Uta stansburiana</i> )	Typically occurs in desert scrub, semidesert grasslands, Great Basin grasslands, and interior chaparral.
Desert iguana ( <i>Dipsosaurus dorsalis</i> )	Primarily found in Mohave desertscrub and the Lower Colorado River Subdivision of Sonoran desertscrub and occasionally in the Arizona Upland Subdivision of Sonoran desertscrub. Occurs on flatlands and gently sloping bajadas.
Desert night snake ( <i>Hypsiglena chlorophaea</i> )	Ranges from flat, open sandy deserts to steep, rocky, and wooded slopes.
Desert spiny lizard ( <i>Sceloporus magister</i> )	Found in Sonoran desertscrub, Great Basin desertscrub, Semidesert grassland, interior chaparral, and woodlands.
Gopher snake ( <i>Pituophis catenifer</i> )	Found in biotic communities up to Alpine Tundra. Occurs in deserts, forests, and coastal grasslands.
Long-nosed leopard lizard ( <i>Gambelia wislizeni</i> )	Found in desert scrub and semidesert grasslands.
Long-nosed snake ( <i>Rhinocheilus lecontei</i> )	Occurs in deserts, dry prairies, arid river valleys, thornbrush, and shrubland.
Long-tailed brush lizard ( <i>Urosaurus graciosus</i> )	Primarily an inhabitant of Lower Colorado River Sonoran and Mohave desertscrub, commonly found in creosotebush-lined desert flats with sandy soils and along drainages.
Mohave rattlesnake ( <i>Crotalus scutulatus</i> )	Found in desert scrub and semidesert grassland, usually in relatively level terrain.
Ornate tree lizard ( <i>Urosaurus ornatus</i> )	Occurs in most biotic communities from desert scrub to subalpine.
Sidewinder ( <i>Crotalus cerastes</i> )	Typically occurs in flat, open desert with sandy or loamy soils.

Common Name (Scientific Name)	Habitat
Spotted leaf-nosed snake ( <i>Phyllorhynchus decurtatus</i> )	Found in creosotebush flats and washes in Sonoran desertscrub.
Tiger whiptail ( <i>Aspidoscelis tigris</i> )	Occurs in a wide variety of habitats including creosotebush flats, sandy wash, canyons, and hillsides. Found in desert scrub, semidesert grasslands, and lower reaches of chaparral.
Western banded gecko ( <i>Coleonyx variegatus</i> )	Ranges from dry creosotebush flats to rugged, rocky slopes to barren high desert plateaus.
Western patch-nosed snake ( <i>Salvadora hexalepsis</i> )	Found in flatlands and low valleys from desert scrub to woodlands.
Western shovel-nosed snake ( <i>Chionactis occipitalis klauberi</i> )	Found in or near sandy washes or dunes in desert flats or on gently sloping bajadas.
Zebra-tailed lizard ( <i>Callisaurus draconoides</i> )	Found primarily in desert scrub. Occurs in flatlands and broad, sandy washes.

Source: Range or habitat information is from AZGFD (2024a; 2024b); Brennan (2012); and NatureServe (2024).

## Amphibians

There are no perennial water sources within the Interconnection Project or Study Area aside from irrigation canals and sludge ponds. Amphibians may occur in the irrigation canals in the Interconnection Project and in the sludge ponds in the Study Area, and they have the potential to occur at any location that accumulates water, including roadside puddles or depressions following monsoon rains or within fields or canals during irrigation. During dry seasons, amphibians shelter in mud cracks, mammal burrows, or structures or may go underground to avoid desiccation. Table D-4 lists the amphibian species that may occur in the Study Area. SGCN species Lowland leopard frog (*Lithobates yavapaiensis*) and Sonoran Desert toad (*Incilius alvarius*) are addressed in Exhibit C.

**Table D-4. Amphibian Species that May Occur in the Study Area**

Common Name (Scientific Name)	Habitat
<b>Amphibians</b>	
American bullfrog† ( <i>Lithobates catesbeianus</i> )	Introduced in Arizona. Occurs in a wide variety of aquatic habitats from cattle tanks and canals to ponds, reservoirs, and marshes.
Couch's spadefoot ( <i>Scaphiopus couchii</i> )	Found primarily in Sonoran and Chihuahuan deserts and associated grasslands. They can be encountered in any arid western desert valley capable of supporting rain pools that last at least 7–8 days.
Sonoran green toad ( <i>Anaxyrus retiformis</i> )	Occurs in valleys and sparingly onto lower bajadas, typically in the Lower Colorado River and Arizona Upland subdivisions of Sonoran desertscrub.
Woodhouse's toad ( <i>Anaxyrus woodhousii</i> )	Found in areas near ponded permanent water, such as backwaters and slack water of lakes and irrigation ditches and canals, but can also be found in cattle tanks and other seasonal wetlands, foraging in rural or urban areas near these habitats.

Sources: Range or habitat information is from AZGFD (2024a); Brennan (2012); and NatureServe (2024).

†Nonnative species

## Fish Species

There is no perennial aquatic habitat aside from the sludge ponds within the Study Area and irrigation canals in both the Interconnection Project and Study Area. The Picacho Reservoir, approximately 0.28 mile east of the Study Area, is an ephemeral water body that is entirely dry some years. The Gila River, approximately 8.6 miles north of the Interconnection Project and with perennial and intermittent stretches,

is the nearest source of water to the Study Area that is not human-made (i.e., a canal, sludge pond, or reservoir). However, introduced fish have the potential to occur within the Interconnection Project and Study Area in the concrete-lined canals. Many of these fish represent invasive species that have been released or sportfish that have been stocked in waterways connected to the canals. No native fish species are expected to occur.

The Central Arizona Project (CAP) canal has the potential to supply water to agricultural portions of the Interconnection Project and Study Area through diversion into the concrete-lined canals. Fish from the larger canals could be swept into the concrete-lined canals; however, these canals are unlikely to constitute suitable habitat for any of these species that would support long-term life-history functions (e.g., foraging, reproduction). The CAP canal is known to carry fish, although none of the fish caught in a 2005–2009 study were native to the Gila River Basin (Kesner and Marsh 2010). The following fish were observed in the CAP canal downstream reach (i.e., south of the Fannin-McFarland Aqueduct) during the 2005–2009 study (Kesner and Marsh 2010): bluegill (*Lepomis macrochirus*), channel catfish (*Ictalurus punctatus*), common carp (*Cyprinus carpio*), flathead catfish (*Pylodictis olivaris*), grass carp (*Ctenopharyngodon idella*), green sunfish (*Lepomis cyanellus*), largemouth bass (*Micropterus salmoides*), redear sunfish (*Lepomis microlophus*), striped bass (*Morone saxatilis*), smallmouth bass (*Micropterus dolomieu*), and sunfish hybrids (Family Centrarchidae).

## Summary of Potential Effects

### Vegetation

The Interconnection Project involves work in previously developed and disturbed areas (i.e., existing roadway, existing agricultural fields, existing electrical energy infrastructure) as well as in disturbed Sonoran desertscrub dominated by grasses, forbs, and introduced weeds. Vegetation will be removed in areas where power poles and access roads are placed. However, the Interconnection Project will not result in landscape level impacts to the Lower Colorado River Valley subdivision of the Sonoran Desert biotic community native vegetation because of the relatively small amount of disturbance and the abundant Sonoran desertscrub vegetation occurring in the vicinity of the Study Area.

### Mammal Species

Seventeen mammal species, including one bat species, may occur in the Interconnection Project based on records near the Interconnection Project, habitat characteristics, and species' ranges (Table D-1). Four of these species were observed in the Interconnection Project during Project surveys. Interconnection Project construction activities could cause death or injury to terrestrial mammals that may not be able to flee from heavy equipment or vehicular traffic, with a higher likelihood of these impacts for individuals of species that are small, nocturnal, or fossorial. Interconnection Project construction could cause behavior changes, as individuals are expected to flee from an increase of noise, vibration, and human presence within the Interconnection Project vicinity. Individuals are expected to flee or hide, depending on the life history of the species, which could increase depredation, decrease foraging success, reduce reproductive success, and result in loss of fitness for that individual from increased metabolic output.

Interconnection Project construction activities are temporary. The loss and degradation of mammal habitat from short- and long-term Interconnection Project activities will be minor as the planned disturbance within the Interconnection Project is relatively small and the Study Area contains abundant agricultural and undisturbed desert habitat outside of the Interconnection Project. The small disturbance footprint and relatively short timeframe of construction will limit the migratory habitat loss for those species and the avoidance of the area by migratory species. As such, any loss of vegetation from construction activities will not contribute meaningfully to habitat fragmentation for mammals or decrease connectivity between habitats.



Bat activity patterns and foraging are unlikely to be impacted since bats are nocturnal and Project construction will occur during the day. Some roosting habitats may occur in the Study Area, but none are present in the Interconnection Project. The loss of potential foraging habitat in the Interconnection Project is unlikely to have individual or population-level impacts to any bat species because the area of disturbance is relatively small compared with the available foraging habitat in the Study Area. Bat species can collide with manmade structures during long distance migration. Migrating bats often fly high above ground level and do not actively echolocate. However, during normal foraging activity, bats are actively using echolocation and are typically able to detect and avoid features such as overhead transmission lines (Arnett et al. 2015).

Construction of the Project will result in an increase in fugitive dust. The fugitive dust during construction could change mammal behavior (e.g., reducing the amount of foraging). The likelihood and severity of impacts from construction will decrease with increasing distance from the Interconnection Project. These impacts will cease with completion of construction activities.

## ***Bird Species***

Thirty-three bird species typical of the Sonoran Desert may occur within and in the vicinity of the Interconnection Project (see Table D-2). Nine of these species were observed in the Interconnection Project during Interconnection Project surveys. Potential impacts on these species could include changes in behavior due to Interconnection Project-related noise, vibration, and the presence of workers and equipment; risk of collision or electrocution with new power poles or power lines; loss of breeding and foraging habitat; and impacts to nesting species. Potential impacts to nesting birds and their eggs covered under the Migratory Bird Treaty Act of 1918 (MBTA) (16 USC 703-712) will be avoided and/or minimized either by limiting ground clearing/vegetation removal activities to outside the breeding season (generally March to September or January through June for raptors) or through surveys to identify active nests and placement of buffers around those active nests until the young fledge or the nest fails.

Birds, including raptors, can collide with power lines, resulting in injury or death (APLIC 2012). Birds that are large-bodied, are fast flyers, and have large wing spans; birds that have low maneuverability (e.g., many wading birds or waterfowl); or birds that show certain behaviors (e.g., flocking, flying at altitudes at or below power line height, or nesting or foraging in close proximity to power lines) have a higher risk of impacts from power line collisions (APLIC 2012). Birds generally avoid collision with power lines when they are perceived by the bird, and therefore collision risk is lower in areas where multiple transmission lines are co-located or transmission lines are placed near other infrastructure (APLIC 2012).

Power lines can also cause electrocution when a bird is able to touch both energized and grounded electrical components at the same time, which is generally more common in birds with large wing spans, birds that use power poles (e.g., perching, foraging, roosting, or nesting), or in situations where electrical configuration includes closely spaced energized and grounded components that are easily spanned by birds (APLIC 2006).

The existing irrigation canals and sludge pond are likely to show a high bird diversity, including native and nonnative songbirds, raptors, and waterfowl. However, in most cases, these species are likely attracted by water and would not reside permanently at or near this pond owing to lack of habitat required for life history needs, including foraging, breeding, perching, or escaping predation. Although the canals lie within the Interconnection Project, impacts to any birds using them are likely limited to noise, vibration, or human presence resulting from construction activities in the vicinity of the canal crossing.

Potential impacts from increased noise, vibration, or human presence in the Interconnection Project and from loss, degradation, and fragmentation will be the same as those described for terrestrial mammals.

The increase in potential perches for hunting from the additional power poles could improve hunting habitat for some species.

## **Reptile Species**

Nineteen reptile species, including nine snake species, may occur in the Interconnection Project based on the species' habitat requirements and ranges (see Table D-3). Potential impacts to reptiles, including death, injury, or impacts arising from behavior changes, and from the loss, degradation, and fragmentation of habitat will be similar to those described for terrestrial mammals, including changes in behavior due to the presence of workers and equipment, such as moving away from sources of noise and vibration and the potential for individuals being crushed or buried during ground disturbing activities. Fossorial reptiles, reptiles that are inactive from heat or cold, and small reptiles would have a higher chance of injury or death compared with individuals that are more mobile. Reptile species near the additional power poles could experience predation because of the increase in available perches for reptile predators.

## **Amphibian Species**

Four amphibian species may occur in the Interconnection Project (see Table D-4). Potential impacts to amphibians, including death, injury, or impacts arising from behavior changes and from the loss, degradation, and fragmentation of amphibian habitat, would be similar to those described for terrestrial mammals. Proposed ground-disturbing Interconnection Project activities could impact individuals of these species, including the potential for individuals being crushed or buried during ground-disturbing activities. Because the Interconnection Project contains water sources (e.g., canals), there is potential for temporary loss of access to habitat for amphibians as a result of construction activities. However, agricultural canals are abundant in the Study Area and immediate vicinity, so the overall fragmentation of habitat would be minor and temporary.

## **Fish Species**

Although Interconnection Project activities could increase the risk of injury or death to any individual fish occurring in the concrete-lined irrigation canals during construction, most or all introduced fish in the canals would likely die in the absence of construction from lack of food, depredation, or desiccation or by being swept into agricultural areas during crop irrigation. The Interconnection Project will not contribute to the loss of habitat, or any population impacts because these sportfish and introduced fish have only been accidentally swept into the canals within the Study Area and would not occur there otherwise. Fish will experience no additional impacts from construction activities, with the exception that fugitive dust may infiltrate water where fish occur within the Interconnection Project.

## **Mitigation Measures**

The following mitigation measures are designed to reduce the risk of animal injury or spread of invasive species. For mitigation measures specific to special-status species, see Exhibit C.

- Transmission lines pose a risk of collisions and electrocution for birds, particularly raptors. To minimize that risk, the Applicant should design the Interconnection Project to incorporate reasonable measures to minimize impacts to avian species due to electrocution or collision by following the guidelines outlined in *Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006* (Avian Power Line Interaction Committee [APLIC] 2006) and *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* (APLIC 2012) to the extent feasible. Preconstruction surveys for nesting birds should be conducted by qualified biologists if vegetation-clearing activities would occur during bird nesting season (generally March through September or January through June for raptors).
- To minimize the introduction and spread of invasive species and noxious weeds, standard BMPs should be used during construction. These BMPs could include measures such as washing equipment prior to and following mobilization to the Interconnection Project.

- To reduce the potential of negative effects to terrestrial species through collisions, worker awareness trainings and low-level speed limits should be implemented.
- If trenching is included as part of Interconnection Project construction, the following should be considered to minimize injury to wildlife: when trenches cannot be backfilled immediately, the escape ramps, which can be short lateral trenches or wooden planks sloping to the surface, should be constructed at least every 90 meters (m); trench slopes should be less than 45 degrees (1:1); and any trenches left open overnight should be inspected to remove wildlife prior to backfilling.
- Standard BMPs should be employed during construction to prevent contamination of stormwater runoff from the site.
- If vegetation-disturbing activities are planned during the migratory bird nesting season (March through September or January through June for raptors), measures to avoid any active bird nests within the Interconnection Project, such as preconstruction surveys for migratory bird nests by a qualified biologist, should be taken to maintain compliance with the MBTA since suitable nesting habitat for migratory bird species is present in the Interconnection Project.
- The recommendations in AZGFD's *Guidelines for Solar Development in Arizona* (AZGFD 2009) and the AZGFD's *Wildlife Compatible Fencing Guidelines* (AZGFD 2024c) should be reviewed and implemented for the Interconnection Project as applicable and feasible to minimize impacts to wildlife and their habitats.

## Conclusion

This biological resource review analyzed all Interconnection Project route options for overhead and as-yet-unknown underground components.

Portions of the Interconnection Project and Study Area occur within previously disturbed and developed areas with existing roads, residences, energy infrastructure, and agricultural fields. Existing distribution lines occur in the Interconnection Project. Because the Interconnection Project will disturb minimal vegetation within the Interconnection Project and there is abundant habitat in the Study Area and vicinity, impacts to general plants and wildlife will be minimal and restricted to individuals. These impacts will be similar for both overhead or underground components, with no difference resulting from selection of any routes.

Whereas fewer wildlife species are expected to occur in the disturbed, developed, and in-use agricultural areas than in native desert habitat, irrigation canals and sludge ponds likely draw animals from surrounding areas to water or prey species there, and some wildlife species are specifically attracted to agricultural fields because of the open space or higher moisture. However, disturbance within the Interconnection Project will be minimal, and active agricultural land occurs within the Study Area outside of the Interconnection Project. At a landscape level, the Interconnection Project will not significantly reduce the amount of vegetation available for wildlife use, increase habitat fragmentation, or impact any likely wildlife dispersal or migration corridors. Therefore, the proposed Interconnection Project may impact individuals (both wildlife and plant) but is unlikely to result in impacts at the population level for any species.

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# EXHIBIT E. SCENIC AREAS, HISTORIC SITES AND STRUCTURES, AND ARCHAEOLOGICAL SITES

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As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219, Exhibit 1:

*Describe any existing scenic areas, historic sites and structures or archaeological sites in the vicinity of the proposed facilities and state the effects, if any, the proposed facilities will have thereon.*

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## Scenic Areas and Visual Resources

### Overview

This section of Exhibit E addresses the inventory of and potential impacts to scenic and/or visual resources in relation to construction and operation of the Selma Energy Center Interconnection Project (Interconnection Project) by producing a Visual Resource Assessment (VRA). The VRA uses the methodology identified below and includes separate discussions with regard to scenery (i.e., scenic quality) and sensitive viewers. The methodology is followed by the results of the inventory and the impact assessment, both of which include separate discussions for scenery and sensitive viewers within a 1-mile radius of the CEC Corridor (Study Area). The Interconnection Project is not located on federal or state lands (e.g., does not occur on land managed by the Bureau of Land Management (BLM), U.S. Forest Service), or lands managed by any other agency that requires conformance with visual resource management objectives or guidelines, and is not within any designated national or state scenic areas.

### Methodology

The purpose of the VRA is to identify and characterize the level of visual modification in the landscape that will result from the construction and operation of the Interconnection Project. Landscape modification is typically described in terms of the degree of visual contrast, which can potentially affect both scenic quality and sensitive viewers. Whereas scenic quality refers to the general characteristics and inherent aesthetic value of the landscape as a resource regardless of specific viewers, the term “sensitive viewer” refers to specific viewers and/or groups of viewers whose views could be affected by potential changes to the landscape. This assessment employed the following steps to assess the potential impacts to the visual environment and provide a completed VRA:

- Define a visual Study Area.
- Perform a desktop review to inventory designated scenic areas, identify existing land uses and future land use plans, and assess aerial imagery.
- Describe the affected environment by evaluating the existing landscape character within the Study Area to identify impacts from the introduction of Interconnection Project components within the landscape.
- Identify Key Observation Points (KOPs) from where the Interconnection Project may be viewed and simulations created.
- Perform a field survey by visiting each KOP, collecting site photographs, and documenting existing conditions.
- Prepare visual simulations of the Interconnection Project using the KOP photographs.



- Assess the potential visual impacts of Interconnection Project development based on the existing conditions observed during the field survey in concert with the visual simulations.

The Study Area for the VRA refers to the area within a 1-mile radius of the Interconnection Project, encompassing areas from which viewers could potentially see any part of the Interconnection Project. Visual resource information and data for this VRA were developed based on desktop research, available geographic information system (GIS) data, aerial photography, and on-site field verification and photographic documentation. The data were collected for all land within the Study Area, regardless of jurisdiction, and used to develop a comprehensive understanding of the existing landscape and associated visual resources. The Study Area consists of private land within the city of Coolidge and unincorporated Pinal County and is mostly used for active agricultural production, commercial, utility, or residential development.

Impacts to both scenic quality and sensitive viewers are determined, in part, by evaluating the visual contrast the proposed features would have with the existing landscape. Visual contrast refers to the degree that the Interconnection Project features would either match/repeat existing features in the landscape or contrast with existing landscape features. The degree of visual contrast considers the existing landforms, vegetation, and built features present in the landscape and is described in terms of the degree of perceptible change in the basic design elements of form, line, color, and texture that would be evident by the introduction of the Interconnection Project in the landscape.

The impact thresholds for this assessment are categorized as follows:

- **High:** Interconnection Project features would result in a strong degree of contrast and would appear as dominant features within the existing landscape.
- **Moderate:** Interconnection Project features would result in a moderate degree of contrast and would appear as co-dominant features within the existing landscape.
- **Low:** Interconnection Project features would result in a weak degree of contrast and would be subordinate to the features of the existing landscape.

## SCENERY

Scenery is a measure, or the inherent aesthetic value, of the landscape based on the appearance of existing landscape features. This includes unique landforms, variable vegetation, and built features. In general terms, the scenic quality is based on the premise that landscapes with greater diversity and visual variety in landforms and vegetation are more aesthetically pleasing and therefore hold greater value. For this analysis, impacts to scenic quality were determined by comparing the inventoried quality of the scenery to the anticipated quality and considering any contrast introduced because of the construction and operation of the Interconnection Project.

## SENSITIVE VIEWERS

The concept of sensitive viewers refers to members of the public who have potential views of the Interconnection Project and may be sensitive to potential changes in the surrounding scenery and their existing views. Regarding sensitive viewers, the Interconnection Project contrast is dependent on several factors, including viewing distance, duration of view, viewing condition, and degree of visibility. When combined, these factors indicate the overall visual dominance of the Interconnection Project within the landscape.

Sensitive viewing locations around the Study Area are limited and of primarily short duration (recreation or vehicular travelers). Static viewing locations where viewers would experience the site for long durations,

such as residences, were identified within the Study Area. Sensitive viewers or viewing locations that would be potentially affected by this Interconnection Project include:

- Recreational areas – No recreational areas within the Interconnection Project or Study Area.
- Vehicular travelers – Primary travel routes are Arizona State Route (SR) 287, East Selma Highway, and SR 87. Collector routes support access to local residences and commercial and agricultural land.
- Residences – A variety of residential uses occur in the Study Area.

The term “viewing distance” refers to the viewer’s physical distance from the Interconnection Project components and is predicated on the fact that one’s ability to discern details dissipates over distance. Distance zones are used to separate the Study Area into distinct classifications based on the various levels of landscape detail available to the viewer and type of project infrastructure. SWCA reviewed established agency protocols, including those published by the U.S. Forest Service, BLM, and U.S. Department of Transportation, to determine an appropriate area for each distance zone for the Study Area. The standard BLM distance zones of foreground-middle ground (0-5 miles), background (5-15 miles), and seldom seen (>15 miles) were used as a starting point. Because of the characteristics of the specific landscape and equipment being evaluated, SWCA used the following distance zone, as measured from the boundary of the Interconnection Project, to represent available views from within the Study Area (Table E-1). Note that because of the identified Study Area, middle-ground and background distance zones are not available to viewers and are therefore not included.

**Table E-1. Distance Zones**

Name	Distance	Explanation
Foreground	0 to 1.0 mile	At this distance, a viewer can perceive details of an object with clarity. Surface textures, small features, and the full intensity and value of color can be seen on foreground objects. Large-scale landscape features remain recognizable and distinguishable as landscape patterns, colors, and textures.

The duration of view refers to the length of time and associated angle of view at which the Interconnection Project would remain visible to an observer and is based on the idea that viewer attention increases as the duration of view increases. Viewing conditions refer to whether the viewer is looking down at the Interconnection Project from a superior position, looking up at the Interconnection Project from an inferior position, or viewing the Interconnection Project from an elevation that is similar to that of the Interconnection Project (i.e., a neutral view). The term “degree of visibility” refers to whether views of the Interconnection Project would be either open and unobstructed or partially to fully obstructed by other features in the existing landscape (i.e., topography, vegetation, or built features). The degree of visibility also refers to whether the Interconnection Project would be viewed against the sky (i.e., skylined) or a backdrop of landforms, vegetation, and/or built features.

Anticipated viewer sensitivities to visual changes are also discussed within the VRA, including brief discussions regarding the potential sensitivities of different types of identified viewer groups within the vicinity of the Interconnection Project. Residential and recreational viewer groups are typically considered to have high sensitivities to visual changes in the landscape, whereas viewers moving along travel routes are considered to have low-to-moderate sensitivities to visual changes (unless traveling along a designated scenic travel route or more natural appearing areas).

## Inventory Results

### SCENERY

The Interconnection Project is in a rural setting within the Sonoran Basin and Range Level III ecoregion, more specifically, within the Gila/Salt Intermediate Basins Level IV ecoregion (U.S. Department of Interior 2014). The Sonoran Basin and Range Level III ecoregion consists of generally broad, open landscapes with scattered mountains and vegetation comprising paloverde (*Parkinsonia* sp.), saguaro (*Carnegiea* sp.), and other various Sonoran Desert plants. The Study Area includes residences, commercial land, the Union Pacific Railroad, and utilities dispersed through active agricultural land, which dominates the developed portion of the Study Area. SR 287 and East Selma, the main east-west travel routes, pass through the Study Area for approximately 1 mile. SR 87, the main north-south travel route, passes through the middle of the Study Area for approximately 4 miles. Commercial use includes the Storey Energy Center and Saint Solar projects parallel to SR 87. Scenic views from the Study Area include open fields that are actively being used year-round, open desert beyond the Study Area to the east, and panoramic views of the Granite Hills approximately 7.4 miles to the east and Picacho Peak approximately 13.5 miles to the southeast. Human development within the Study Area and throughout the ecoregion is characterized as agricultural and supporting infrastructure development including high voltage transmission and lower voltage distribution.

The scenic quality within the Study Area is considered low based on the general lack of visually interesting landforms and vegetation, dominant views with focal features and visually sensitive resources, or the prominence of existing built features and development that contrasts with the appearance of the natural landscape.

KOPs were chosen to represent potential views of the Interconnection Project from major and minor roadways, agricultural and residential areas, and utility area (substation). Four KOPs representing typical viewing conditions of prominent Interconnection Project views of components were selected. SWCA conducted in-field assessments on April 10, 2024, at each of the KOPs and collected associated photographs, notes on the site's visual aspects, and pertinent location information. Table E-2 lists the identified KOPs and associated viewer type and reason for inclusion in the VRA.

**Table E-2. Selected KOP Locations and Sensitive Viewer Type**

KOP	Location (Latitude, Longitude)	Sensitive Viewer Group/ Distance from Viewer	Reason for Inclusion
1	View facing southwest from East Steele Road 32.879587°N, -111.506772°W	Vehicular travelers, residential area Proposed: 0.25 mile	Representative of views while traveling along local access road, East Steele Road, with local access to residential and agriculture areas. Residential locations also represent longer duration views that are available to viewers adjacent to the Study Area.
2	View facing northeast from intersection of East Laughlin Road and SR 87 32.8723°N, -111.515262°W	Vehicular travelers Proposed: 0.3 mile	Representative of views while traveling along local access road, East Laughlin Road and main travel route, SR 87, with local access to residential and agriculture areas.
3	View facing east from East Earley Road and SR 87 32.864933°N, -111.515293°W	Vehicular travelers, residential area Proposed: 0.25 mile	Representative of views while traveling along local access road, East Earley Road and SR 87, with local access to residential and agriculture areas. Residential locations also represent longer duration views that are available to viewers adjacent to the Study Area.

KOP	Location (Latitude, Longitude)	Sensitive Viewer Group/ Distance from Viewer	Reason for Inclusion
4	View facing northwest from SR 87 32.84854°N, -111.515214°W	Vehicular Travels Proposed: 600 feet	Representative of views while traveling north along SR 87.

## **SENSITIVE VIEWERS**

### **Residences**

A variety of individual residences are within the Study Area. The nearest residential viewers are approximately 210 feet north of the Interconnection Project located near the intersection of East Earley Road and SR 87. Existing transmission line infrastructure across the Study Area is also visible from the identified residences. The height of these existing features, along with the repetitive pattern of structure and conductor, makes them highly visible and dominant features as they bisect the landscape. Views from residences are mostly open and panoramic in nature and include distant views of the Sacaton Mountains to the northwest, the Picacho Mountains to the southeast, agricultural fields, and existing transmission infrastructure. Residential viewers are assumed to have a relatively long duration of view and relatively high sensitivities to visual changes within the Study Area.

### **Recreation Areas**

The Study Area does not include any established recreational uses. The nearest recreation area to the Interconnection Project is the Pinal County Fairgrounds, approximately 2 miles west of the Interconnection Project. Other recreational uses within the Study Area include activities such as equestrian use, walking, or bicycling on public streets or privately owned property.

The Pinal County Open Space and Trails Master Plan (Pinal County 2007) highlights multiple segments of planned multi-use trail corridors within the Study Area, as identified in Exhibit A-3. These planned trail segments are located approximately 0.7 mile north of the Interconnection Project and intersecting the southern portion of the Interconnection Project. Existing views from the planned trail segments include rural landscapes that are dominated by highly visible existing large-scale transmission lines and energy infrastructure as well as highways and a railroad.

### **Travel Routes**

The primary travel routes crossing the Study Area and within proximity of the Study Area are SR 287, SR 87, and East Selma Highway. Collector routes that support access to local residence areas are within the proximity of the Interconnection Project and include East Saddleback Road, Palm Lane, North Citrus Lane, North Sunset Lane, North Desert Lane, East Steele Road, North La Palma Road, South Carter Lane, East Earley Road, South Christensen Road, East Laughlin Road, Unger Road, Vail Road, East Arizona Western Boulevard, East Cornman Road, and additional unnamed roads. Views from travel routes within the Study Area are typically of active residential and agricultural land in the foreground and middle ground moving to dominant mountain ranges in the background. Existing transmission lines and infrastructure within the Study Area are also visible to users because of their dominating height and highly visible features within the foreground. Similar to residential views, the views from travel routes are mostly open and panoramic in nature and include distant views to the mountains and agricultural operations. Viewers moving along travel routes are expected to have relatively short durations of view based on travel speeds and low sensitivities to visual changes as a result of the existing visible development and infrastructure.

## **Impact Assessment Results**

Below is a general description of the potential impacts to scenic quality and sensitive viewers based on the construction and operation of the Interconnection Project. Overall, impacts associated with the

Interconnection Project will be low because the Interconnection Project components will appear similar to the existing transmission lines and existing infrastructure that are adjacent to the Interconnection Project and the visually dominant features in the foreground landscape.

## **SCENERY**

The Interconnection Project will introduce a new 230-kV transmission line corridor (structures and conductors) and associated substation facilities. Depending on the portion of the Interconnection Project to be constructed aboveground, the Interconnection Project will add up to 30 structures. The structures will be approximately 60 to 110 feet high, spanning anywhere from 100 to 1,000 feet, will be made of weathering steel, and will be either self-supporting or guyed. The lines, forms, colors, textures, and scale of the Interconnection Project will be similar in appearance to other transmission lines and infrastructure within the landscape. The existing patchwork of operational agricultural fields and residential land will not be interrupted by the additional Interconnection Project equipment. The foreground colors will match the various hues of green and beige in the patchwork pattern. The Interconnection Project is expected to create minor impacts to the existing, relatively low scenic quality within the Study Area. Interconnection Project components could be seen but will not attract attention and will be similar to other built facilities within the landscape, which would result in a weak degree of contrast.

## **SENSITIVE VIEWERS**

The following is a summary of anticipated impacts to sensitive viewers resulting from the construction and operation of the Interconnection Project.

### **Residences**

Views from residences within or adjacent to the Study Area will vary from unobstructed open views to partially obstructed views based on location and depending on foreground vegetation and associated out buildings/built facilities on adjacent properties. Based on the generally flat landforms of the surrounding landscape, views from residences will generally be from a neutral position and will include skylined views of the Interconnection Project gen-tie and structures within the Project Substation, where visible.

The nearest residence, near the intersection of East Earley Road and SR 87, will have partially obstructed views of the Interconnection Project because of vegetation and existing buildings, as represented by KOP 3 (see Exhibit G-11), approximately 200 feet west of the Interconnection Project. The Interconnection Project – Preferred Route continues north along SR 87 and the Interconnection Project – Subroute Option will turn east for 0.25 mile, turn north for 0.1 mile across canals, and turn towards SR 87 for approximately 0.3 mile where it will connect to either Option A or Option B. Foreground color patterns are just visible from this vantage point and do not change with the introduction of the Interconnection Project. The structures protrude into the light pale sky above the background mountains. The lines, forms, colors, textures, and scale of the Interconnection Project facilities will be similar in appearance to other transmission lines and infrastructure within the existing landscape. Despite the relatively close proximity of these residences and the anticipated long duration of view, the Interconnection Project will begin to attract attention and appear as co-dominant features within the existing landscape, resulting in a moderate degree of contrast and medium impacts.

KOP 1 also represents a residence near East Steele Road that would have partially obstructed views of the Interconnection Project because of vegetation and existing infrastructure, as represented by KOP 1 (see Exhibit G-5 to G-7), approximately 0.45 mile northeast of the Interconnection Project – Preferred Route, 0.35 mile northeast of Option A, and 0.45 mile northeast of Option B of the Interconnection Project. Foreground color patterns are just visible from this vantage point and do not change with the introduction of the Interconnection Project. The structures will protrude into the light pale sky above the background mountains. The lines, forms, colors, textures, and scale of the Interconnection Project facilities will be

similar in appearance to other transmission lines and infrastructure within the existing landscape. Despite the relatively close proximity of these residences and the anticipated long duration of view, the Interconnection Project will be visible but subordinate to other built facilities within the landscape, resulting in a weak degree of contrast and low impacts. The underground portion of the Interconnection Project will have lower contrast produced by the Interconnection Project.

## **Recreation Areas**

Multiple segments of planned multi-use trail corridors within the Study Area are identified in the Pinal County Open Space and Trails Master Plan (Pinal County 2007). Views of the Interconnection Project from these planned segments will be from a distance of approximately 0.7 mile to the north and intersecting the Interconnection Project to the south. Despite the relatively close proximity of these views, and generally high sensitivity of recreation viewers, the lines, forms, colors, textures, and scale of the Interconnection Project features would mimic those of the existing utility infrastructure within the area. The degree of contrast from the planned segments will be weak, and the Interconnection Project will be subordinate to the features of the existing landscape, including large-scale transmission lines and energy infrastructure as well as highways and a railroad.

## **Travel Routes**

Views from travel routes within the Study Area will vary based on location and range from unobstructed to partially or fully obstructed. Most views of the Interconnection Project will be partially obstructed by existing facilities within the landscape, such as trees, existing buildings, and other built facilities. Based on the generally flat landform on which the Interconnection Project will be, views of the Interconnection Project from travel routes will generally be from a neutral position and will include skylined views of the transmission lines and infrastructure, where visible.

Views of the Interconnection Project from East Steele Road, a local travel route to support residences and agriculture, are represented by KOP 1 (see Exhibit G-5 to G-7), approximately 0.45 mile northeast of the Interconnection Project – Preferred Route, 0.35 mile northeast of Option A, and 0.45 mile northeast of Option B of the Interconnection Project. From this vantage point, Interconnection Project structures appear co-located with existing equipment and blend into the overall view. The lines, forms, colors, textures, and scale of the Interconnection Project components are like those found within the existing visual setting landscape but will be shorter in height in comparison to the 500-kV transmission line. Despite the relatively close proximity of this road, the Interconnection Project could be seen but will not attract attention and will be subordinate to other facilities within the landscape, resulting in a weak degree of contrast and low impacts. The underground portion of the Interconnection Project will have the lowest contrast produced by the Interconnection Project.

The intersection of SR 87, a main north-south travel route, and East Laughlin Road, a local travel route to support residences and agriculture, is represented by KOP 2 (see Exhibit G-8 to G-10), approximately 190 feet west of the Interconnection Project – Preferred Route, Option A, and Option B of the Interconnection Project where it is parallel to East Laughlin Road. The nearest transmission structure is approximately 0.25 mile to the Interconnection Project – Preferred Route, 0.25 mile to Option A, and 0.2 mile to Option B northeast of KOP 2. The form, line, color, texture, and scale of the Interconnection Project facilities will be similar to those of the existing transmission line and infrastructure in the area and thus will not attract attention, resulting in weak contrast and low impacts. The underground portion of the Interconnection Project will have the lowest contrast produced by the Interconnection Project.

The intersection of SR 87, a main north-south travel route, and East Earley Road, a local travel route to support residences and agriculture, is represented by KOP 3 (see Exhibit G-11), approximately 200 feet west of the Interconnection Project. The Interconnection Project – Preferred Route continues north along SR 87 and the Interconnection Project – Subroute Option will turn east for 0.25 mile, turn north for 0.1 mile

across canals, and turn towards SR 87 for approximately 0.3 mile where it will connect to either Option A or Option B. The form, line, color, texture, and scale of the Interconnection Project are similar in appearance to other transmission lines and infrastructure within the existing landscape. The Interconnection Project will begin to attract attention at KOP 3 due to the appearance of co-dominant features within the existing landscape, resulting in a moderate degree of contrast and moderate impacts.

SR 87 is a north–south-oriented primary travel route within the Study Area that is represented by KOP 4 (see Exhibit G-12) approximately 0.1 mile southeast of the Interconnection Project. The lines, forms, colors, textures, and scale of the Interconnection Project features will be similar to those of the existing transmission line infrastructure in the area. Due to the orientation of travelers along SR 87 in the northbound and southbound directions, the Interconnection Project would be viewed peripherally and for a short duration of time based on travel speeds. Intervening vegetation, existing transmission line infrastructure, and surrounding roadway and residential infrastructure will further influence the viewers’ ability to focus on the Interconnection Project. The Interconnection Project could be seen, will begin to attract attention, and will appear co-dominant to other built features within the landscape, resulting in a moderate degree of contrast and moderate impacts.

## CONCLUSION

Impacts to sensitive viewers will be low to moderate from residences due to close proximity to the Interconnection Project and existing infrastructure. As seen from the public viewpoints in the surrounding area, the overall Interconnection Project will be similar in form, line, color, and texture, compared with other energy facility and transmission infrastructure in the Study Area, which will result in low to moderate impacts to scenery. Additionally, views from public roadways and residential areas will result in low to moderate impacts as a result of perceived contrast due to intervening visual elements, existing infrastructure, composition of views of the Interconnection Project, and low number of resources within the Study Area.

## Historic Sites and Structures, and Archaeological Sites

As required by the Arizona Corporation Commission *Rules of Practice and Procedure* R14-3-219, the potential effects of the proposed Interconnection Project on historic sites and structures and archaeological sites were assessed. The assessment was also prepared to support Arizona Corporation Commission compliance with the State Historic Preservation Act (ARS 41–861 through 41–864), which requires state agencies to consider impacts of their programs on historic properties listed in or eligible for the Arizona Register of Historic Places (ARHP) or National Register of Historic Places (NRHP) and to provide the Arizona State Historic Preservation Office (SHPO) an opportunity to review and comment on the actions that affect such historic properties.

To be eligible for the ARHP/NRHP, a property must be at least 50 years old (less if it has special significance) and have national, state, or local significance in American history, architecture, archaeology, engineering, or culture. It should also possess integrity of location, design, setting, materials, workmanship, feeling, and association, and meet at least one of the four following criteria:

- Criterion (a): be associated with significant historical events or trends,
- Criterion (b): be associated with historically significant persons,
- Criterion : have distinctive characteristics of a style or a type, or have artistic value, or represent a significant entity whose components may lack individual distinction, and
- Criterion (d): have yielded or have the potential to yield important information concerning history or prehistory.



## Methodology

The Study Area, for the purpose of assessing potential impacts to historic sites, structures, and archaeological sites, is defined as a 1-mile-radius buffer from the CEC Corridor. SWCA reviewed archival records to identify such properties within the Study Area. Data sources searched include AZSITE, Arizona's statewide cultural resources database that includes records from the Arizona State Museum (ASM), Arizona State University, SHPO, and the BLM; SWCA records; the ARHP, the NRHP database; General Land Office (GLO) plat maps; and historical topographic maps.

## Previous Cultural Resources Projects

A records review of AZSITE identified 37 previous cultural resources surveys that have taken place within the Study Area. These projects occurred from 1985 to 2019 in support of projects relating to electrical and fiber optic transmission, pipeline maintenance, electrical generation, transportation, geotechnical drilling, lake development, and both San Carlos Irrigation Project (SCIP)/SCIDD and HIDD distribution line installation and maintenance. Of these, 17 cultural surveys intersect the proposed CEC Corridor and cover approximately 334 of the 418 total acres (80%) of the proposed CEC Corridor (Table E-3).

Out of the 17 cultural surveys within the proposed CEC Corridor, only two surveys have been conducted within the last 10 years. The SHPO has provided guidance for the reliance on survey data that are 10 years or older (SHPO 2004). Two surveys (1987-222.ASM and 11.136.SHPO) conducted before 1995 did not use the current ASM site definition criteria (ASM 1995). Of the remaining 13 surveys, it is SWCA's professional opinion that 11 of the 15 surveys that are more than 10 years old used survey strategies that meet current methodological standards as set forth by SHPO for full coverage in Arizona, whose principal investigators meet current professional qualification standards, and it is unlikely that there are additional resources present in the proposed CEC Corridor that have become at least 50 years old since the previous surveys were conducted. The 13 surveys that have been evaluated as adequate cover approximately 258 of the total 418 acres (62%) of the proposed CEC Corridor and can be relied on for current inventory purposes.

**Table E-3. Previous Cultural Resource Projects Intersecting the Proposed CEC Corridor**

Agency Number	Project Name	Organization	Year
1987-222.ASM	U.S. Telecom Buried Fiber Optic Cable	Dames & Moore, Phoenix Cultural Resources Services	1986-1987
1997-209.ASM	SFPP Arizona Reconditioning Project	William Self Associates	1997
1998-443.ASM	SR 87 Oracle Maintenance Coolidge	Archaeological Research Services, Inc.	1998
1999-587.ASM	PBNS Level 3 Fiber Optic Line	SWCA, Phoenix	1999
2000-140.ASM	KMEP Arizona Anomaly Repair Project	William Self Associates	2000
2000-723.ASM	AT&T NexGen/Core Project Link 3 Class 3 Survey	Western Cultural Resource Management, Inc.	2000
2001-406.ASM	Surveys of Six Proposed Reroutes for a Proposed Fiber Optic Cable ROW	Western Cultural Resource Management, Inc.	2001
2003-910.ASM	Cultural Resources Survey of the 360Networks Fiber Optics Lines	TRC Mariah Associates, Inc.	2000
2004-627.ASM	Add. D: El Paso to Los Angeles Fiber Optic Cable Project: GRIC Alt B Reroute	SWCA	2001
2004-679.ASM	AT&T NexGen/Core Project	Western Cultural Resource Management, Inc.	2000-2002
2007-692.ASM	Pinal West to Dinosaur Transmission Line Surveys	Desert Archaeology, Inc.	2007

Agency Number	Project Name	Organization	Year
2009-170.ASM	Picacho Energy Project Environmental	SWCA	2009
2011-203.ASM	Class III Cultural Resources Surveys in Pima and Pinal Counties, Arizona; SCIP 2011 Second Quarter	Bureau of Indian Affairs, San Carlos Irrigation Project (SCIP)	2011
2012-363.ASM	TEP Pinal Central to Tortolita Survey WRI 1610.86 CR 520	Westland Resources	2012
11.136.SHPO/ Temp. No. 93	Tucson Aqueduct Phase A Survey Sites	Arizona State Museum	1980
2019-218.ASM	East Line Solar	SWCA	2019
Saint Solar	Saint Solar Records Review and Site Inspection	Environmental Planning Group, LLC.	2019

Note: Shading denotes surveys that SWCS believes **cannot** be relied on for current inventory purposes.

## Historic-era Sites

The records review identified two historic-era sites within the Study Area (Table E-4), neither of which intersect the CEC Corridor. Site AZ AA:2:329(ASM) consists of the remnants of the historic-era Hess Homestead. BLM land patent records indicate Daniel Hess was deeded the land in 1938 under the Desert Land Act of 1877. Features of the homestead include five concrete foundations, a shaft possibly from a privy, and associated artifacts. The site was determined not eligible for inclusion in the ARHP/NRHP by SHPO (Luhnow and Schilz 2010). Site AZ AA:2:339(ASM) consists of a historic-era water pumping station with three irrigation ditches, three water control devices, and one well built in the 1950s-60s, but has been abandoned since the early 1980s. The site was recommended not eligible for inclusion in the ARHP/NRHP (Luhnow and Schilz 2010).

**Table E-4. Previously Recorded Historic-era Sites within the Study Area**

Site Number	Cultural/Temporal Affiliation	Site Type	ARHP/NRHP Eligibility Status	Associated Reference(s)	Distance from CEC Corridor (miles)
AZ AA:2:329(ASM)	Euro-American/ Late Historic-era ca. 1938	Hess Homestead.	Determined not eligible	Luhnow and Schilz 2010	0.87
AZ AA:2:339(ASM)	Euro-American/ Late Historic-era ca. 1954-1982	Field irrigation pumping system	Recommended not eligible	Luhnow and Schilz 2010	0.64

## Historic-era Structures

The records review identified 19 historic-era in-use structures within the Study Area (Table E-5). These structures consist of seven roads/highways, eight canals/ditches, one railroad, two powerlines, and one farmstead. AZ AA:2:341(ASM) consists of 22 historic-era concrete-lined field ditches adjacent to agricultural fields. Four of the ditches are abandoned; however, the majority are in-use or temporarily inactive (Luhnow and Schilz 2010). Eight of the overall 19 in-use structures intersect the proposed CEC Corridor. These are the original SR 84 alignment (now SR 87), SR 87, Selma Highway, the Florence Casa Grande Canal Extension, the Casa Grande Canal, the SCIDD No. 1 Cross-cut Canal, the Southern Pacific Railroad: Wellton-Phoenix-Eloy Spur, and a utility line.

**Table E-5. Previously Recorded Historic-Era In-Use Structures within the Study Area**

Site Number	Cultural/Temporal Affiliation	Site Type	ARHP/NRHP Eligibility Status	Associated Reference(s)	Distance from CEC Corridor (miles)
AZ AA:2:118(ASM)	Euro-American/ Late historic-era (A.D. 1936–present)	SR 84	Segments determined eligible (Criterion D)	Fenicle et al. 2015	Intersects Interconnection Project – Preferred Route
AZ AA:2:132(ASM)	Euro-American/ Middle to late historic-era (A.D. 1800–present)	Maintained gravel road	Determined not eligible	White et al. 2012	0.93
AZ AA:2:133(ASM)	Euro-American/ Late historic-era (A.D. 1928–present)	Florence Casa Grande Canal Extension	Segments determined eligible (Criteria A and D)	Young 2015a	Intersects Interconnection Project – Preferred Route
AZ AA:2:149(ASM)	Euro-American/ Late historic-era (ca. A.D. 1900–present)	SR 287	Segments determined eligible (Criterion D)	Young 2015b	0.35
AZ AA:2:213(ASM)	Euro-American/ Late historic-era (A.D. 1900–present)	Steele Road	Determined not eligible	Young 2015b	0.15
AZ AA:2:219(ASM)/ AZ AA:2:333(ASM)	Euro-American/ Late historic-era (A.D. 1922–present)	Selma Highway/Selma School Road	Recommended not eligible	Tactikos et al. 2010; Luhnnow and Schilz 2010	Intersects Interconnection Project – Preferred Route
AZ AA:2:297(ASM)	Euro-American/ Middle to late historic-era (A.D. 1800–present)	Utility line	Determined not eligible	Luhnnow and Schilz 2010	Intersects CEC Corridor
AZ AA:2:305(ASM)	Euro-American/ Late historic-era (A.D. 1900–present)	Historic Farmstead	Determined eligible (Criterion D)	Henderson et al. 2009	0.95
AZ AA:2:330(ASM)	Euro-American/ late historic-era (ca. A.D. 1920s–present)	Laughlin Road	Recommended not eligible	Luhnnow and Schilz 2010	0.84
AZ AA:2:338(ASM)	Euro-American/ late historic-era (ca. A.D. 1940s–present)	Transmission line	Recommended not eligible	Luhnnow and Schilz 2010	0.66
AZ AA:2:341(ASM)	Euro-American/ late historic-era (ca. A.D. 1936–present)	Discontinuous irrigation lateral canals	Recommended not eligible	Luhnnow and Schilz 2010	0.5
AZ AA:3:209(ASM)	Euro-American/ middle to late historic-era (A.D. 1889–present)	Casa Grande Canal/ SCIP/SCIDD “No. 16 Lake Outlet”	Segments determined eligible (Criteria A, C, D)	Moreno et al. 1996	Intersects Interconnection Project – Route and Subroute Option
AZ AA:6:63(ASM)	Euro-American/ late historic-era (ca. A.D. 1920s–present)	SR 87	Segments determined eligible (Criteria A and D)	White et al. 2012; Prasciunas et al. 2012	Intersects Interconnection Project – Preferred Route
AZ T:10:84(ASM)	Euro-American/ late historic-era (A.D. 1926–present)	Southern Pacific Railroad: Wellton-Phoenix-Eloy Spur	Segments determined eligible (Criterion A)	White et al. 2012	Intersects CEC Corridor
No. 1 Cross-cut Canal/ SCIP Sublateral 17-37	Euro-American/ late historic-era (ca. A.D. 1920s–present)	Lateral water conveyance structure	Recommended not eligible	Pfaff (1996)	Intersects Interconnection Project – Preferred Route

Site Number	Cultural/Temporal Affiliation	Site Type	ARHP/NRHP Eligibility Status	Associated Reference(s)	Distance from CEC Corridor (miles)
SCIP Sublateral 17-22	Euro-American/ late historic-era (ca. A.D. 1920s–present)	Lateral water conveyance structure	Determined not eligible	Pfaff (1996)	0.63
SCIP Sublateral (1) 17-37-9	Euro-American/ late historic-era (ca. A.D. 1920s–present)	Lateral water conveyance structure	Determined not eligible	Pfaff (1996)	0.42
SCIP Sublateral (2) 17-37-11	Euro-American/ late historic-era (ca. A.D. 1920s–present)	Lateral water conveyance structure	Determined not eligible	Pfaff (1996)	0.68
SCIP Sublateral (3) 17-37-13	Euro-American/ late historic-era (ca. A.D. 1920s–present)	Lateral water conveyance structure	Determined not eligible	Pfaff (1996)	0.94

Note: Shading indicates historic-era in-use structures intersecting the CEC Corridor.

The original GLO survey plat map of Township 6 South, Range 8 East, filed in 1890 depicts the FLORENCE CANAL (now the Casa Grande Canal) and an OLD ROAD TO TUCSON intersecting the proposed CEC Corridor in sections 27 and 34. A well and the Desert Land Claims of William J. Hunsucker, J.L. Copeland, and Chas. A. Shibell are depicted within the Study Area. An area labelled OLD RUINS is depicted within the Study Area around the approximate location of AZ AA:3:316(ASM). The dependent resurvey GLO plat map of Township 6 South, Range 8 East, filed in 1930, depicts the Florence Canal labelled on the 1890 survey plat as the CASA GRANDE FLORENCE CANAL, along with an adjacent unimproved road. SR 87 is present within the proposed CEC Corridor, as well as one unimproved road along the modern alignment of Selma Highway and one other unnamed unimproved road. The SOUTHERN PACIFIC railroad is depicted within the proposed CEC Corridor and lined with a parallel utility line. There are three unnamed buildings / structures depicted within the proposed CEC Corridor. Within the Study Area, the surrounding area of La Palma has become much more developed with multiple utility lines and/or fence lines crossing throughout each section. There are three unnamed, unimproved roads, 10 structures, McDowell School, and an agricultural field within the Study Area.

The original GLO survey plat map of Township 7 South, Range 8 East, filed in 1915, depicts a FRAME HOUSE within the southern portion of the proposed CEC Corridor. Within the Study Area, there are two north-south trending roads (the westernmost one is within the proposed CEC Corridor) that converge in the southern portion of Section 3 and continue just south of the Study Area to Roy S. Ward's house. Additionally, the plat depicts R. H. Miller's house in northwest corner of Section 4 within the Study Area.

The 1922 USGS Signal Peak, Arizona, 1:62,500 and 1922 Red Rock No. 2, Arizona 1: 48,000 quadrangle maps depict the Casa Grande-Florence Canal, as well as SR 87, SR 287, an unimproved road along the modern alignment of Steele Road, an improved/unimproved road along the modern alignment of Selma Highway, five wells, and three structures within the proposed CEC Corridor. Within the Study Area, the maps depict 13 structures, the Pinal School (labelled on the GLO plats as McDowell School), 10 wells, five unimproved roads, and a structure/well in the approximate location of AZ AA:2:305(ASM). Many of the historic-era features depicted on these maps likely correspond to others on the GLO plat maps.

The 1965 USGS Eloy North, Arizona, the 1965 Coolidge, Arizona, and the 1965 Picacho Reservoir, Arizona, 1:24,000 quadrangle maps depict the majority of the modern roads and highways as well as the unimproved agricultural access roads present in modern aerial imagery. There are an increased number of wells and structures present. Both the Florence-Casa Grande Canal Extension and the Casa Grande Canal are depicted, with a north-south oriented sublateral canal (No. 1 Crosscut) connecting the two. SCIP sublateral canals 17-53, 17-37-13, 17-37-11, and 17-37-9 are depicted.

Historic aerial imagery from 1961 depicts the proposed CEC Corridor and surrounding area as primarily agricultural with residences throughout. AZ AA:2:329(ASM) is visible but AZ AA:2:305(ASM) is not. There are at least four sets of structures visible within the proposed CEC Corridor, only one (remnants) of which is visible on modern aerial imagery (NETROnline 2024).

The NRHP database maintained by the National Park Service was also consulted to ascertain if any cultural resources previously listed in the NRHP are located in the proposed CEC Corridor or Study Area. No NRHP-listed properties were identified. Additionally, the National Scenic and National Historic Trail webmap indicates that the Congressionally-designated, 1,200-mile-long Juan Bautista de Anza National Historic Trail (1775–1776) is approximately 2 miles west of the proposed CEC Corridor (outside of the Study Area) (National Park Service 2024).

## Archaeological Sites

There are three previously recorded archaeological sites within the Study Area (Table E-6), none of which intersect the proposed CEC Corridor. Site AZ AA:2:84(ASM) is a Pre-Classic period Hohokam artifact scatter which was recommended eligible for inclusion in the ARHP/NRHP under Criterion D (Newsome and Berg 2001). Site AZ AA:3:117(ASM) is an archaic lithic scatter, which has not been evaluated for inclusion in the ARHP/NRHP, though it may have been destroyed by road construction (Van Nimwegen and Henderson 1991). Site AZ AA:3:316(ASM) consists of four Hohokam Santa Cruz to Sacaton phase trash mounds and an associated artifact scatter. This site was determined eligible for inclusion in the ARHP/NRHP under Criterion D (White et al. 2012).

**Table E-6. Previously Recorded Archaeological Sites within the Study Area**

Site Number	Cultural/Temporal Affiliation	Site Type	ARHP/NRHP Eligibility Status	Associated Reference(s)	Distance from CEC Corridor (miles)
AZ AA:2:84(ASM)	Hohokam Pre-Classic period (A.D. 750–1100)	Artifact scatter	Recommended eligible (D)	Newsome and Berg 2001	0.95
AZ AA:3:117(ASM)	Unknown Indigenous Archaic (8,000 B.C.–A.D. 200)	Lithic scatter	Not evaluated (likely destroyed)	Van Nimwegen and Henderson 1991	0.98
AZ AA:3:316(ASM)	Hohokam Santa Cruz to Sacaton phases (A.D. 800–1150)	Trash mounds and artifact scatter	Determined eligible (D)	White et al. 2012	0.84

## Assessment of Effects

A project can have direct and/or indirect effects on historic sites, historic in-use structures, and archaeological sites when it alters the characteristics that qualify it for listing in the ARHP/NRHP. Only historic properties (i.e., resources that are listed in or eligible for the ARHP/NRHP) need to be considered for Interconnection Project impacts. Direct effects result when a project physically impacts a historic resource, whereas indirect effects to historic properties are typically visual. Effects are adverse when they diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties include:

- Physical destruction of or damage to all or part of the property.
- Removal of the property from its historic location.
- Change of the character of the property’s use of physical features within the property’s setting that contribute to its historic significance.

- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic characteristics.
- Neglect of a property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe.
- Transfer, lease, or sale of a property out of government ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

## **DIRECT EFFECTS**

Five historic properties (all historic-era in-use structures) intersect the proposed CEC Corridor. These are SR 84, SR 87, the Florence Casa Grande Canal Extension, the Casa Grande Canal, and the Southern Pacific Railroad: Wellton-Phoenix-Eloy Spur. Four of these also intersect the Interconnection Project – Preferred Route (SR 84, SR 87, the Florence Casa Grande Canal Extension, and the Casa Grande Canal). The Casa Grande Canal also intersects the proposed Interconnection Project – Subroute Option. These properties are all in-use, and the Interconnection Project will avoid directly impacting these historic properties through engineering controls.

## **INDIRECT EFFECTS**

The records review identified an additional four historic properties within the Study Area that do not intersect the proposed CEC Corridor. These are all archaeological sites and historic-era in-use structures recommended or determined eligible under Criterion D. Construction of overhead elements of the Interconnection Project will not introduce visual, atmospheric, or auditory elements to the setting that would diminish the integrity of the characteristics which make them, or the five historic properties identified in the direct effects section, eligible for the ARHP/NRHP. The underground portion of the Interconnection Project will not introduce indirect effects to historic properties.

## ***Conclusion***

The records review identified that approximately 62% of the proposed CEC Corridor has been previously and adequately surveyed for cultural resources. Five historic properties (all linear historic-era in-use structures) intersect the proposed CEC Corridor. The Interconnection Project will avoid directly impacting these historic properties through engineering controls. Four additional historic properties are within the Study Area and don't intersect the proposed CEC Corridor, and all of these properties are recommended or determined eligible under Criterion D. The Interconnection Project will not introduce indirect effects that would adversely affect the nine identified historic properties.

To ensure that other potential historic properties will not be impacted within the proposed CEC Corridor, the Applicant will complete a cultural resources inventory of the portions that have not been previously adequately surveyed. The inventory will identify and evaluate any cultural resources that may be present. If any historic properties are encountered, the inventory will provide recommendations on how to mitigate any adverse effects on those historic properties.

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**From:** [Caroline Klebacha](#)  
**To:** [Andrew Vorsanger](#)  
**Cc:** [Colin Agner](#); [Cara Bellavia](#)  
**Subject:** Re: Request for Consultation – Selma Energy Center Interconnection Project, Application for a Certificate of Environmental Compatibility  
**Date:** Tuesday, August 6, 2024 4:58:48 PM  
**Attachments:** [image001.png](#)

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Good afternoon,

Thank you for consulting with our office regarding the Selma Energy Center Interconnection Project. I have one question and several comments. First, can you provide us with more information regarding the purpose of the Subroute Option that will avoid approximately 0.25 mile of SR-87?

Next, SHPO agrees that 62 percent of the project area has been adequately surveyed and does not require additional survey at this time. We request that the remainder of the project area be surveyed for cultural resources per SHPO and ASM guidelines. Once the survey is complete, please submit the report to our office for additional review and comment.

Lastly, we request the following two conditions be added to the CEC, should it be approved by the Line Siting Committee.

1. The Applicant shall consult the State Historic Preservation Office (SHPO) pursuant to A.R.S. § 41-861 through 41-864, the State Historic Preservation Act. Construction for the project shall not occur without SHPO concurrence. Any project involving federal land is a federal undertaking and requires SHPO concurrence on the adequacy of the survey and area of potential effects. The applicant shall coordinate with SHPO regarding the status of Section 106 consultation.
2. If any archaeological, paleontological, or historical site or a significant cultural object is discovered on private, state, county, or municipal land during the construction or operation of the Project, the Applicant or its representative in charge shall promptly report the discovery to the Director of the Arizona State Museum (ASM), and in consultation with the Director, shall immediately take all reasonable steps to secure and maintain the preservation of the discovery as required by A.R.S. §41-844 or A.R.S. §41-865, as appropriate.

Please let us know if you have any questions or comments.

Thank you,

Caroline

**Caroline Klebacha, M.A.**  
**Archaeological Compliance Specialist**  
**State Historic Preservation Office**  
*A Division of Arizona State Parks & Trails*  
**Please use [azshpo@azstateparks.gov](mailto:azshpo@azstateparks.gov) for initial consultation!**

*1110 West Washington Street, Suite 100*

#### **Exhibit E-1a. SHPO Consultation.**

Phoenix, AZ 85007-2957

Phone: [REDACTED]

Email: [REDACTED]

Web: <http://AZStateParks.com/SHPO>



On Wed, Jul 10, 2024 at 10:41 AM AZSHPO - AZPARKS <[azshpo@azstateparks.gov](mailto:azshpo@azstateparks.gov)> wrote:

SHPO-2024-0686 (175778)

----- Forwarded message -----

From: **Andrew Vorsanger** <[REDACTED]>  
Date: Tue, Jul 9, 2024 at 3:46 PM  
Subject: Request for Consultation – Selma Energy Center Interconnection Project, Application for a Certificate of Environmental Compatibility  
To: [azshpo@azstateparks.gov](mailto:azshpo@azstateparks.gov) <[azshpo@azstateparks.gov](mailto:azshpo@azstateparks.gov)>  
Cc: Colin Agner <[REDACTED]>, Cara Bellavia <[REDACTED]>

Good Afternoon,

On behalf of Selma Energy Center LLC, we respectfully request that the State Historic Preservation Office (SHPO) review and provide comment on the Selma Energy Center Interconnection Project to support the Arizona Corporation Commission's compliance with the State Historic Preservation Act (Arizona Revised Statutes 41-861 through 41-864). Please find attached the letter that contains information about the Project in accordance with the SHPO's September 2022 "ACC-SHPO Consultation Checklist for Compliance with the State Historic Preservation Act." Also included are the project location and Class I results maps. We look forward to consulting with your office on this project, and please do not hesitate to contact us with any questions.

Thank you.

**Andrew Vorsanger** | he, him, his

Senior Cultural Resources Team Lead - Arizona

**SWCA Environmental Consultants**  
20 E. Thomas Road, Suite 1700

#### Exhibit E-1b. SHPO Consultation.

Phoenix, Arizona, 85012

D: + [REDACTED] | O: + [REDACTED]

[REDACTED]



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**Exhibit E-1c. SHPO Consultation.**



20 East Thomas Road, Suite 1700  
Phoenix, Arizona 85012  
Tel 602.274.3831 Fax 602.274.3958  
www.swca.com

July 9, 2024

Kathryn Leonard, State Historic Preservation Officer  
1110 W. Washington St., #100  
Phoenix, AZ 85007

Submitted via email to: [azshpo@azstateparks.gov](mailto:azshpo@azstateparks.gov) and [cklebacha@azstateparks.gov](mailto:cklebacha@azstateparks.gov)

**Re: Request for Consultation – Selma Energy Center Interconnection Project, Application for a Certificate of Environmental Compatibility**

Dear Ms. Leonard:

Selma Energy Center, LLC (Applicant), plans to file an application for a Certificate of Environmental Compatibility (CEC) with the Arizona Power Plant and Transmission Line Siting Committee (Siting Committee) for approval for its proposed Selma Energy Center Interconnection Project (Interconnection Project). The Interconnection Project is a proposed 230-kilovolt (kV) alternating current generation intertie transmission line (gen-tie), with associated substation facilities, that will be located above- and underground and connect the proposed Selma Energy Center to the existing Salt River Project (SRP) Vah Ki Substation. The Interconnection Project is designed to deliver power from the Selma Energy Center (Energy Facility), which is a 150-megawatt (MW) solar photovoltaic facility with a 150-MW battery storage system. This letter contains information about the Interconnection Project in accordance with the State Historic Preservation Office's September 2022 "ACC-SHPO Consultation Checklist for Compliance with the State Historic Preservation Act" (attached as Attachment 1).

The Interconnection Project will be located on private lands within the city of Coolidge and unincorporated Pinal County, except for three canal rights-of-way (ROWS) and one highway ROW. The Energy Facility will be located on private lands within the city of Coolidge and unincorporated Pinal County, except for one canal ROW. The Applicant proposes to construct and operate the Interconnection Project to connect the Energy Facility to the regional electrical grid.

The Interconnection Project is a proposed 2.5 mile-long, 230-kV alternating current gen-tie that will be located aboveground, with an undetermined portion of the line below ground. The Interconnection Project will begin at the Energy Facility project substation (Project Substation) and will traverse private property in the city of Coolidge and private property in unincorporated Pinal County. The Interconnection Project will connect to the regional electric grid at the existing SRP Vah Ki Substation. The Interconnection Project and Energy Facility are displayed in Attachment 2, Figures 1 and 2.

The Applicant plans to request that the Siting Committee approve a corridor within which the Interconnection Project would be constructed (CEC Corridor). The CEC Corridor is displayed in Attachment 2, Figure 2, and described in more detail below. The requested CEC Corridor is the Project Area analyzed for cultural resources.

**Exhibit E-1d. SHPO Consultation.**

On behalf of the Applicant, we respectfully request that the SHPO review and provide comment on the Interconnection Project to support the Arizona Corporation Commission's compliance with the State Historic Preservation Act (Arizona Revised Statutes 41-861 through 41-864).<sup>1</sup>

## **GENERAL PROJECT INFORMATION**

- *Project name:* Selma Energy Center Interconnection Project
- *Project location (legal description, see Table 1)*
  - The Interconnection Project would be constructed within the requested CEC Corridor. The Interconnection Project would originate at the Project Substation. The CEC Corridor, which generally has a width of 1,000 feet and is centered on the proposed alignment for the Interconnection Project (i.e., 500 feet on each side of the proposed alignment), is described below.
  - The Interconnection Project consists of a route preferred by the Applicant (Interconnection Project – Preferred Route) and a potential subroute option (Interconnection Project – Subroute Option). Only one of these routes would be constructed. Both the Interconnection Project – Preferred Route and Interconnection Project – Subroute Option could include either option described further below. The Interconnection Project – Preferred Route and Interconnection Project – Subroute Option are depicted in Attachment 2, Figures 1 and 2.
  - The Interconnection Project offers two options (“Option A” and “Option B”) for entering the Vah Ki Substation. The Applicant is working closely with SRP to determine the interconnection details for connecting into the existing Vah Ki Substation for both options. Of those two options, only one option would be selected and built by the Applicant. These options are depicted in Attachment 2, Figures 1 and 2.
  - The CEC Corridor would begin as an approximate 1,000-foot corridor (with 500 feet being on each side of the Interconnection Project centerline) on privately-owned land on parcel 40148001A. The CEC Corridor would continue for approximately 2,620 feet east, before heading northeast for approximately 753 feet. The CEC Corridor would head north for approximately 4,833 feet and would continue to be approximately 1,000 feet wide. At this point, the CEC Corridor would expand to a total of 2,134 feet wide for approximately 5,034 feet. This expansion is inclusive of Options A and B, and provides siting flexibility for the Interconnection Project, and Options A and B, to be properly sited as it enters into the Vah Ki Substation. Additionally, the expanded CEC Corridor provides flexibility for the Applicant to safely site the Interconnection Project around and through the existing Saint Solar Project, which the Applicant currently owns and operates.
  - The proposed route for the Interconnection Project starts at the Project Substation. The Project Substation will be located approximately 0.6 mile west of State Route (SR) 87, on the south side of East Selma Highway. The Project Substation will be within the Energy Facility in Township 7S, Range 8E, Section 4, on private property.
  - From the Project Substation, the Interconnection Project will proceed east for approximately 0.6 mile, before crossing SR 87 at an angle (northeast) as requested by ADOT and then turning north at the intersection of East Selma Highway and SR 87. The Interconnection Project will cross a San Carlos Irrigation and Drainage District (SCIDD) irrigation canal and proceed north for approximately 1 mile along the east side of SR 87. From this point, the

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<sup>1</sup> The State Historic Preservation Act requires state agencies to consider impacts of their programs on historic properties listed in or eligible for listing in the Arizona Register of Historic Places (ARHP) and to provide the State Historic Preservation Office (SHPO) an opportunity to review and comment on the actions that affect such historic properties.

## **Exhibit E-1e. SHPO Consultation.**

Interconnection Project – Preferred Route and the Interconnection Project – Subroute Option begin. Both of these routes are described in greater detail below. Only one of these routes would be constructed.

- The Interconnection Project – Preferred Route would continue to proceed north along the east side of SR 87 for approximately 0.47 mile. The Interconnection Project – Preferred Route would cross the proposed SunZia Transmission ROW and the existing ROW for TEP’s Pinal Central – Tortolita 500-kV line along this segment of the Interconnection Project. From this point, two options are proposed. The Interconnection Project – Preferred Route from this point describing both options as they enter into the existing Vah Ki Substation is described in greater detail below.
- The Interconnection Project – Subroute Option would then turn east. From SR 87, the Interconnection Project – Subroute Option will extend east for 0.25 mile and then extend north for 0.10 mile across Hohokam Irrigation Drainage District (HIDD) and SCIDD irrigation canals. From there, the Interconnection Project – Subroute Option will extend northwest at roughly a 45-degree angle for approximately 0.30 mile across the proposed SunZia Transmission ROW and the existing ROW for TEP’s Pinal Central – Tortolita 500-kV line and then back to a point near the east side of SR 87 and back onto the Interconnection Project – Preferred Route alignment. Next, the route will extend north along SR 87, along the east side of the highway, for approximately 0.25 mile. From this point, two options are proposed. The Interconnection Project – Subroute Option from this point describing both options as they enter into the existing Vah Ki Substation is described in greater detail below.
- The proposed route for the Interconnection Project Route – Option A (“Option A”) starts at SR 87, just north of the proposed SunZia Transmission ROW and the existing ROW for TEP’s Pinal Central – Tortolita 500-kV line. Option A extends north along the east side of SR 87 for approximately 0.5 mile before turning east into the Saint Solar field. Option A would extend east for approximately 0.25 mile before turning south for approximately 0.10 mile to connect to the Vah Ki Substation. As noted previously, a portion of Option A may be installed underground, depending on the final engineering design.
- The proposed route for the Interconnection Project Route – Option B (“Option B”) starts at SR 87, just north of the proposed SunZia Transmission ROW and the existing ROW for TEP’s Pinal Central – Tortolita 500-kV line. Option B extends north along the east side of SR 87 for approximately 0.25 mile before turning east into the Saint Solar field. Option B would weave into the Saint Solar field towards the Vah Ki Substation, extending approximately 0.10 miles northeast before extending approximately 0.10 mile east and then turning north for 0.10 mile. From the northwest corner of the Vah Ki Substation, the route would extend east for approximately 0.05 mile to connect to the Vah Ki Substation. As noted previously, a portion of Option B may be installed underground depending on the final engineering design.
- Table 1 includes the townships, ranges, and sections that intersect the CEC Corridor.

**Table 1. Requested CEC Corridor Location**

Township	Range	Section
6S	8E	W½ 27, E½ 28, E½ 33, and W½ 34
7S	8E	NW¼ 3, NE¼ 4,

- *Funding source:* Private (no state, federal, or other public funding sources)

## Exhibit E-1f. SHPO Consultation.

## PROJECT AREA INFORMATION

- *Project Area:*

The Project Area is the CEC Corridor for which the Applicant is submitting a CEC application. The CEC Corridor is described above and shown in Attachment 2.

- *Total Acres in the Project Area:* Approximately 418 acres

- *Landownership (all involved; acres by land jurisdiction):* See Table 2 below.

**Table 2. Project Area (CEC Corridor) Land Jurisdiction**

Jurisdiction	Area (approximate acres)	Percent of Total
Private	418	100%

## SCOPE OF WORK

The Interconnection Project will be an approximately 2.5-mile-long transmission line located in the CEC Corridor (Attachment 2, Figure 3). The Applicant anticipates that structures for the Interconnection Project will be spaced between 100 and 1,000 feet apart, depending on structure type, terrain, turns, and other factors. The above ground transmission structures for the Interconnection Project will be approximately 60 to 110 feet tall, will be made of weathering steel, and will be either self-supporting or guyed. The structure types proposed for the Interconnection Project are anticipated to include tangent monopoles, deadend monopoles, riser deadend monopoles, and A-frame deadend. The Applicant will, depending on the final engineering design, install an up to 1.1-mile segment of the Interconnection Project as underground. Where the underground segment is necessary, the Applicant would install overhead-to-underground transition structures (riser and/or A-frame deadend) at each end of the underground segments. The Applicant also notes that it may refine minor design characteristics for the Interconnection Project during its final engineering phase.

The Interconnection Project is sited adjacent to existing linear features, including roadways (SR 87 and East Selma Highway), a railroad (Union Pacific Railroad), existing energy (solar) facilities (Saint Solar and Storey Solar, both owned and operated by the Applicant), and other distribution and high voltage transmission lines.

## SUMMARY OF PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS WITHIN THE STUDY AREA

SWCA prepared a cultural resources inventory of the requested CEC Corridor (i.e., Project Area) in support of the CEC application. Exhibit E of the CEC application describes scenic areas and visual resources, as well as historic sites and structures, and archaeological sites within the Project Area and a 1-mile radius around it (herein called the Study Area). SWCA's studies included a records review of the Study Area.

A records review of AZSITE identified 37 previous cultural resources surveys that took place within the Study Area. These projects occurred from 1985 to 2019 in support of projects relating to electrical and fiber optic transmission, pipeline maintenance, electrical generation, transportation, geotechnical drilling, lake development, and both SCIP and HIDD distribution line installation and maintenance. Of these surveys, 17 cultural surveys intersect the Project Area and cover approximately 334 of the 418 total acres (80 percent) of the Project Area (Table 3).



Out of the 17 cultural surveys within the Project Area, only two surveys were conducted within the last 10 years. The SHPO has provided guidance for the reliance on survey data that are 10 years or older (SHPO 2004). Two surveys (1987-222.ASM and 11.136.SHPO) conducted before 1995 did not use the current Arizona State Museum (ASM) site definition criteria (ASM 1995). Of the remaining 13 surveys, SWCA believes 11 used survey strategies that would meet current methodological standards as set forth by SHPO for full coverage in Arizona with principal investigators meeting current professional qualification standards, and it is unlikely that there are additional resources present in the current Project Area that have become at least 50 years old since the previous surveys were conducted. The 13 surveys that have been evaluated as adequate cover approximately 258 of the total 418 acres (62 percent) of the Project Area and can be relied on for current inventory purposes.

**Table 3. Previous Cultural Resource Projects Intersecting the Project Area**

Project No.	Project Description	Reference
11.136.SHPO/Temp. No. 93	Tucson Aqueduct Phase A Survey Sites	Czaplicki 1984
1987-222.ASM	U.S. Telecom Buried Fiber Optic Cable	O'Brien et al. 1987
1997-209.ASM	SFPP Arizona Reconditioning Project	Self 1997
1998-443.ASM	SR 87 Oracle Maintenance Coolidge	Woodall 1999
1999-587.ASM	PBNS Level 3 Fiber Optic Line	Doak 1999
2000-140.ASM	KMEP Arizona Anomaly Repair Project	Self 2003
2000-723.ASM	AT&T NexGen/Core Project Link 3 Class 3 Survey	Kearns et al. 2001
2001-406.ASM	Surveys of Six Proposed Reroutes for a Proposed Fiber Optic Cable ROW	Baker and Webb 2001
2003-910.ASM	Cultural Resources Survey of the 360Networks Fiber Optics Lines	Railey and Yost 2001
2004-627.ASM	Add. D: El Paso to Los Angeles Fiber Optic Cable Project: GRIC Alt B Reroute	Newsome and Berg 2001
2004-679.ASM	AT&T NexGen/Core Project	Baker 2004
2007-692.ASM	Pinal West to Dinosaur Transmission Line Surveys	Henderson et al. 2009
2009-170.ASM	Picacho Energy Project Environmental	Hedquist 2009
2011-203.ASM	Class III Cultural Resources Surveys in Pima and Pinal Counties, Arizona; SCIP 2011 Second Quarter	Rago 2011
2012-363.ASM	TEP Pinal Central to Tortolita Survey WRI 1610.86 CR 520	White et al. 2012
2019-218.ASM	East Line Solar	Hayden 2019
Saint Solar	Saint Solar Records Review and Site Inspection	Swanson 2019

Note: Shading denotes surveys that SWCA believes cannot be relied on for current inventory purposes.

## IDENTIFICATION OF CULTURAL RESOURCES WITHIN THE STUDY AREA

### Archaeological Sites

The records review identified five archaeological sites within the Study Area (Table 4), none of which intersect the Project Area. The sites consist of an archaic lithic scatter, a Hohokam artifact scatter, Hohokam trash mounds and an associated artifact scatter, a historic-era homestead, and a historic-era water pumping station complex.

**Table 4. Previous Archaeological Sites within the Study Area**

Site Number	Cultural/Temporal Affiliation	Site Type	Eligibility Status	Reference
AZ AA:2:84(ASM)	Hohokam Pre-Classical period (A.D. 750–1100)	Artifact scatter	Recommended eligible (D)	Newsome and Berg 2001
AZ AA:2:329(ASM)	Euro-American/ Late Historic-era ca. 1938	Hess Homestead.	Determined not eligible	Luhnow and Schilz 2010
AZ AA:2:339(ASM)	Euro-American/ Late Historic-era ca. 1954–1982	Field irrigation pumping system	Recommended not eligible	Luhnow and Schilz 2010
AZ AA:3:117(ASM)	Unknown Indigenous Archaic (8,000 B.C.–A.D. 200)	Lithic scatter	Not evaluated (likely destroyed)	Van Nimwegen and Henderson 1991
AZ AA:3:316(ASM)	Hohokam Santa Cruz to Sacaton phases (A.D. 800–1150)	Trash mounds and artifact scatter	Determined eligible (D)	White et al. 2012

### Historic-era In-Use Structures

The records review identified 19 historic-era in-use structures within the Study Area (Table 5). These structures consist of seven roads/highways, eight canals/ditches, one railroad, two powerlines, and one farmstead. AZ AA:2:341(ASM) consists of 22 historic-era concrete-lined field ditches adjacent to agricultural fields. Four of the ditches are abandoned; however, the majority are in-use or temporarily inactive (Luhnow and Schilz 2010). Eight of the overall 19 in-use structures intersect the Project Area. These are original SR 84 alignment (now SR 87), SR 87, Selma Highway, the Florence Casa Grande Canal Extension, the Casa Grande Canal, the SCIDD No. 1 Cross-cut Canal, the Southern Pacific Railroad: Wellton-Phoenix-Eloy Spur, and a utility line.

**Table 5. Previously Recorded Historic-Era In-Use Structures within the Study Area**

Site Number	Cultural/ Temporal Affiliation	Site Type	ARHP/NRHP Eligibility Status	Associated Reference(s)
AZ AA:2:118(ASM)	Euro-American/ Late historic-era (A.D. 1936–present)	SR 84	Segments determined eligible (Criterion D)	Fenicle et al. 2015
AZ AA:2:132(ASM)	Euro-American/ Middle to late historic-era (A.D. 1800–present)	Maintained gravel road	Determined not eligible	White et al. 2012
AZ AA:2:133(ASM)	Euro-American/ Late historic-era (A.D. 1928–present)	Florence Casa Grande Canal Extension	Segments determined eligible (Criteria A and D)	Young 2015a
AZ AA:2:149(ASM)	Euro-American/ Late historic-era (ca. A.D. 1900–present)	SR 287	Segments determined eligible (Criterion D)	Young 2015b
AZ AA:2:213(ASM)	Euro-American/ Late historic-era (A.D. 1900–present)	Steele Road	Determined not eligible	Young 2015b
AZ AA:2:219(ASM)/ AZ AA:2:333(ASM)	Euro-American/ Late historic-era (A.D. 1922–present)	Selma Highway/Selma School Road	Recommended not eligible	Tactikos et al. 2010; Luhnow and Schilz 2010
AZ AA:2:297(ASM)	Euro-American/ Middle to late historic-era (A.D. 1800–present)	Utility line	Determined not eligible	Luhnow and Schilz 2010
AZ AA:2:305(ASM)	Euro-American/ Late historic-era (A.D. 1900–present)	Historic Farmstead	Determined eligible (Criterion D)	Henderson et al. 2009
AZ AA:2:330(ASM)	Euro-American/ late historic-era (ca. A.D. 1920s–present)	Laughlin Road	Recommended not eligible	Luhnow and Schilz 2010
AZ AA:2:338(ASM)	Euro-American/ late historic-era (ca. A.D. 1940s–present)	Transmission line	Recommended not eligible	Luhnow and Schilz 2010

### Exhibit E-1i. SHPO Consultation.

*Request for Consultation – Selma Energy Center Interconnection Project, Application for a Certificate of Environmental Compatibility*

Site Number	Cultural/ Temporal Affiliation	Site Type	ARHP/NRHP Eligibility Status	Associated Reference(s)
AZ AA:2:341(ASM)	Euro-American/ late historic-era (ca. A.D. 1936–present)	Discontinuous irrigation lateral canals	Recommended not eligible	Luhnnow and Schilz 2010
AZ AA:3:209(ASM)	Euro-American/ middle to late historic-era (A.D. 1889–present)	Casa Grande Canal/ SCIP/SCIDD "No. 16 Lake Outlet"	Segments determined eligible (Criteria A, C, D)	Moreno et al. 1996
AZ AA:6:63(ASM)	Euro-American/ late historic-era (ca. A.D. 1920s–present)	SR 87	Segments determined eligible (Criteria A and D)	White et al. 2012; Prasciunas et al. 2012
AZ T:10:84(ASM)	Euro-American/ late historic-era (A.D. 1926–present)	Southern Pacific Railroad: Wellton-Phoenix-Eloy Spur	Segments determined eligible (Criterion A)	White et al. 2012
No. 1 Cross-cut Canal/ SCIP Sublateral 17-37	Euro-American/ late historic-era (ca. A.D. 1920s–present)	Lateral water conveyance structure	Recommended not eligible	Pfaff 1996
SCIP Sublateral 17-22	Euro-American/ late historic-era (ca. A.D. 1920s–present)	Lateral water conveyance structure	Determined not eligible	Pfaff 1996
SCIP Sublateral (1) 17-37-9	Euro-American/ late historic-era (ca. A.D. 1920s–present)	Lateral water conveyance structure	Determined not eligible	Pfaff 1996
SCIP Sublateral (2) 17-37-11	Euro-American/ late historic-era (ca. A.D. 1920s–present)	Lateral water conveyance structure	Determined not eligible	Pfaff 1996
SCIP Sublateral (3) 17-37-13	Euro-American/ late historic-era (ca. A.D. 1920s–present)	Lateral water conveyance structure	Determined not eligible	Pfaff 1996

Note: Shading indicates historic-era in-use structure intersects the Project Area.

## Historical Map Research

The original GLO survey plat map of Township 6 South, Range 8 East, filed in 1890 depicts the FLORENCE CANAL (now the Casa Grande Canal) and an OLD ROAD TO TUCSON intersecting the proposed CEC Corridor in sections 27 and 34. A well and the Desert Land Claims of William J. Hunsaker, J.L. Copeland, and Chas. A. Shibell are depicted within the Study Area. An area labelled OLD RUINS is depicted within the Study Area around the approximate location of AZ AA:3:316(ASM). The dependent resurvey GLO plat map of Township 6 South, Range 8 East, filed in 1930, depicts the Florence Canal, labelled on the 1890 survey plat as the CASA GRANDE FLORENCE CANAL, along with an adjacent unimproved road. SR 87 is present within the Project Area in addition to one unimproved road along the modern alignment of Selma Highway and one other unnamed unimproved road. The SOUTHERN PACIFIC railroad is depicted within the Project Area and lined with parallel utility lines. There are three structures depicted within the Project Area. Within the Study Area, the surrounding area of La Palma has become much more developed, with multiple utility lines and/or fence lines crossing through each section. There are three unnamed, unimproved roads, 10 structures, McDowell School, and an agricultural field within the Study Area.

The original GLO survey plat map of Township 7 South, Range 8 East, filed in 1915, depicts a FRAME HOUSE within the southern portion of the proposed CEC Corridor. Within the Study Area, there are two north-south trending roads (the westernmost one is within the Project Area) that converge in the southern portion of Section 3 and continue just south of the Study Area to Roy S. Ward's house. Additionally, the plat depicts R. H. Miller's house in the northwest corner of Section 4 within the Study Area.

The 1922 USGS Signal Peak, Arizona, 1:62,500 and 1922 Red Rock No. 2, Arizona 1:48,000 quadrangle maps depict the Casa Grande-Florence Canal as well as SR 87, SR 287, an unimproved road along the modern alignment of Steele Road, an improved/unimproved road along the modern alignment of Selma Highway, five wells, and three structures within the Project Area. Within the Study Area, the maps depict

## Exhibit E-1j. SHPO Consultation.

13 structures, the Pinal School (labelled on the GLO plats as McDowell School), 10 wells, five unimproved roads, and a structure/well in the approximate location of AZ AA:2:305(ASM). Many of the historic-era features depicted on these maps likely correspond to others on the GLO plat maps.

The 1965 USGS Eloy North, Arizona, the 1965 Coolidge, Arizona, and the 1965 Picacho Reservoir, Arizona, 1:24,000 quadrangle maps depict the majority of the modern roads and highways as well as the unimproved agricultural access roads present in modern aerial imagery. There are an increased number of wells and structures present. Both the Florence-Casa Grande Canal Extension and the Casa Grande Canal are depicted, with a north-south oriented sublateral canal (No. 1 Crosscut) connecting the two. SCIP sublateral canals 17-53, 17-37-13, 17-37-11, and 17-37-9 are depicted.

Historic aerial imagery from 1961 depicts the Project Area and surrounding area as primarily agricultural with residences throughout. AZ AA:2:329(ASM) is visible, however AZ AA:2:305(ASM) is not. There are at least four sets of structures visible within the Project Area, only one (remnants) of which is visible on modern aerial imagery (NETROnline 2024).

The National Register of Historic Places (NRHP) database maintained by the National Park Service was also consulted to ascertain if any cultural resources previously listed in the NRHP are located in the Project Area or Study Area. No NRHP-listed properties were identified. Additionally, the National Scenic and National Historic Trail webmap indicates that the Congressionally-designated, 1,200-mile-long Juan Bautista de Anza National Historic Trail (1775–1776) is approximately 2 miles west of the Project Area (outside of the Study Area) (National Park Service 2024).

## **SUMMARY AND ASSESSMENT OF EFFECTS**

The records review identified that approximately 62 percent of the Project Area has been previously and adequately surveyed for cultural resources. Five historic properties (all historic-era in-use structures) intersect the Project Area. These are SR 84, SR 87, the Florence Casa Grande Canal Extension, the Casa Grande Canal, and the Southern Pacific Railroad: Wellton-Phoenix-Eloy Spur. Four of these properties also intersect the Interconnection Project route (SR 84, SR 87, the Florence Casa Grande Canal Extension, and the Casa Grande Canal). The Casa Grande Canal also intersects the proposed Interconnection Project Subroute Option. These properties are all in-use, and the Interconnection Project would avoid directly impacting these historic properties through engineering controls.

An additional four historic properties are located within the Study Area and don't intersect the Project Area. These are all archaeological sites and historic-era in-use structures recommended or determined eligible under Criterion D. Construction of overhead elements of the Interconnection Project would not introduce visual, atmospheric, or auditory elements to the setting that would diminish the integrity of the characteristics which make them, or the five historic properties identified in the direct effects section, eligible for the ARHP/NRHP. The underground portion of the Interconnection Project would not introduce indirect effects to historic properties.

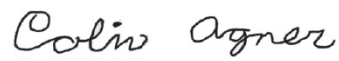
To ensure that other potential historic properties would not be impacted within the Project Area, the Applicant will complete a cultural resources inventory of the portions that have not been previously adequately surveyed. The inventory will identify and evaluate any cultural resources that may be present. If any historic properties are encountered, the inventory would provide recommendations on how to mitigate any adverse effects on those historic properties.

The Applicant respectfully requests your review and comments for the Interconnection Project. CEC hearings before the Siting Committee are anticipated to start on October 21<sup>st</sup>, 2024. If possible, please provide comments or concurrence by August 8, 2024. Please feel free to contact me ([cagner@swca.com](mailto:cagner@swca.com)).

### **Exhibit E-1k. SHPO Consultation.**

or our Cultural Resources Director – Andrew Vorsanger ([Andrew.Vorsanger@swca.com](mailto:Andrew.Vorsanger@swca.com)), should you have any further questions.

Sincerely,



Colin Agner  
Project Manager

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**Exhibit E-1n. SHPO Consultation.**

**Exhibit E-1o. SHPO Consultation.**



**ATTACHMENT 1**

**ACC-SHPO Consultation Checklist for Compliance with the State  
Historic Preservation Act**

**Exhibit E-1p. SHPO Consultation.**

**ACC-SHPO CONSULTATION CHECKLIST  
FOR COMPLIANCE WITH THE STATE HISTORIC PRESERVATION ACT  
(September 2022)**

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Projects requiring a Certificate of Environmental Compatibility are subject to the Arizona State Historic Preservation Act and consultation with the Arizona State Historic Preservation Officer. All submissions must include a letter on letterhead, addressed to:

Kathryn Leonard, State Historic Preservation Officer  
1110 W. Washington St., #100  
Phoenix, AZ 85007

The letter should be one or two pages (as needed) and include:

- ☐ Project Name
- ☐ Project location (please include legal description and UTM's)
- ☐ Funding source for the project, and/or the state or federal agency or program, as applicable
- ☐ Project Area description (project area dimensions, and include all alternatives, access roads, gen-tie connections, staging areas, etc)
- ☐ Total Acres in Project Area
- ☐ Landownership (all involved; provide acres by land jurisdiction)
- ☐ Scope of work (detailed description of the project)
- ☐ Summary of previous archaeological investigations within the Project Area
- ☐ Identification of cultural resources within the Project Area (brief description of site and eligibility status)
- ☐ Request for SHPO review and comment

Attachments should include:

- ☐ Location map showing where the project area is located and land jurisdiction
- ☐ Map(s) showing Class I research results for projects and cultural resources

Email to: [azshpo@azstateparks.gov](mailto:azshpo@azstateparks.gov) (no hard copies accepted)

Additional questions: [cklebacha@azstateparks.gov](mailto:cklebacha@azstateparks.gov)

**ATTACHMENT 1 - ACC-SHPO Consultation Checklist for Compliance with the State Historic Preservation Act**

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Attachment 1 -1

**Exhibit E-1q. SHPO Consultation.**

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**Exhibit E-1r. SHPO Consultation.**

**ATTACHMENT 2**

**Location map showing the Interconnection Project**

**Exhibit E-1s. SHPO Consultation.**

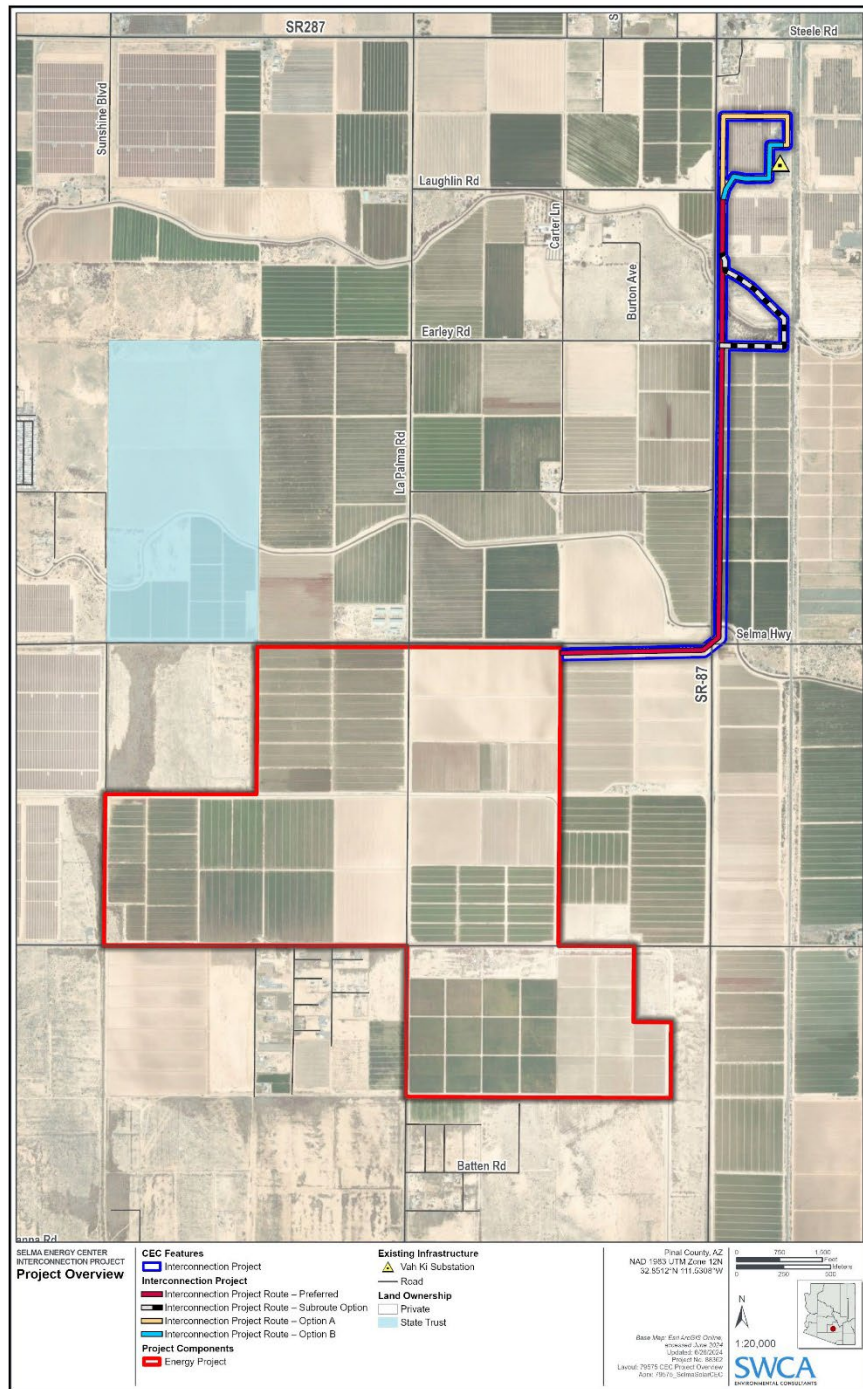


Figure 1. Interconnection Project Vicinity.

**Exhibit E-1t. SHPO Consultation.**

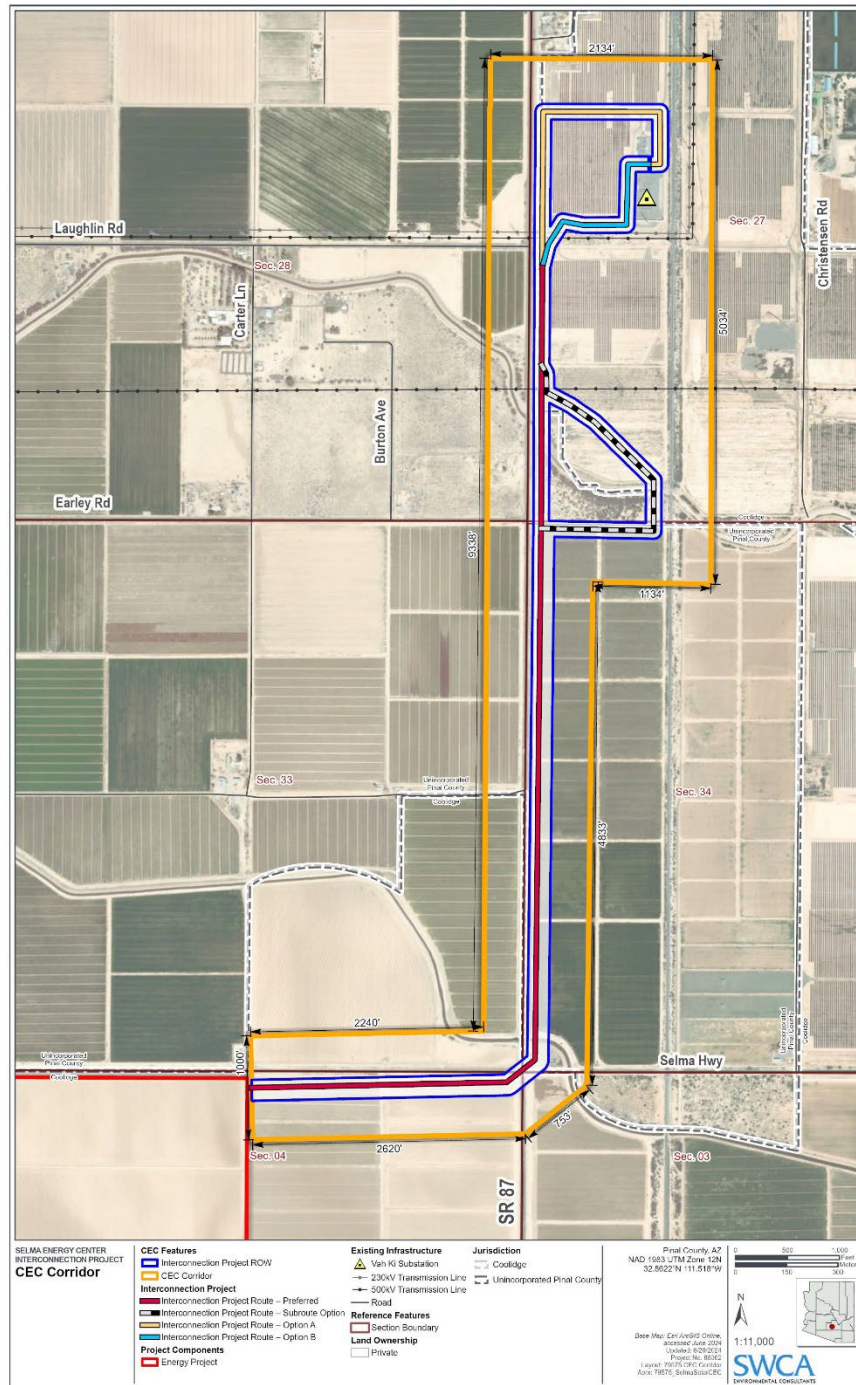


Figure 2. Interconnection Project CEC Corridor.

### Exhibit E-1u. SHPO Consultation.

**Exhibit E-1v. SHPO Consultation. Class I Previous Research Maps not provided to prevent disclosure of cultural resources.**

## EXHIBIT F. RECREATION

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As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219, Exhibit 1, the intent of this exhibit is to:

*State the extent, if any, the proposed site or route will be available to the public for recreational purposes, consistent with safety considerations and regulations and attach any plans the applicant may have concerning the development of the recreational aspects of the proposed site or route.*

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Recreation information for the Study Area was obtained from Pinal County and the City of Coolidge. The Pinal County *We Create Our Future: Pinal County Comprehensive Plan* (Pinal County 2021) does not identify any recreation/conservation, major open space, or restricted open space land use categories within the Interconnection Project or Study Area. The *Pinal County Open Space and Trail Master Plan* (Pinal County 2007) identifies proposed open space (associated with the Picacho Reservoir), which is 0.28 mile east of the Study Area. Pinal County identified one proposed land use trail that intersects the Interconnection Project and one proposed land use trail that intersects the Study Area (Pinal County 2007). The proposed land use trail that intersects the Interconnection Project follows the Florence Casa Grande Canal, which crosses the southern portion of the Interconnection Project and connects to the other mentioned proposed land use trail, outside of the Study Area. The second proposed land use trail intersects the northern portion of the Study Area and follows Saddleback Road, connecting the Arizona Trail to Interstate 10. Finally, Pinal County did not identify any parks maintained by Pinal County within the Interconnection Project or Study Area. The closest park to the Study Area is the Pinal County Fairgrounds and Event Center (Fairgrounds) located approximately 2 miles to the west of the Study Area.

The City of Coolidge *2025 General Plan: The Future Today* (2025 General Plan) (City of Coolidge 2014) does not identify any recreational land use categories. The Interconnection Project and Study Area do not contain any parks managed or maintained by the City of Coolidge. The Open Space Chapter in the 2025 General Plan identifies the Fairgrounds as an “Existing Activity Center” recreational element, the Mary C. O’Brien Elementary School as an “Existing School” recreational element, and the Casa Grande Canal and Central Arizona Project as canal “trail & open space opportunities” (City of Coolidge 2014). The Casa Grande Canal intersects the northern portion of the Interconnection Project. The Fairgrounds, as described above, is not located within the Study Area, and the Mary C. O’Brien Elementary School is approximately 2.2 miles northwest of the Study Area. No other recreational elements, parks/open space, or trails/open space opportunities were identified by the 2025 General Plan in the Interconnection Project or Study Area.

Of all the recreational facilities identified by Pinal County and the City of Coolidge, the Interconnection Project only crosses the two planned land use trails and two canals. The Interconnection Project will parallel the proposed land use trails and canals, and no long-term disturbance features will be placed in the proposed land use trails or canals.

Other land uses in the Interconnection Project and Study Area, which currently provide limited recreational opportunities, include agricultural, vacant, commercial, and utility. Recreational users may occasionally use public roadways for walking, biking, and general transportation, as well as incidental uses. Within the surrounding region, recreational opportunities, such as off-road vehicle use, hiking, bird watching, and horseback riding, are available, primarily informally on vacant lands. Generally, all Arizona State Land Department-administered lands, which provide similar recreation opportunities, can be accessed by the public with a Special Use Permit.

The Interconnection Project will not be fenced. Implementation of the Interconnection Project will have minimal impact to existing recreational use in the Interconnection Project because long-term disturbance features will avoid the proposed land use trails and canals, and the Interconnection Project will not interfere



with their use. Similarly, the Interconnection Project implementation will have minimal to no impact to recreation in the Interconnection Project or Study Area because implementation will not block access to recreation areas.

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# EXHIBIT G. CONCEPTUAL DRAWINGS OF TRANSMISSION FACILITIES

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As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219, Exhibit 1:

*Attach any artist's or architect's conception of the proposed plan or transmission line structures and switchyards, which applicant believes may be informative to the committee.*

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Exhibit G-1 – Typical 230-kV tangent monopole structure

Exhibit G-2 – Typical 230-kV angle monopole structure

Exhibit G-3 – Typical 230-kV underground structures

Exhibit G-4 – Typical 230-kV A-frame dead-end structure

Exhibit G-5 – Photosimulation of the Interconnection Project – Option A from Key Observation Point (KOP) 1 – aboveground

Exhibit G-6 – Photosimulation of the Interconnection Project – Option B from KOP 1 – aboveground

Exhibit G-7 – Photosimulation of the Interconnection Project from KOP 1 – underground

Exhibit G-8 – Photosimulation of the Interconnection Project – Option A from KOP 2 – aboveground

Exhibit G-9 – Photosimulation of the Interconnection Project – Option B from KOP 2 – aboveground

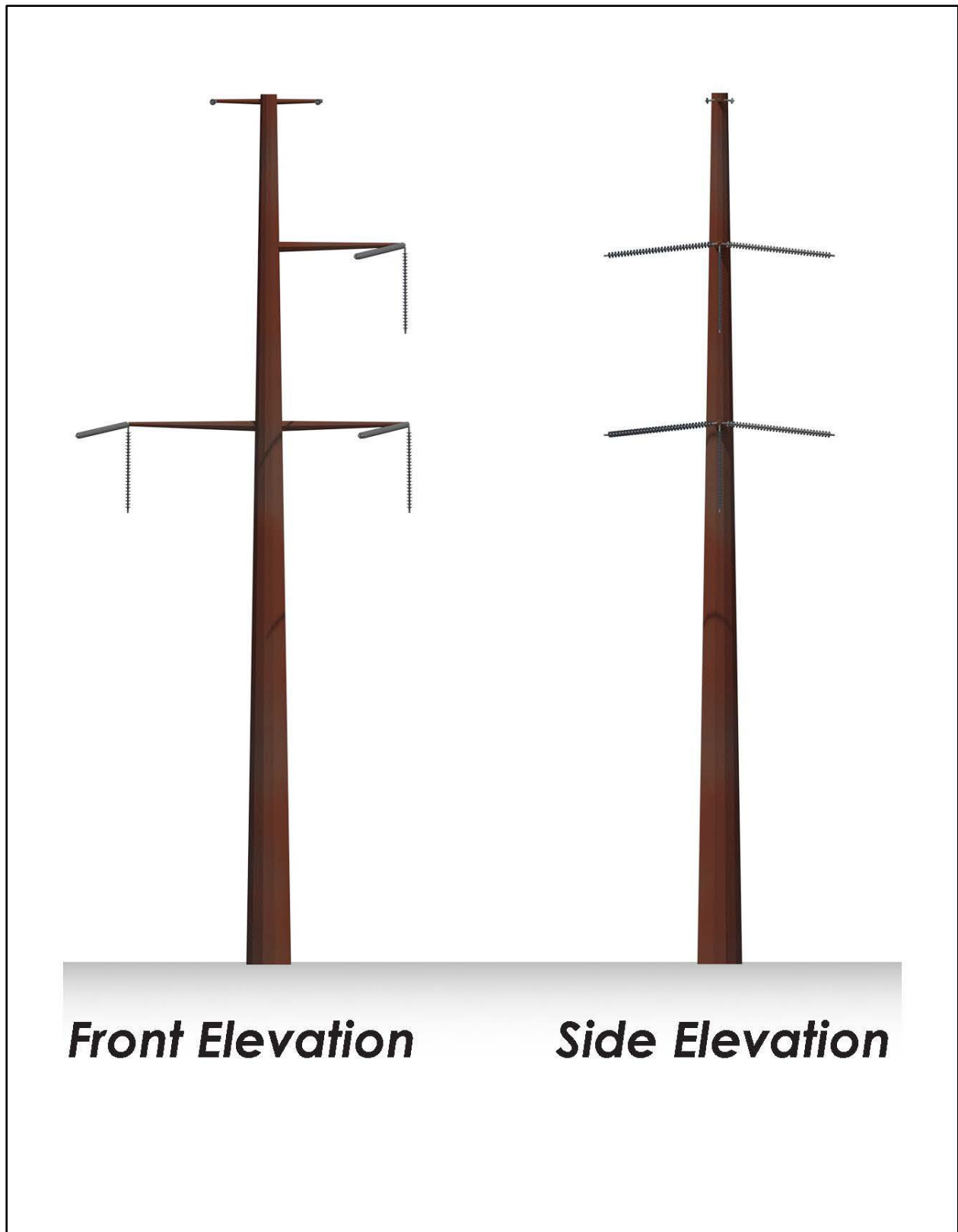
Exhibit G-10 – Photosimulation of the Interconnection Project from KOP 2 – underground

Exhibit G-11 – Photosimulation of the Interconnection Project from KOP 3

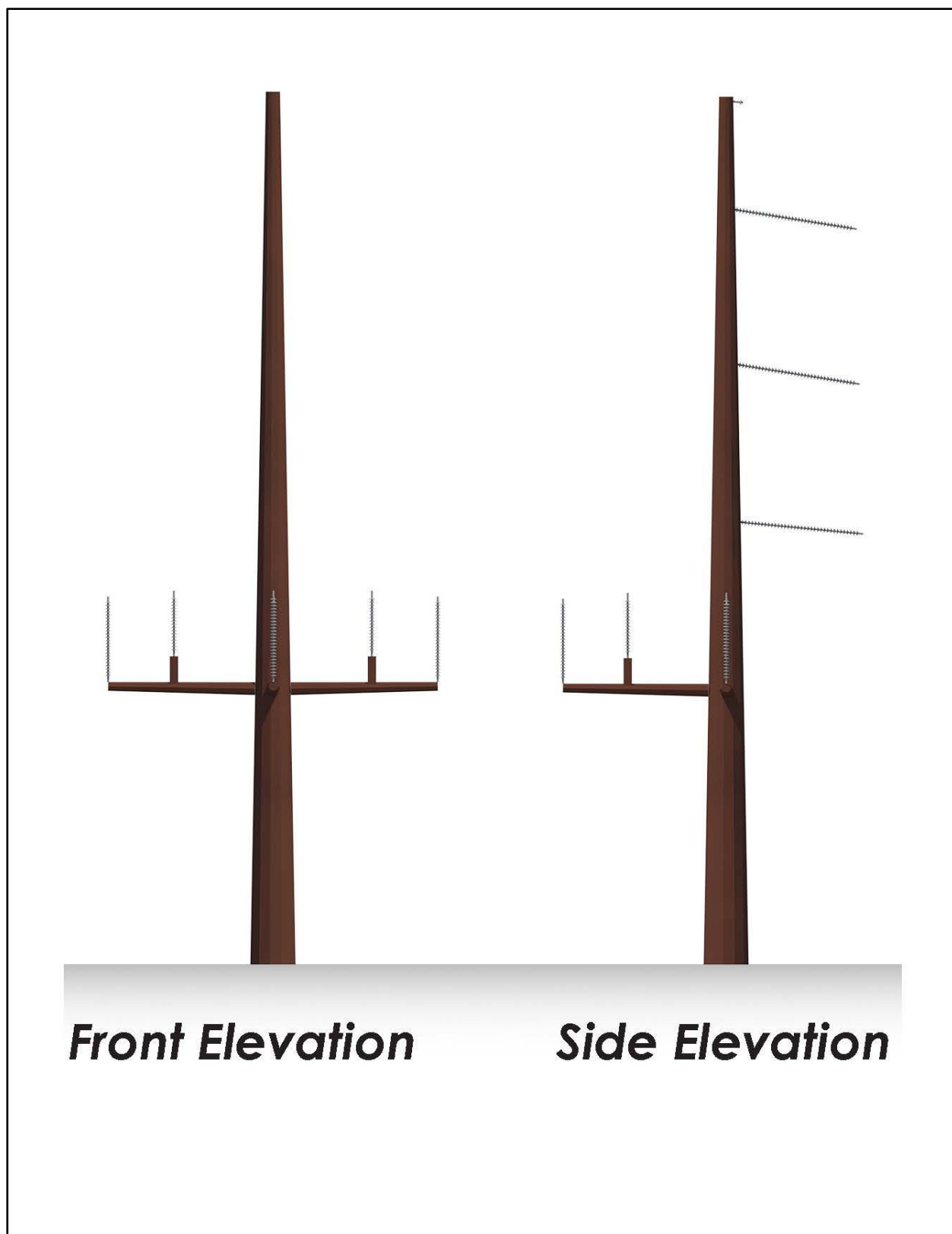
Exhibit G-12 – Photosimulation of the Interconnection Project from KOP 4



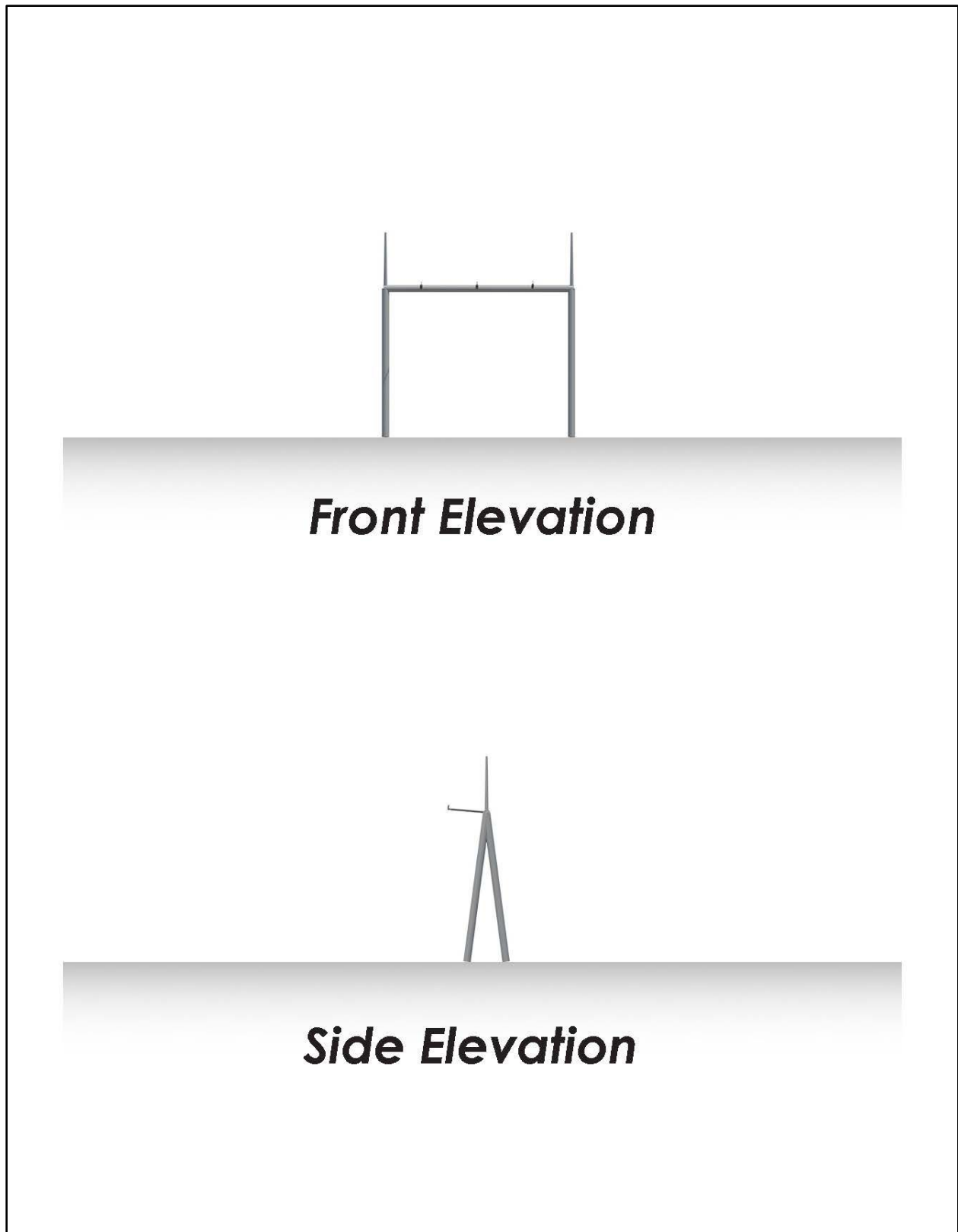
**Exhibit G-1. Typical 230-kV tangent monopole structure.**



**Exhibit G-2. Typical 230-kV angle monopole structure.**



**Exhibit G-3. Typical 230-kV underground structures.**



**Exhibit G-4. Typical 230-kV A-frame dead-end structure.**



*This page intentionally left blank.*

### Sun and Weather



Date: **4-10-24**  
Photo Time: **9:10 am**

Visibility:



**Air Quality: Good**

Sun Azimuth (degrees):



**97.55**

Sun Angle (degrees): **25.26**

Lighting Angle on Project:

**Side Lit**

Wind:

**6 mph**

Cloud Cover:

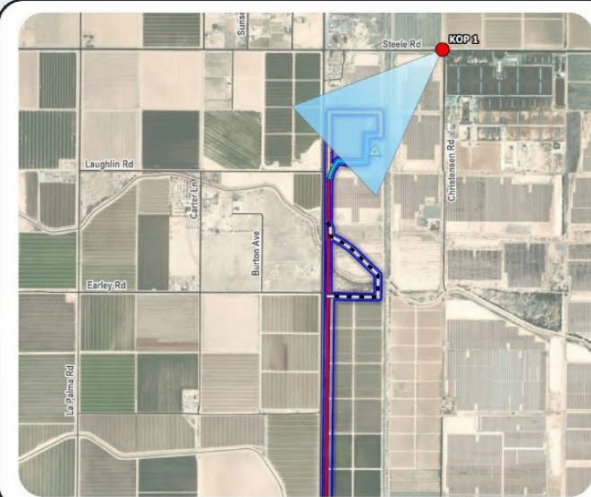
**0 %**

Temperature (°F):

**68°F**

*Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.*

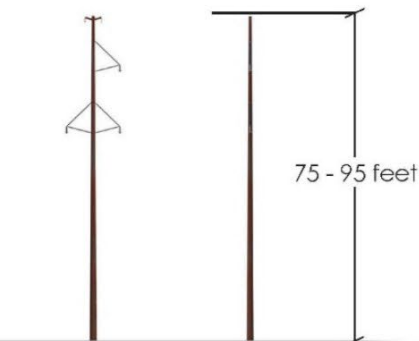
### Selma Energy Center Interconnection Project



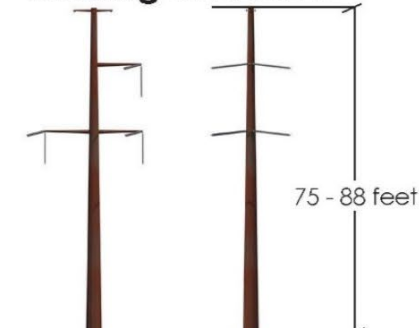
Approximate Distance Neareast Transmission Structure: **0.35 miles**

#### Project Location

#### Tangent Structure



#### Turning Structure



#### Structure Diagram



### KOP 1 - East Steele Road

Base Photographic Documentation

Latitude, Longitude (degrees):

**32.879587, -111.506772**

Viewpoint Elevation (feet): **1,470**

Camera Height (meters): **1.5**

Camera Heading (degrees): **225**

Camera Make & Model:

**Canon EOS 5D Mark IV**

Camera Sensor Size (mm):

**36 x 24 Full Frame**

Crop Factor:

**1x**

Lens Make & Model:

**AF-P Nikkor**

Lens Focal Length (mm):

**50**

Image Size (pixels):

**6720 x 4480**

*Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.*

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**Exhibit G-5a. Photosimulation of the Interconnection Project – Option A from KOP 1 – aboveground (page 1).**





**KOP 1: View from East Steele Road looking southwest - Existing Condition**

**Exhibit G-5b. Photosimulation of the Interconnection Project – Option A from KOP 1 – aboveground (page 2).**





**KOP 1: View from East Steele Road looking southwest - Simulated Condition Option A**

**Exhibit G-5c. Photosimulation of the Interconnection Project – Option A from KOP 1 – aboveground (page 3).**



### Sun and Weather



Date: **4-10-24**  
Photo Time: **9:10 am**

Visibility:



**Air Quality: Good**

Sun Azimuth (degrees):



**97.55**

Sun Angle (degrees): **25.26**

Lighting Angle on Project:

**Side Lit**

Wind:

**6 mph**

Cloud Cover:

**0 %**

Temperature (°F):

**68°F**

*Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.*

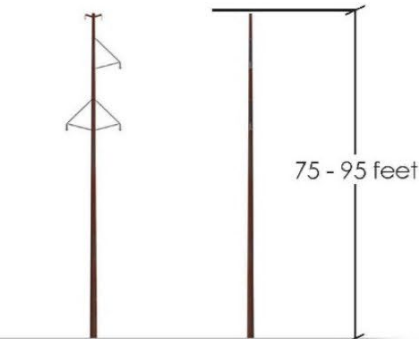
### Selma Energy Center Interconnection Project



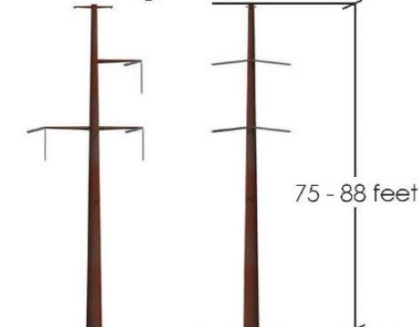
Approximate Distance Neareast Transmission Structure: **0.45 miles**

#### Project Location

#### Tangent Structure



#### Turning Structure



#### Structure Diagram



### KOP 1 - East Steele Road

Base Photographic Documentation

Latitude, Longitude (degrees):

**32.879587, -111.506772**

Viewpoint Elevation (feet): **1,470**

Camera Height (meters): **1.5**

Camera Heading (degrees): **225**

Camera Make & Model:

**Canon EOS 5D Mark IV**

Camera Sensor Size (mm):

**36 x 24 Full Frame**

Crop Factor:

**1x**

Lens Make & Model:

**AF-P Nikkor**

Lens Focal Length (mm):

**50**

Image Size (pixels):

**6720 x 4480**

*Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.*

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**Exhibit G-6a. Photosimulation of the Interconnection Project – Option B from KOP 1 – aboveground (page 1).**





**KOP 1: View from East Steele Road looking southwest - Existing Condition**

**Exhibit G-6b. Photosimulation of the Interconnection Project – Option B from KOP 1 – aboveground (page 2).**





**KOP 1: View from East Steele Road looking southwest - Simulated Condition of Option B**

**Exhibit G-6c. Photosimulation of the Interconnection Project – Option B from KOP 1 – aboveground (page 3).**



### Sun and Weather



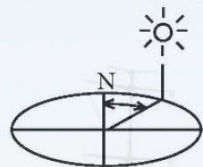
Date: **4-10-24**  
Photo Time: **9:10 am**

Visibility:



**Air Quality: Good**

Sun Azimuth (degrees):



**97.55**

Sun Angle (degrees): **25.26**

Lighting Angle on Project:

**Side Lit**

Wind:

**6 mph**

Cloud Cover:

**0 %**

Temperature (°F):

**68°F**

*Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.*

### Selma Energy Center Interconnection Project



Approximate Distance Neareast Transmission Structure: **0.45 miles**

#### Project Location

#### Tangent Structure

75 - 95 feet

#### Turning Structure

75 - 88 feet

#### Underground Structure

90 feet

#### Structure Diagram



### KOP 1 - East Steele Road

Base Photographic Documentation

Latitude, Longitude (degrees):

**32.879587, -111.506772**

Viewpoint Elevation (feet): **1,470**

Camera Height (meters): **1.5**

Camera Heading (degrees): **225**

Camera Make & Model:

**Canon EOS 5D Mark IV**

Camera Sensor Size (mm):

**36 x 24 Full Frame**

Crop Factor:

**1x**

Lens Make & Model:

**AF-P Nikkor**

Lens Focal Length (mm):

**50**

Image Size (pixels):

**6720 x 4480**

*Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.*

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**Exhibit G-7a. Photosimulation of the Interconnection Project from KOP 1 – underground (page 1).**





**KOP 1: View from East Steele Road looking southwest - Existing Condition**

**Exhibit G-7b. Photosimulation of the Interconnection Project from KOP 1 – underground (page 2).**





**KOP 1: View from East Steele Road looking southwest - Simulated Condition**

**Exhibit G-7c. Photosimulation of the Interconnection Project from KOP 1 – underground (page 3).**



Sun and Weather



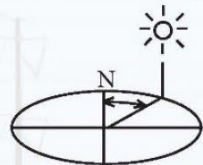
Date:  
**4-10-24**  
Photo Time:  
**9:20 am**

Visibility:



**Air Quality: Good**

Sun Azimuth (degrees):



**98.93**

Sun Angle (degrees): **27.11**

Lighting Angle on Project:  
**Side Lit**

Wind:  
**6 mph**

Cloud Cover:  
**0 %**

Temperature (°F):  
**68°F**

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

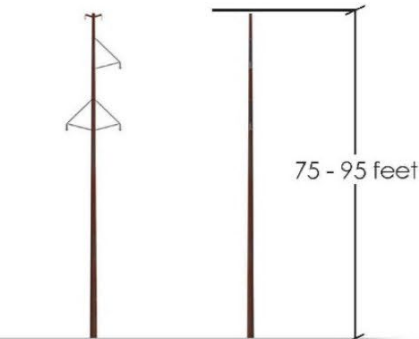
Selma Energy Center Interconnection Project



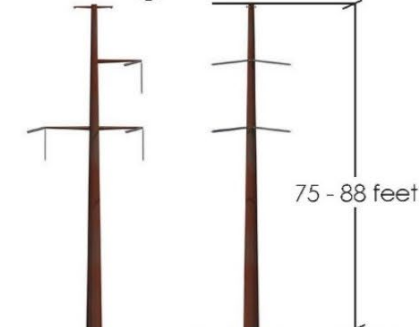
Approximate Distance Nearest Transmission Structure:  
**0.25 miles**

Project Location

Tangent Structure



Turning Structure



Structure Diagram

KOP 2 - East Laughlin Road and Arizona State Route 87

Base Photographic Documentation

Latitude, Longitude (degrees):

**32.8723, -111.515262**

Viewpoint Elevation (feet): **1,475**

Camera Height (meters): **1.5**

Camera Heading (degrees):  
**70**

Camera Make & Model:  
**Canon EOS 5D Mark IV**

Camera Sensor Size (mm):  
**36 x 24 Full Frame**

Crop Factor:  
**1x**

Lens Make & Model:  
**AF-P Nikkor**

Lens Focal Length (mm):  
**50**

Image Size (pixels):  
**6720 x 4480**

Single frame simulation approximates 50mm full frame equivalent.

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

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Exhibit G-8a. Photosimulation of the Interconnection Project – Option A from KOP 2 – aboveground (page 1).





**KOP 2: View from intersection of East Laughlin Road and Arizona State Route 87 looking northeast - Existing Condition**

**Exhibit G-8b. Photosimulation of the Interconnection Project – Option A from KOP 2 – aboveground (page 2).**





**KOP 2: View from intersection of East Laughlin Road and Arizona State Route 87 looking northeast - Simulated Condition Option A**

**Exhibit G-8c. Photosimulation of the Interconnection Project – Option A from KOP 2 – aboveground (page 3).**



## Sun and Weather



**Sunny**

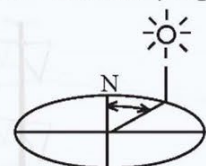
Date: **4-10-24**  
Photo Time: **9:20 am**

Visibility:



**Air Quality: Good**

Sun Azimuth (degrees):



**98.93**

Sun Angle (degrees): **27.11**

Lighting Angle on Project:

**Side Lit**

Wind:

**6 mph**

Cloud Cover:

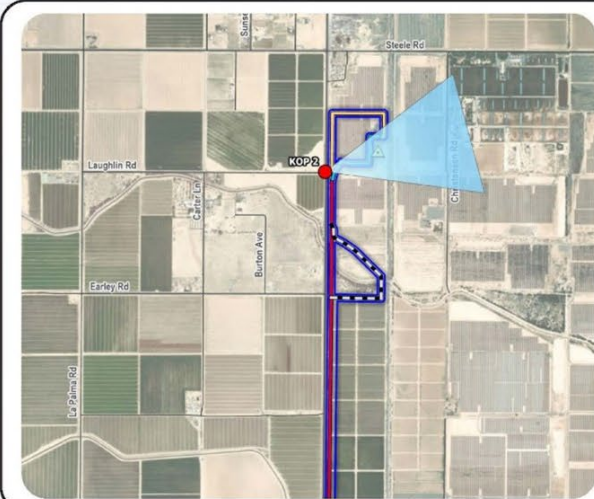
**0 %**

Temperature (°F):

**68°F**

*Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.*

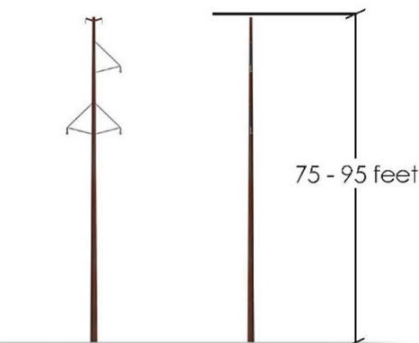
## Selma Energy Center Interconnection Project



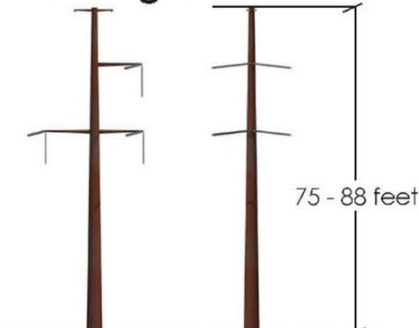
Approximate Distance Nearest Transmission Structure: **0.2 miles**

### Project Location

### Tangent Structure



### Turning Structure



### Structure Diagram



### KOP 2 - East Laughlin Road and Arizona State Route 87

Base Photographic Documentation

Latitude, Longitude (degrees):

**32.8723, -111.515262**

Viewpoint Elevation (feet): **1,475**

Camera Height (meters): **1.5**

Camera Heading (degrees):

**70**

Camera Make & Model:

**Canon EOS 5D Mark IV**

Camera Sensor Size (mm):

**36 x 24 Full Frame**

Crop Factor:

**1x**

Lens Make & Model:

**AF-P Nikkor**

Lens Focal Length (mm):

**50**

Image Size (pixels):

**6720 x 4480**

*Single frame simulation approximates 50mm full frame equivalent.*

*Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.*

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**Exhibit G-9a. Photosimulation of the Interconnection Project – Option B from KOP 2 – aboveground (page 1).**

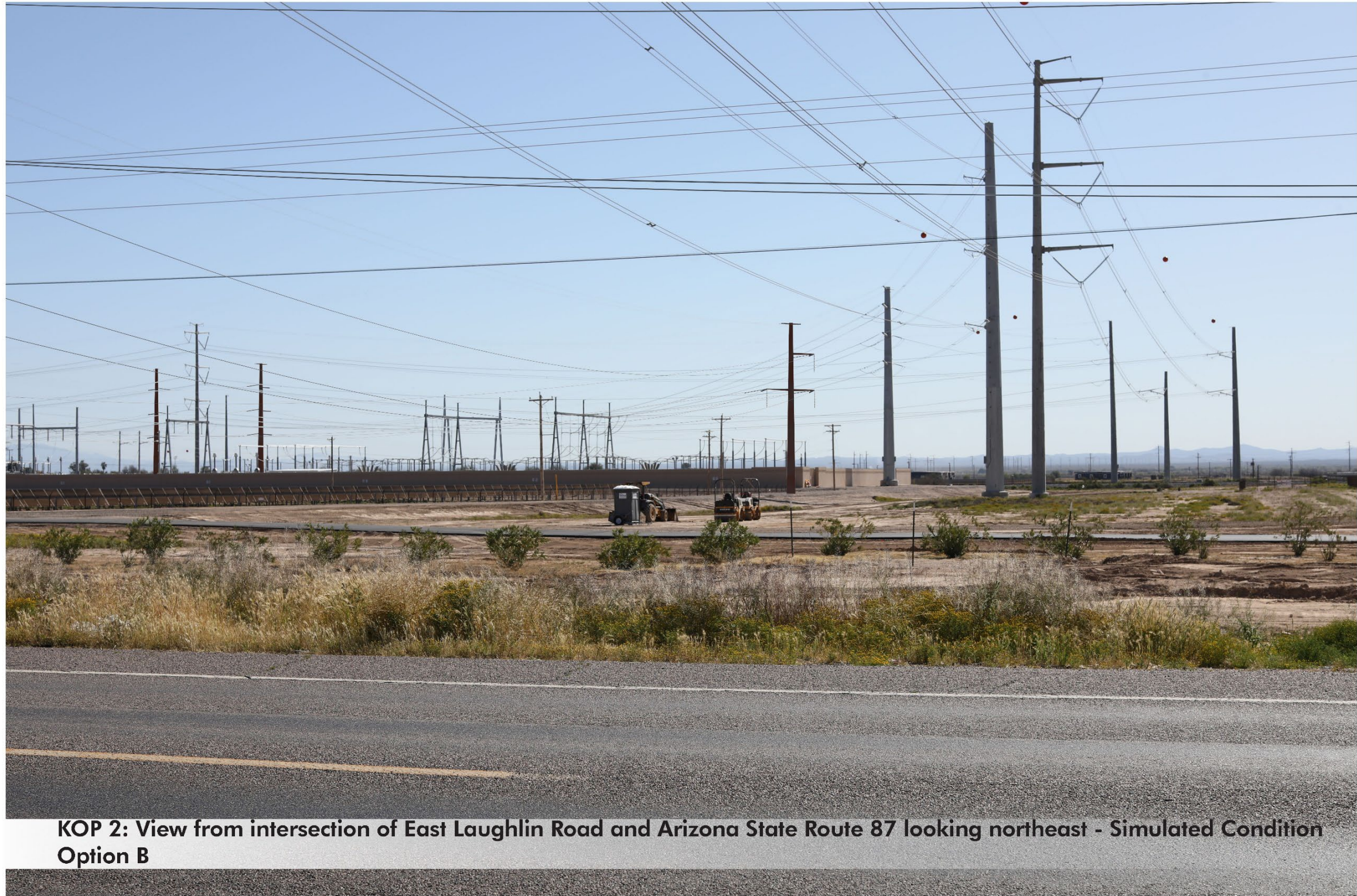




**KOP 2: View from intersection of East Laughlin Road and Arizona State Route 87 looking northeast - Existing Condition**

**Exhibit G-9b. Photosimulation of the Interconnection Project – Option B from KOP 2 – aboveground (page 2).**





**KOP 2: View from intersection of East Laughlin Road and Arizona State Route 87 looking northeast - Simulated Condition Option B**

**Exhibit G-9c. Photosimulation of the Interconnection Project – Option B from KOP 2 – aboveground (page 3).**



### Sun and Weather



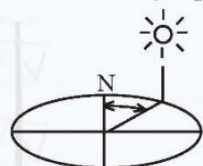
Date: **4-10-24**  
Photo Time: **9:20 am**

Visibility:



**Air Quality: Good**

Sun Azimuth (degrees):



**98.93**

Sun Angle (degrees): **27.11**

Lighting Angle on Project:  
**Side Lit**

Wind:

**6 mph**

Cloud Cover:

**0 %**

Temperature (°F):

**68°F**

*Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.*

### Selma Energy Center Interconnection Project



Approximate Distance Neareast Transmission Structure:  
**0.25 miles**

### Project Location

#### Tangent Structure

75 - 95 feet

#### Turning Structure

75 - 88 feet

#### Underground Structure

90 feet

### Structure Diagram

### KOP 2 - East Laughlin Road and Arizona State Route 87

Base Photographic Documentation

Latitude, Longitude (degrees):

**32.8723, -111.515262**

Viewpoint Elevation (feet): **1,475**

Camera Height (meters): **1.5**

Camera Heading (degrees): **70**

Camera Make & Model:

**Canon EOS 5D Mark IV**

Camera Sensor Size (mm):

**36 x 24 Full Frame**

Crop Factor: **1x**

Lens Make & Model:

**AF-P Nikkor**

Lens Focal Length (mm):

**50**

Image Size (pixels):  
**6720 x 4480**

*Single frame simulation approximates 50mm full frame equivalent.*

*Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.*

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Exhibit G-10a. Photosimulation of the Interconnection Project from KOP 2 – underground (page 1).





**Exhibit G-10b. Photosimulation of the Interconnection Project from KOP 2 – underground (page 2).**





**KOP 2: View from intersection of East Laughlin Road and Arizona State Route 87 looking northeast - Simulated Condition**

**Exhibit G-10c. Photosimulation of the Interconnection Project from KOP 2 – underground (page 3).**



### Sun and Weather



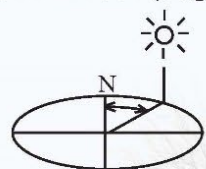
Date:  
**4-10-24**  
Photo Time:  
**9:35 am**

Visibility:



**Air Quality: Good**

Sun Azimuth (degrees):



**101.29**

Sun Angle (degrees): **30.19**

Lighting Angle on Project:  
**Side Lit**

Wind:

**7 mph**

Cloud Cover:

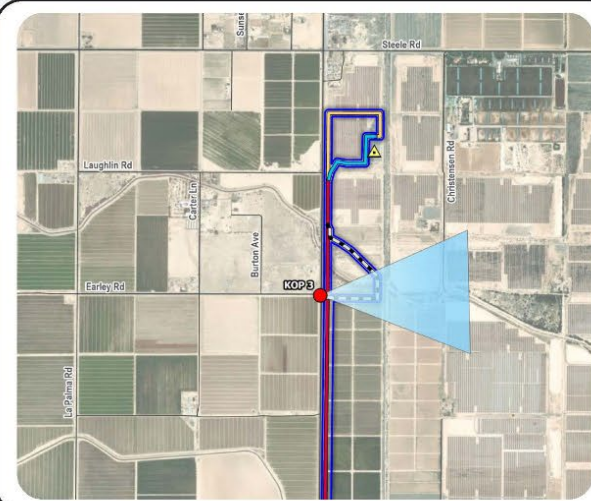
**0 %**

Temperature (°F):

**73°F**

*Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.*

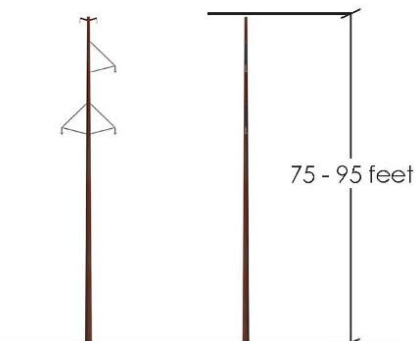
## Selma Energy Center Interconnection Project



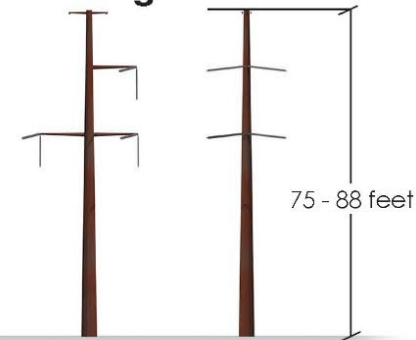
Approximate Distance Neareast Transmission Structure:  
**170 feet**

### Project Location

### Tangent Structure



### Turning Structure



### Structure Diagram



### KOP 3 - East Earley Road and Arizona State Route 87

Base Photographic Documentation

Latitude, Longitude (degrees):

**32.864933, -111.515293**

Viewpoint Elevation (feet): **1,485**

Camera Height (meters): **1.5**

Camera Heading (degrees): **90**

Camera Make & Model:

**Canon EOS 5D Mark IV**

Camera Sensor Size (mm):

**36 x 24 Full Frame**

Crop Factor:

**1x**

Lens Make & Model:

**AF-P Nikkor**

Lens Focal Length (mm):

**50**

Image Size (pixels):

**6720 x 4480**

*Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.*

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Exhibit G-11a. Photosimulation of the Interconnection Project from KOP 3 (page 1).





**KOP 3: View from intersection of East Earley Road and Arizona State Route 87 looking east - Existing Condition**

**Exhibit G-11b. Photosimulation of the Interconnection Project from KOP 3 (page 2).**





**KOP 3: View from intersection of East Earley Road and Arizona State Route 87 looking east - Simulated Condition**

**Exhibit G-11c. Photosimulation of the Interconnection Project from KOP 3 (page 3).**



### Sun and Weather



Sunny

Date:

4-10-24

Photo Time:

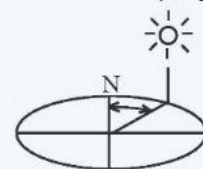
10:00 am

Visibility:



Air Quality: Good

Sun Azimuth (degrees):



105.7

Sun Angle (degrees): 35.46

Lighting Angle on Project:

Side Lit

Wind:

7 mph

Cloud Cover:

0 %

Temperature (°F):

73°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

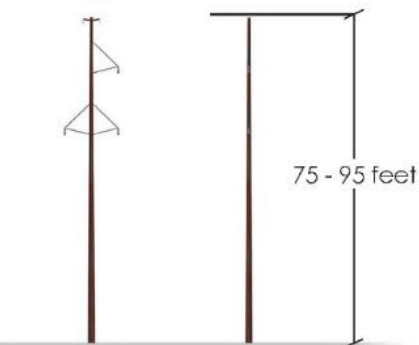
### Selma Energy Center Interconnection Project



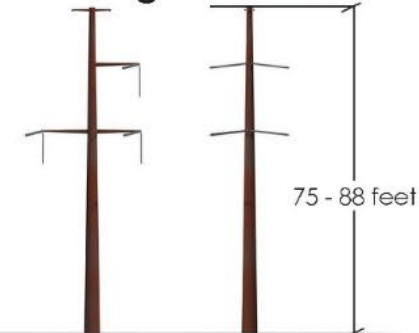
Approximate Distance Nearest Transmission Structure:  
600 feet

### Project Location

### Tangent Structure



### Turning Structure



### Structure Diagram



### KOP 4 - Arizona State Route 87

Base Photographic Documentation

Latitude, Longitude (degrees):

32.84854, -111.515214

Viewpoint Elevation (feet): 1,495

Camera Height (meters): 1.5

Camera Heading (degrees): 335

Camera Make & Model:

Canon EOS 5D Mark IV

Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

1x

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.

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Exhibit G-12a. Photosimulation of the Interconnection Project from KOP 4 (page 1).

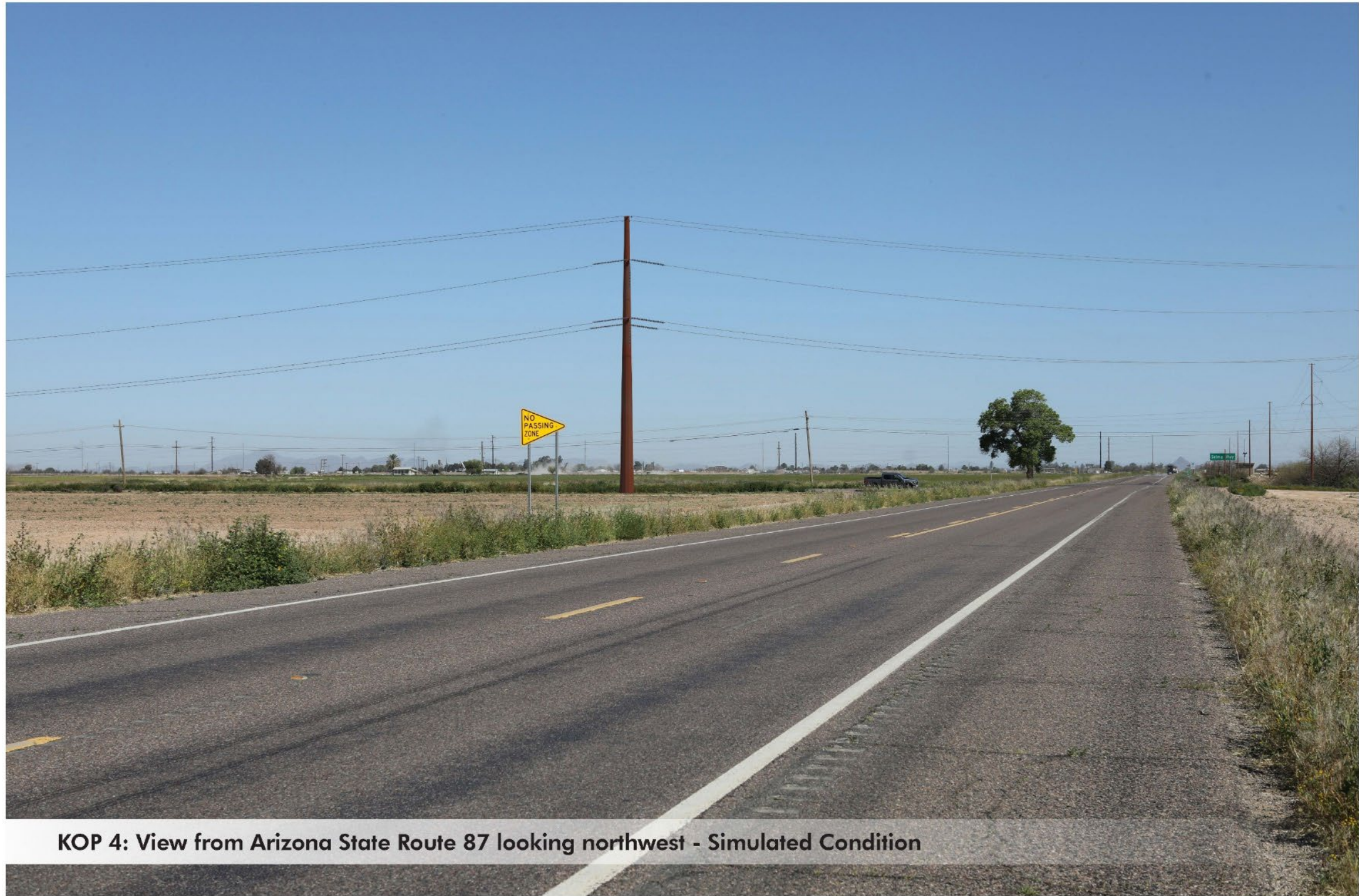




**KOP 4: View from Arizona State Route 87 looking northwest - Existing Condition**

**Exhibit G-12b. Photosimulation of the Interconnection Project from KOP 4 (page 2).**





**KOP 4: View from Arizona State Route 87 looking northwest - Simulated Condition**

**Exhibit G-12c. Photosimulation of the Interconnection Project from KOP 4 (page 3).**

## EXHIBIT H. EXISTING PLANS

As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219, Exhibit 1:

*To the extent applicant is able to determine, state the existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site or route.*

### Overview

Existing and future land uses are mapped in Exhibits A-2 and A-3 and discussed in Exhibit B. The Pinal County Comprehensive Plan, the City of Coolidge 2025 General Plan, and the Pinal County interactive mapping service were evaluated as part of the land use study.

### Outreach Letters

On May 30, 2024, letters were sent to the jurisdictions (listed in Table H-1) to provide Interconnection Project information and request new or additional information on planned developments within the Study Area. Exhibits H-1a and H1-b provide a copy of the letter and Exhibit H-2 includes the written response provided.

**Table H-1. Entities that Received Letters with Project Information**

Contact Name	Title	Agency/Organization
Rick Miller	City Manager	City of Coolidge
Gilbert Lopez	Development Services Director	City of Coolidge
Jon Thompson	Mayor	City of Coolidge
David Malewitz	City Manager	City of Eloy
Mackenzie Letcher	Assistant City Manager	City of Eloy
Jon Vlaming	Community Development Director	City of Eloy
Brent Billingsley	Community Development Director	Pinal County
Stephen Miller	District 3 Supervisor	Pinal County
Roderick Lane	Southcentral District Engineer	Arizona Department of Transportation
Courtney King	ADOT North-South Study Contact	Arizona Department of Transportation
-	-	SkyDive Arizona
Alexander Smith	Phoenix Area Office Manager	Bureau of Reclamation, Lower Colorado Basin Region
Grace Garcia	District General Manager	Hohokam Irrigation and Drainage District
Ron McEachern	General Manager	Central Arizona Irrigation and Drainage District
Brandi Ogle	General Manager	San Carlos Irrigation and Drainage District
Juan (Johnny) Federico		San Carlos Irrigation Project
Kyle Varvel	Branch Manager	San Carlos Irrigation Project
Brian Pugh	TEP Supervisor of Environmental & Land Use Planning	Tucson Electric Power
David Felix	Manager of Regulatory Affairs	Salt River Project

Contact Name	Title	Agency/Organization
Jayson Carpenter	Supervisor, Land	Salt River Project
Jason Spitzkoff	Manager, Transmission Engineering	Arizona Public Service
Eduardo Uribe	Electrical Engineer	Western Area Power Administration, Desert Southwest Region
Natalie Ortega	Environmental Manager	Western Area Power Administration, Desert Southwest Region
Ken Robbins	General Manager	Electrical District No. 2
Jose Perez	-	Electrical District No. 2
Charles Kenney	-	Electrical District No. 2
Brian Beazer	Manager, Arizona	Union Pacific Railroad
Matt Rencher	Public Works Director/City Engineer	Eloy Public Works
Benjamin Navarro	Public Works Director	Coolidge Public Works
Celeste Garza	Deputy Director	Pinal County Public Works
Ginger Ritter	Project Evaluation Supervisor	Arizona Game and Fish Department
-	-	Arizona State Land Department



«#Record»

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20 East Thomas Road, Suite 1700  
Phoenix, Arizona 85012  
Tel 602.274.3831 Fax 602.274.3958  
www.swca.com

May 29, 2024

«Contact»  
«Title»  
«Agency»  
«Address»  
«Address2»  
«City/State/Zip»

**Re: Selma Energy Center Interconnection Project**

Dear «Contact»,

Selma Energy Center, LLC, a wholly-owned indirect subsidiary of NextEra Energy Resources, LLC (NEER), plans to file an application for a Certificate of Environmental Compatibility (CEC) for the Selma Energy Center Interconnection Project (Interconnection Project) with the Arizona Power Plant and Transmission Line Siting Committee (Line Siting Committee) in September 2024. The Interconnection Project involves a new, approximately 2.5-mile-long, 230-kilovolt (kV) electrical generation-tie transmission line that would connect a new project substation at the proposed Selma Energy Center project to the regional electric grid at the existing Vah Ki Substation. Further information about the project is available at: [www.selmasolarproject.com](http://www.selmasolarproject.com).

Selma Energy Center, LLC is working with SWCA Environmental Consultants (SWCA) to prepare environmental studies for the Interconnection Project's CEC application. A map of the proposed route for the Interconnection Project is enclosed on the following page. The Line Siting Committee will evaluate the CEC application at a public hearing in late 2024.

Arizona Administrative Code Rule R14-3-219 requires that CEC applications include an exhibit that identifies "the existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site or route."

This letter is an opportunity for your organization to provide any information or comments regarding development plans for inclusion in the CEC application. We respectfully request your response in writing; specifically, please advise us of any relevant existing or future development plans that you can identify at this time.

For Selma Energy Center, LLC to include your information in the CEC application, please forward your written comments to SWCA by July 10, 2024, via email at [cagner@swca.com](mailto:cagner@swca.com), or by physical mail: Attn: Colin Agner, SWCA Environmental Consultants, 20 E Thomas Road, Suite 1700, Phoenix, AZ 85012.

Thank you for your cooperation.

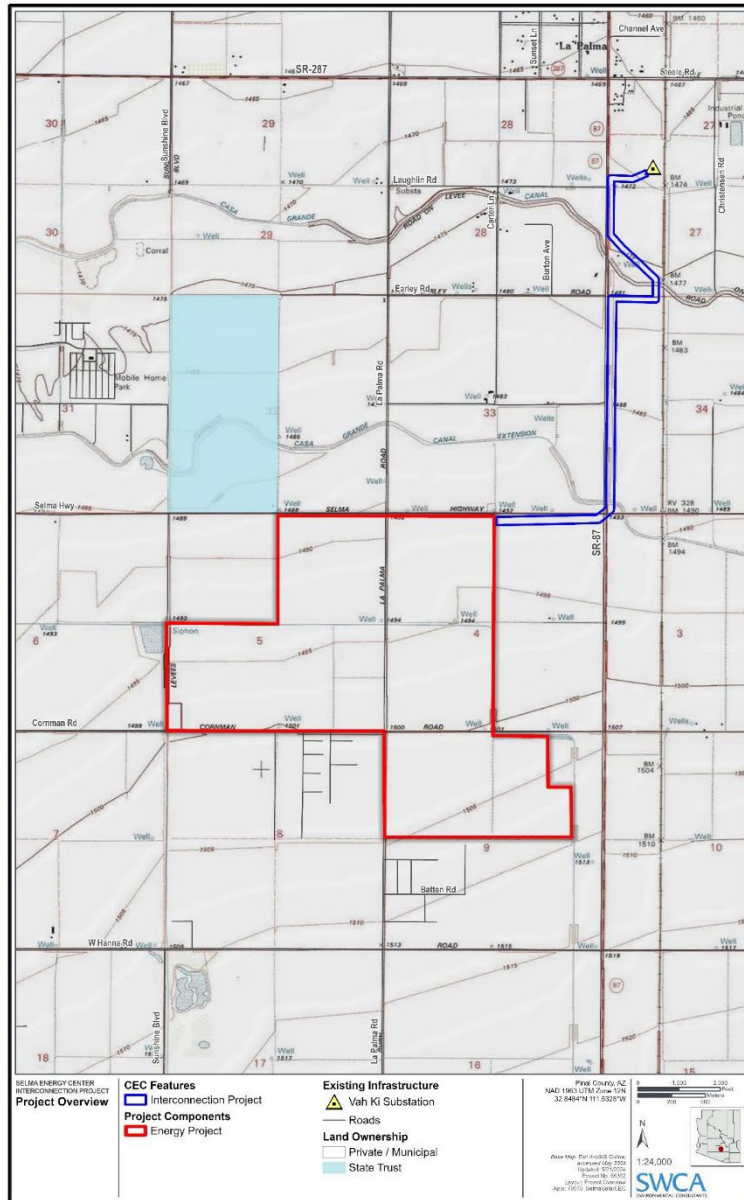
Respectfully,

*Colin Agner*

Colin Agner, Project Manager  
SWCA Environmental Consultants

**Exhibit H-1a. Example May 2024 Exhibit H letter (1 of 2).**





Selma Energy Center Interconnection Project

Exhibit H-1b. Example May 2024 Exhibit H letter (2 of 2).



July 10, 2024

Ms. Ashley Johnson  
Lead Project Manager  
20 E Thomas Road, Suite 1700  
Phoenix, AZ 85012

Electronically submitted to: [SelmaSolar.SharedMailbox@nexteraenergy.com](mailto:SelmaSolar.SharedMailbox@nexteraenergy.com)

**RE: Selma Energy Center Interconnection Project**

Dear Ms. Johnson:

The Arizona Game and Fish Department (Department) appreciates the opportunity to review the Selma Energy Center Interconnection Project (Project). The Department understands that the Project would involve the construction of a new 2.5-mile long, 230-kV Gentie line within 1,042-acres of private agricultural land, that will connect to a new project substation and to the existing Vah Ki Substation. The Project will involve the use of heavy equipment to grade and level the site, installation of solar panels, construction of above ground power lines, construction of perimeter fences and large scale soil disturbance.

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 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 recreation.

Arizona has recently seen an increase in the number of proposed and in-development renewable energy generation projects and associated infrastructure. A number of solar projects have been built or proposed within the vicinity of this project. Although each of these projects individually may have a minimal impact on the broader landscape, these projects cumulatively could result in loss of habitat, impact wildlife movements, and affect wildlife-related recreation. Additionally, long-term effects to wildlife can extend several kilometers beyond the footprint of a solar project area ([Sawyer et al. 2022<sup>1</sup>](#)). It is important to consider all potential cumulative effects and to

<sup>1</sup> <https://csajournals.onlinelibrary.wiley.com/doi/10.1002/fcc.2498>

**azgfd.gov | 480.981.9400**

**MESA OFFICE: 7200 E. UNIVERSITY DRIVE, MESA AZ 85207**

**GOVERNOR:** KATIE HOBBS **COMMISSIONERS:** CHAIRMAN CLAY HERNANDEZ, TUCSON | MARSHA PETRIE SUE, SCOTTSDALE | JEFF BUCHANAN, PATAGONIA  
JAMES E. COUGHNOUR, PAYSON | TODD C. GEILER, PRESCOTT **DIRECTOR:** TY E. GRAY **DEPUTY DIRECTOR:** TOM P. FINLEY

**Exhibit H-2a. AGFD response letter (1 of 3).**

evaluate this project in association with other projects in the area. Department staff are available to assist in identifying potential cumulative impacts to wildlife and associated voluntary conservation measures that can be implemented for the project.

- The canal present along the northern portion of the Project is a proposed multi-use trail corridor along the Florence-Casa Grande Canal. Department staff remain available to assist the County and the Developer in identifying wildlife needs in these areas such as vegetative cover and appropriate setbacks for wildlife movement across the project area. Once implementation is complete, the associated open space surrounding the canal systems will provide for wildlife connectivity through the project site to associated riparian habitats and to Picacho Reservoir. Additionally, the Department recommends incorporating unfenced areas along the canal entrances and exits to the project area to allow for wildlife movement through the project area.

The Department recognizes the importance of planning efforts to develop energy storage facilities that contribute to regional and state economic growth needs for renewable energy. The Department recognizes that appropriate coordination, proper planning, and voluntary implementation of best management practices allow projects to be developed that avoid, minimize, or offset potential impacts to wildlife and recreational access during development, maintenance, and operation of the facilities. For your consideration, the Department provides the following general and preliminary comments based on the agency's statutory authorities, public trust responsibilities, and special expertise related to wildlife resources and recreation. Additionally, please refer to the attached Online Environmental Review Tool report (HGIS-22251) created by SWCA Consultants for recommendations on artificial lighting and actions that could be taken to reduce the spread of invasive species.

- The western burrowing owl, a special status species that is regulated under the Migratory Bird Treaty Act (MBTA), has been documented within the project area. The Department recommends conducting occupancy surveys for this species following guidelines found in [Burrowing Owl Project Clearance Guidance for Landowners](#)<sup>2</sup>. Please note that the survey should be conducted by a surveyor who is certified by the Department or has similar training and qualifications. If an active burrowing owl burrow is detected, please contact the Department and the [U.S. Fish and Wildlife Service](#)<sup>3</sup> (USFWS) for direction, in accordance with the guidelines.
- Burrowing mammal species could occur within the project area and could be influenced by construction activities and by loss of habitat. Surveys for these species are recommended to determine their presence and to inform pre-construction activities. Department staff are available to assist in identifying suitable conservation measures, such as one-way exclosures on burrows that allow wildlife to exit the burrows and disperse to adjacent lands in advance of construction.
- Large-scale solar PV facilities can result in bird mortality due to habitat loss, collision with panels, attraction due to an optical illusion of water, and unknown causes ([Kosciuch et al. 2020](#)<sup>4</sup>). The Department recommends conducting avian surveys during the planning

<sup>2</sup> <https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/nongame/eagles/BurrowingOwlClearanceProtocol2009.pdf>

<sup>3</sup> <https://www.fws.gov/office/arizona-ecological-services/contact-us>

<sup>4</sup> <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0232034>

#### Exhibit H-2b. AGFD response letter (2 of 3).



stage in order to better understand species presence and to inform potential conservation measures. Point counts are the preferred method for breeding bird surveys. These surveys are conducted twice a year during the peak breeding season, which is mid-January through late June in this area; McLaren et al. (2019)<sup>5</sup> outline protocols. Department staff are available to assist in developing survey protocols for these species.

- The Department recommends following standards established by the Avian Power Line Interaction Committee (APLIC) for the gen-tie line and any other new powerlines, which can be found in [Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006](#)<sup>6</sup> and [Reduced Avian Collisions with Power Lines: The State of the Art in 2012](#)<sup>7</sup>. Birds of prey, such as raptors, owls, vultures, and eagles, are vulnerable to powerline strikes and electrocution during construction and operation of transmission lines; power poles can also serve as perches for birds of prey. The Department also encourages burying all connecting power lines associated with the solar development, and utilizing previously disturbed areas as feasible. Tuk Jacobson, the Department's Raptor Coordinator, can provide further information on specific design features and best management practices; he can be contacted at [raptors@azgfd.gov](mailto:raptors@azgfd.gov) or 623-236-7575.
- In addition, a variety of other Arizona Species of Greatest Conservation Need (SGCN) have the potential to occur within the project area. If wildlife are encountered during project activities, the Department recommends moving them out of harm's way, no more than 0.25 mile outside the project boundary within similar habitat. Please note that the Arizona State Wildlife Action Plan was recently updated, and the Department has an interactive website, [Arizona Wildlife Conservation Strategy](#)<sup>8</sup>, that includes the most recent list of SGCN to help navigate and identify conservation opportunities.

Thank you for the opportunity to provide input on the Selma Energy Center Interconnection Project. For further coordination, please contact Bobby Lamoureux at [blamoureux@azgfd.gov](mailto:blamoureux@azgfd.gov) or 480-262-9427

Sincerely,

*Joshua W. Hurst*

Joshua Hurst  
Regional Supervisor, Mesa

cc: Ginger Ritter - Project Evaluation Program Supervisor  
Kelly Wolff - Habitat, Evaluation, and Lands Program Manager, Region 6  
Jessica Potter - Project Evaluation Renewable Energy Specialist

Attachment: ERT Species Report HGIS 22251  
AZGFD #M24-06123328

<sup>5</sup> <https://www.birdconservancy.org/wp-content/uploads/2021/03/2020-Field-Protocol-for-Spatially-Balanced-Sampling.pdf>

<sup>6</sup> [https://www.aplic.org/uploads/files/2643/SuggestedPractices2006\(I,R-2\).pdf](https://www.aplic.org/uploads/files/2643/SuggestedPractices2006(I,R-2).pdf)

<sup>7</sup> [https://www.aplic.org/uploads/files/15518/Reducing\\_Avian\\_Collisions\\_2012watermarkLR.pdf](https://www.aplic.org/uploads/files/15518/Reducing_Avian_Collisions_2012watermarkLR.pdf)

<sup>8</sup> <https://awcs.azgfd.com>

**Exhibit H-2c. AGFD response letter (3 of 3).**



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# EXHIBIT I. NOISE

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As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219:

*Describe the anticipated noise emission levels and any interference with communication signals which will emanate from the proposed facilities.*

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Exhibit I outlines common electrical and noise emissions associated with high-voltage transmission lines, encompassing phenomena such as corona discharges, audible sounds, and electromagnetic fields (EMFs). Additionally, this exhibit describes the permissible noise emission levels and outlines the anticipated impacts arising from the Interconnection Project.

## Corona

Corona discharge is an electrical phenomenon resulting from the ionization of nearby fluids, often air, around conductors carrying high voltage, such as those in a 230-kV transmission line. Notably, traces of corona discharge can be found in all active high-voltage transmission lines.

When corona discharge forms around an electrified conductor, it can become concentrated enough to cause small electrical discharges. These discharges can have various effects, including producing audible noise, such as faint humming or crackling sounds, causing interference in radio transmissions, generating heat, or even triggering chemical changes in the air's components.

Several factors influence the occurrence and intensity of corona discharge:

- **Voltage Magnitude:** The overall voltage carried by the conductor is a central factor.
- **Physical Attributes of the Conductor:** The shape, diameter, and small surface imperfections, such as dust accumulation, scratches, or nicks, can affect the electrical gradient on the surface and, consequently, the corona activity.
- **Environmental Context:** Wet conditions or foul weather can amplify corona discharges. Additionally, site elevation and air pressure can significantly impact corona discharge.

Given the localized nature of corona discharge and its typically minor effects, it is expected that its impacts will be negligible beyond the Interconnection Project's right-of-way.

## Audible Noise

Sound is a type of energy transmitted through pressure changes, detectable by the ears of animals and humans. In contrast, noise is any unwanted or intrusive sound that disrupts a preferred auditory environment. For humans, noise can cause communication disruptions, hinder learning, disturb rest or sleep, and even lead to physiological health issues.

Sound is characterized by two primary attributes: amplitude and frequency. Amplitude refers to the energy level reaching the ear, determining how loud a sound is perceived. Frequency describes the rate at which the sound source oscillates or cycles within a specific time frame, typically measured in hertz (Hz).

Other important concepts include sound power and sound pressure. Sound power refers to the total energy emitted by a sound source over a given period. It represents the inherent "strength" or "loudness potential" of any sound source and remains constant regardless of the surrounding environment or distance from the source.

Conversely, sound pressure is associated with the variations in air pressure caused by a propagating sound wave. As this wave travels through a medium, often air, it creates local disturbances. Unlike sound power, sound pressure changes based on the distance from the sound source and environmental factors such as reflections, absorptions, and obstructions.

Humans typically perceive sounds within a range of 0 A-weighted decibels (dBA) to 120 dBA. A-weighted decibels adjust for the human ear's sensitivity to different frequencies, ensuring that sound measurements reflect what people hear. Sounds exceeding 120 dBA can be extremely loud and harmful, posing potential risks to the human eardrum.

Understanding how sound levels combine is crucial for assessing the cumulative impact of different noise sources. Decibels are logarithmic units, meaning they don't add up arithmetically. For example, two sources each producing a sound level of 30 dBA would combine to create a sound level of 33 dBA, not 60 dBA, due to the logarithmic nature of decibels.

For practical reference, Table I-1 presents various familiar noise sources and their corresponding sound levels in dBA. Table I-1 can be used to gauge and compare the relative loudness of everyday sounds.

**Table I-1. Sound Levels of Representative Sounds and Noises**

Common Outdoor Activities	Sound Level (dBA)	Common Indoor Activities
	110	Rock band
Jet fly-over at 1,000 feet		
	100	
Gas lawn mower at 3 feet		
	90	
Diesel truck at 50 feet at 50 miles per hour		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban daytime	50	Dishwasher next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: California Department of Transportation (2020).

## ***Existing Sound Levels***

The Interconnection Project is a proposed 230-kV alternating current gen-tie line that will be located above- and underground in the city of Coolidge and unincorporated Pinal County, Arizona. The Interconnection Project aims to deliver up to 150 MW of solar power from the Energy Facility, situated west of SR 87 and south of East Selma Highway, to the existing Vah Ki Substation. The gen-tie line will be located aboveground, with an undetermined portion of the line located underground. The intended route for the Interconnection Project is detailed as follows:

- The gen-tie line will commence at the Project Substation, south of East Selma Highway.
- From the Project Substation, the gen-tie will extend 0.6 mile east along East Selma Highway until it reaches the southeast corner of the intersection of East Selma Highway and SR 87.
- At this point, the gen-tie will turn north, proceeding for approximately 1 mile along the east side of SR 87.
- From here, the Interconnection Project has a route preferred by the Applicant (Interconnection Project – Preferred Route) and a proposed option (Interconnection Project – Subroute Option). Only one of these routes will be constructed.
- The Interconnection Project – Preferred Route continues to proceed north along the east side of SR 87 for an additional 0.5 mile.
- The Interconnection Project – Subroute Option turns east at the intersection of SR 87 and East Earley Road, continuing for approximately 0.25 mile.
- The line will then turn north, proceeding for approximately 0.1 mile.
- Next, it will take a northwestern turn, continuing for approximately 0.25 mile until reaching SR 87.
- From either the Interconnection Project – Preferred Route or Interconnection Project – Subroute Option, the gen-tie line will proceed north along SR 87 for approximately 0.2 mile. From this point, two possible route options exist, Option A and Option B, both terminating at the same location at the Vah Ki Substation.

### **Route Option A**

- Option A continues north along SR 87 for an additional 0.5 miles.
- Next, it turns, heading east along a service road for approximately 0.25 mile.
- Completing the line, Option A then turns south, proceeding for approximately 0.1 mile before turning west to enter the Vah Ki Substation from the eastern side.

### **Route Option B**

- From the same initial position as Option A, Option B instead makes a slight north-northeast deviation along a service road for about 0.1 mile.
- Route option B then turns east, proceeding for approximately 0.1 miles.
- Finally, route option B turns north, extending for approximately 0.1 miles before turning east to enter the Vah Ki Substation from the western side.

Only one of the two routes mentioned above will be chosen to complete the gen-tie.

The Interconnection Project is located in unincorporated Pinal County, Arizona, known for its mix of urban and rural areas, rapid growth, and suitability for solar energy projects. The area surrounding the



Interconnection Project features vast farmlands, open desert landscapes, and renewable energy infrastructure.

The American National Standards Institute (ANSI) has published a standard that approximated typical background noise levels for a variety of land uses (ANSI 2013). For locations that can be classified as "very quiet suburban and rural residential", ANSI's estimations for daytime and nighttime background noise levels are 40 dBA and 34 dBA, respectively. Considering the land uses near the Interconnection Project, these estimations serve as an apt representation of the prevailing conditions.

## ***Noise-Sensitive Receptors***

Assessing the potential noise impact is crucial, especially in areas containing noise-sensitive receptors. Such receptors are locations inhabited by individuals or sites where intrusive sounds might disrupt the typical land use, deteriorating its quality or value. Examples of noise-sensitive receptors include residences, educational institutions (e.g., schools), informational hubs (e.g., libraries), religious institutions (e.g., churches), healthcare centers (e.g., hospitals and nursing homes), cultural venues (e.g., auditoriums), and leisure spaces (e.g., parks and outdoor recreational zones).

In the context of the Interconnection Project for the 230-kV line, it is noteworthy that the line will be contained within a 150-foot ROW. The closest noise-sensitive receptor to the Interconnection Project is a residence. This residence is situated approximately 210 feet north of the Interconnection Project.

## ***Anticipated Noise During Project Construction***

Constructing a transmission line involves the use of various ground-based equipment, including heavy-duty earth-moving machinery, cranes, air compressors, generators, and numerous transport trucks. These machines inherently generate considerable noise, with typical construction equipment producing noise levels in the range of approximately 70 to 90 dBA at 50 feet (FHWA 2011).

It is imperative to note that all construction-related noise will rigorously conform to the local regulations and guidelines set forth by Pinal County, Arizona. Furthermore, to mitigate potential disturbances to residents and adhere to best practices, most construction activities are scheduled to take place during daylight hours.

A significant aspect of construction noise is its rapid reduction in intensity with increased distance from the source. As the distance from the noise source increases, the sound level decreases significantly. Additionally, the noise generated during construction is transient and temporary in nature.

## ***Anticipated Noise During Project Operation***

The Interconnection Project will involve a 230-kV transmission line established within a 150-foot ROW. Using the corona noise modeling results from the Burlington-Wray 230-kV Generation Intertie Project (USDA 2013), conducted using the EMF Workstation: ENVIRO (Version 3.52), as a proxy for the audible noise from the Interconnection Project, we can conclude that the noise levels from the operation of the transmission line will be lower than the assumed daytime background noise levels (40 dBA) for the Interconnection Project site.

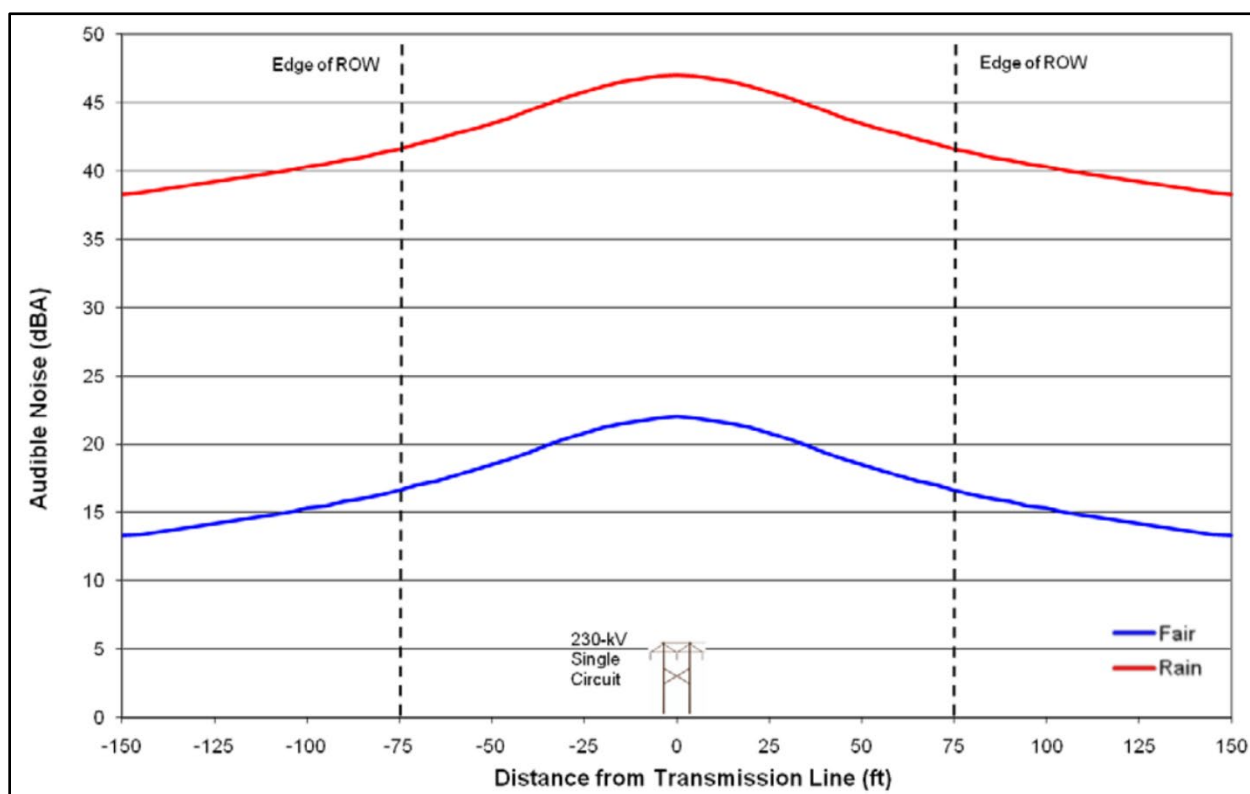
The primary consideration in utilizing modeling results from the Burlington-Wray 230-kV Generation Intertie Project as a representative dataset for the Selma Energy 230-kV Interconnection Project hinges on similarities in infrastructure. Both projects involve 230-kV transmission lines, suggesting comparable technical designs and functional parameters.

Another significant factor supporting this justification is the elevation of the two projects. The Burlington-Wray transmission line was modeled at an elevation of 4,000 feet, significantly higher than the 1,483-foot average elevation of the Interconnection Project. Elevation plays a crucial role in corona noise generation,

with higher elevations typically experiencing increased corona effects due to the reduced density of the atmosphere compared to sea level. Using the relationship  $A/300$ , where A represents the elevation in meters above sea level, we can deduce that corona noise at 600 meters elevation would be double that at 300 meters (EPRI 2005). Therefore, the corona noise produced from the Burlington-Wray's transmission line will be higher than that of the Interconnection Project due to the difference in elevation.

The results from the Burlington-Wray 230-kV Generation Intertie Project showed various noise levels under different weather conditions, as illustrated in Exhibit I-1. Under fair weather conditions, the noise at the ROW edges was approximately 17 dBA, while in wet conditions, it increased to 42 dBA. The maximum noise observed within the ROW was 22 dBA in fair weather and surged to 47 dBA during wet conditions.

For the closest residential receptor, located 210 feet north of the Interconnection Project, and without accounting for the differences in elevation, the noise levels were estimated at 13 dBA in fair weather and 38 dBA in foul conditions.



**Exhibit I-1. Corona Audible noise for 230-kV transmission line.**

## Communication Signal Interference

Overhead transmission lines have been extensively studied for their potential impact on communication signal quality, particularly concerning radio and television reception. Generally, these lines do not interfere with standard communication signals. However, when interference does occur, it can usually be attributed to two primary sources: corona discharges and gap discharges.

Corona discharges from transmission lines can sometimes produce unintended electrical noise. The intensity of this noise diminishes with increased distance from the transmission line. For the AM radio spectrum, which operates at lower frequencies, corona discharges might cause disruptions. For instance, a

humming sound, which fades as the distance from the line increases, may be heard on an AM radio near a power line.

Conversely, FM radio receptions, with their higher frequencies (88 to 108 megahertz), are rarely affected. The inherent interference rejection capabilities of FM systems also render them resistant to such disturbances. Additionally, since the Interconnection Project's voltage does not exceed 230 kV, TV receptions are generally not subject to corona-induced disruptions.

Unlike corona discharges, gap discharges can occur at any voltage level on power lines. Gap discharges arise from small electrical separations or gaps that might form between mechanically connected metal parts. When these gaps are bridged by small electric sparks, unwanted electrical noise can be produced. The impact of this noise depends on various factors, including the quality of the received radio or TV signal and the proximity of the receiver to the power line. However, many interference complaints are often traced back to non-power line sources, such as household appliances or poor-quality antennas.

High-voltage transmission lines usually experience fewer gap discharge problems due to their structural features and maintenance standards. The design and construction of these lines play a pivotal role in minimizing such disturbances. Properly designed hardware, electrical bonding where necessary, and diligent tightening of connections during construction can help avoid most interference issues. For those rare instances of interference, they can typically be traced to specific sources, such as corroded or damaged hardware, and rectified.

Additionally, transmission lines generally do not interfere with other critical communication infrastructures. Specifically, they do not disrupt the functions of cellular phone towers or the communication pathways of microwaves. This non-interference is evident from the widespread practice of mounting cellular antennas and microwave receivers directly onto transmission structures. The height of these structures, which often enhances signal range and quality, encourages such co-use without any reported complications.

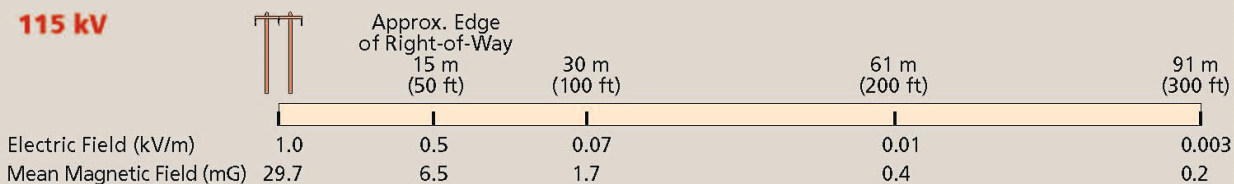
Given the proximity of a residential receptor to the Interconnection Project and other existing power lines, no additional radio interference is anticipated. The inherent design specifications, combined with the project's adherence to construction best practices, will ensure minimal disruptions to nearby communication systems.

## **Electric and Magnetic Fields**

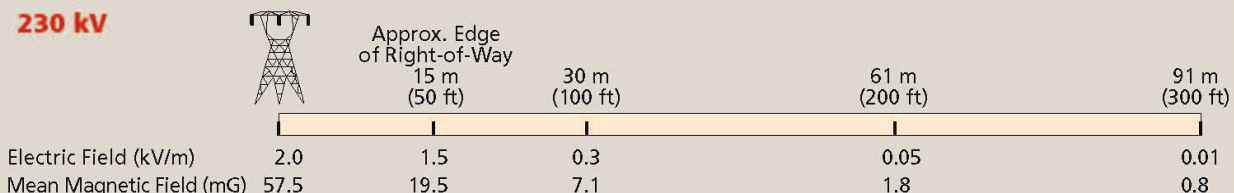
Electric fields occur naturally in the world and typically range from 12 to 150 kilovolt/meter (kV/m). For example, electric fields created by televisions and other video display units typically occur in the range of 20 kV/m. Exhibit I-2 shows typical EMF levels and dissipation of this energy the further removed from a transmission facility. For a standard 230-kV transmission line, the electric field directly beneath it is around 2.0 kV/meter. Magnetic fields naturally occur and are typically in the range of 0.01 nanotesla (nT). Magnetic fields that occur under a transmission line typically occur in the range of 3 to 9 microtesla (μT), or 30 to 90 milligauss (mG). These EMFs reduce quickly the further removed from the source.

## Typical EMF Levels for Power Transmission Lines\*

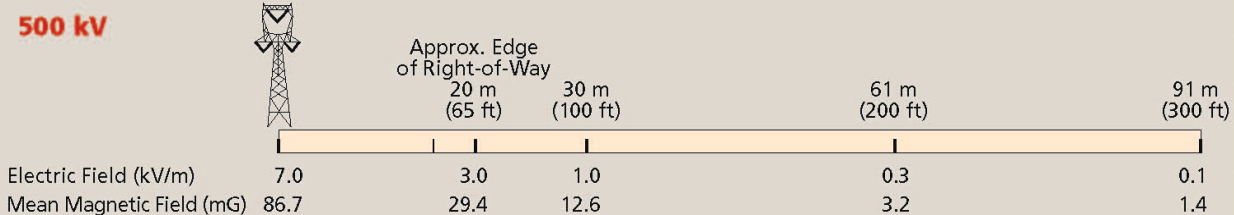
### 115 kV



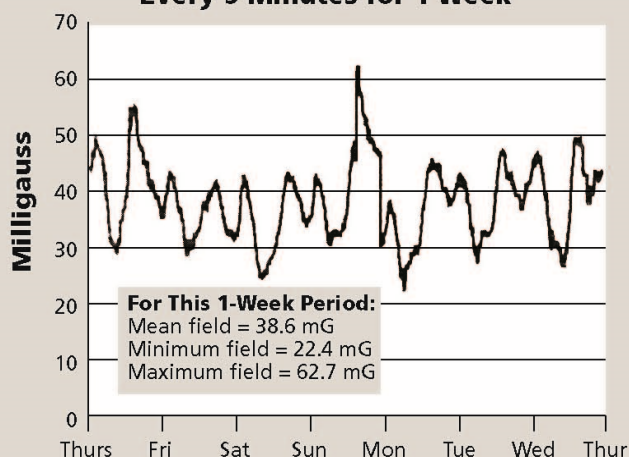
### 230 kV



### 500 kV



### Magnetic Field from a 500-kV Transmission Line Measured on the Right-of-Way Every 5 Minutes for 1 Week



Electric fields from power lines are relatively stable because line voltage doesn't change very much. Magnetic fields on most lines fluctuate greatly as current changes in response to changing loads. Magnetic fields must be described statistically in terms of averages, maximums, etc. The magnetic fields above are means calculated for 321 power lines for 1990 annual mean loads. During peak loads (about 1% of the time), magnetic fields are about twice as strong as the mean levels above. The graph on the left is an example of how the magnetic field varied during one week for one 500-kV transmission line.

\*These are typical EMFs at 1 m (3.3 ft) above ground for various distances from power lines in the Pacific Northwest. They are for general information. For information about a specific line, contact the utility that operates the line.

Source: Bonneville Power Administration, 1994.

Exhibit I-2. Typical EMF levels for power transmission lines.



## Literature Cited

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## EXHIBIT J. SPECIAL FACTORS

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As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219, Exhibit 1:

*Describe any special factors not previously covered herein, which applicant believes to be relevant to an informed decision on its application.*

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### Public Involvement

#### **Informational Letters**

The Applicant sent public notification letters to approximately 128 landowners, residents, and stakeholders within 1 mile of the Interconnection Project as part of the CEC public involvement process. The first notification letter was mailed on May 30, 2024 (Exhibits J-1a and J1b). This letter introduced the Interconnection Project and announced opportunities for comment, including a virtual open house that was launched June 19, 2024, and an in-person open house at the Pinal County Fairgrounds on June 19, 2024. A second letter will announce the filing of the CEC application as well as the dates of the Interconnection Project's Arizona Power Plant and Transmission Line Siting Committee public hearings.

#### **Website and Social Media**

A Project website hosted at [www.SelmaSolarProject.com](http://www.SelmaSolarProject.com) served as a central location to provide stakeholders and interested parties with Interconnection Project information and opportunities for public comment. The website included general information regarding the Energy Facility and the Interconnection Project in its entirety. The website was advertised through informational letters, newspaper advertisements, the telephone information line, the virtual open house, and the public in-person open house. Screenshots of the Interconnection Project website are in Exhibits J-2a through J-2d.

A Facebook page was created to provide additional information to the public, available at [www.facebook.com/SelmaEnergyCenter](http://www.facebook.com/SelmaEnergyCenter). A screenshot of the Facebook page is included in Exhibit J-3. As part of the Facebook page, the Applicant announced the in-person open house and included opportunities for comment. To enhance the visibility of the Facebook page to the local communities, the Applicant "boosted" the Facebook page from June 3, 2024, to June 19, 2024, in the three zip code areas that intersect the Study Area (including 85131 [Eloy], 85128 [Coolidge], and 85194 [Casa Grande]). During this boosted period, there were 77,131 accounts reached, 247,847 impressions, and zero likes, comments, or shares on the Facebook page open house announcement.

#### **Virtual Open House**

An online virtual open house was hosted at <http://SelmaEnergyOpenHouse.com> to provide general information on the Interconnection Project. The virtual open house was announced in the informational letter and paid newspaper advertisements, the Interconnection Project website, and through the telephone information line.

The virtual open-house format included an interactive website with Interconnection Project information provided in clickable modules, which allowed interested parties to visit and review the materials at their convenience, ask questions, request information, or provide comment through embedded comment forms. The clickable modules included large maps and text displays with highlighted details of the Interconnection Project and images simulating the appearance of the facilities after construction. Following the online publishing of the virtual open house, the Applicant initiated a 1-month comment period, requesting that

stakeholder comments or questions be provided by July 17, 2024. During this period, 36 viewers attended the virtual open-house meeting. No comments were submitted through the website during the formal comment period, but comments will continue to be accepted throughout the duration of the Interconnection Project. Screenshots of the virtual open house website and informational display boards are included in Exhibit J-4a through J-4d.

### ***In-Person Open House Meeting***

An in-person public open-house meeting was held for the Interconnection Project on Wednesday, June 19, 2024, from 6:00 p.m. to 7:00 p.m. at the Pinal County Fairgrounds (512 S. Eleven Mile Corner Road, Casa Grande, AZ 85194). The format of the meeting was an informal open house, allowing community members to attend at their convenience, review informational displays, and communicate with members of the Interconnection Project team. Exhibit J-5a shows the meeting sign-in sheet. At the open house, one person attended but did not sign in. The attendee spent time with the Applicant and discussed surrounding property use and ownership, a general support of solar and willingness for their property to be utilized for solar use (see Table J-1 for detailed comment and response). The comment form provided during the in-person public open-house is provided in Exhibit J-5b. The attendee did not provide a formal comment. Information relayed at the meeting can be found in Exhibits J-6a through J-6m.

Based on the discussions during and comments received from the in-person open house meeting, no concerns, issues or problems were identified that required additional mitigation. If any concerns, issues, or problems arise during the permitting process that require additional mitigation, the Applicant will address those to the extent feasible.

### ***Newspaper Advertisements***

The Applicant placed advertisements in the *Tri Valley Dispatch* on June 6 and 13, 2024, and the *Casa Grande Dispatch* on June 4 and 11, 2024 (Exhibits J-7a through J-f). These advertisements provided information regarding the Interconnection Project and announced the in-person open house and additional opportunities for comment through the telephone information line, postal mail, and the Interconnection Project website.

### ***Email and Telephone Line***

The Applicant created a telephone information line and email address to provide additional opportunities for members of the public to learn about the Interconnection Project and express questions or comments.

The telephone number and email address were provided in informational letters, the Facebook page, and newspaper advertisements as well as at the virtual and in-person open house meetings. Initially, the telephone line gave a summary of the Interconnection Project and announced the Interconnection Project in-person open house and the associated 30-day comment period. Following the completion of the comment period, the telephone line was updated to inform callers to leave a message with their name and number and the Applicant would return their call. The telephone line also invited the caller to visit the Interconnection Project website for additional information. The telephone line will continue to provide callers with the opportunity to comment or request information throughout the entirety of the CEC permitting process. Five comments were provided through the Interconnection Project email (Table J-1).

### ***Public Comment***

To date, six comments have been received about the Interconnection Project. All comments and responses are provided in Table J-1. One comment received was in general support of the Interconnection Project. The second comment was from the Arizona Game and Fish Department, whose letter is included in Exhibit H. The third comment was related to the Energy Facility detailed design, which the Applicant could not

provide at this time given that the Energy Facility is in a conceptual design phase. The fourth comment was a potential unsolicited contractor asking to bid on the Project, which the Applicant did not respond to this request. The fifth comment was a request on how to stay updated on the Project, which the Applicant directed the commenter to the Facebook page and Project website. The final comment was a request to consider additional property for the Project, which the Applicant did not respond to this comment.



**Table J-1. Comments Received**

<b>Comment number</b>	<b>Method of Comment</b>	<b>Comment</b>	<b>Response</b>
1	Verbal Comment at In-Person Open House	General support of the project as a current landowner in the area. Asked general questions regarding property use, interest of other locals, and the project details. Expressed a general support of solar.	Listened, answered questions and thanked them for their support.
2	Project Email	Good afternoon, Attached you will find our Departments comments for the Selma Energy Center Interconnection Project, along with the referenced ERT species report. Please let me know if you have any questions and thank you for the opportunity to review. -Bobby	Applicant thanked the Arizona Game and Fish Department for their response and provided their letter in Exhibit H.
3	Project Email	Ashley, We are the property owners to the South of your proposed project. Could not make it to the meeting last night Can you send me the high level plans of what your team is proposing? Need to make sure there is adequate buffers Thanks Tanner Petersen	Applicant let the commenter know that the project is still in conceptual phase of planning the physical layout, however, they directed the commenter to visit the project website for the available project information.
4	Project email	Howdy, Do you have a contractor that takes cares of the weeds growing in your solar fields? Would you entertain another bid? Thanks, Hunter	Applicant did not respond.
5	Project email	Hello, I recently received a letter inviting me to attend the project open house meeting that was held on June 19th. Unfortunately, I was not able to attend it, so is there a community forum I could sign up for to receive any updates on it. Thank you, Meena	Applicant directed the commenter to visit the project website and Facebook page for updates. Applicant also provided the project virtual open house link to view the project information.

Comment number	Method of Comment	Comment	Response
6	Project email	<p>Good afternoon Ashley,</p> <p>My name is Buck REDACTED and I am part of the disposition team for the 160 Acre site immediately due south of the Selma Energy Center in Coolidge. I am writing to let you know our site is currently being marketed and should NextEra Energy have an interest in all or part of the site, our client would be interested in a discussion. We've been approached by data centers, traditional industrial distribution centers, and other contemplated development uses, so having your project sharing our immediate northern most boundary is something we'd be interested in learning more about so that we can actively seek potential complimentary development uses for the site.</p> <p>My client received your letter (attached) and asked me to connect with you to find out how we might be able to potentially work together on this.</p> <p>Give me a call when you have some time to discuss. I'd love to learn more about how our listing might be able to help support your project. I have included our most recent marketing collateral for your review. Looking forward to speaking with you.</p>	Applicant did not respond.

**Selma Energy Center, LLC**

May 29, 2024

**Invitation to learn about the proposed Selma Energy Center Interconnection Project**

Dear Interested Party,

This letter provides notice of the Selma Energy Center Interconnection Project public open house meeting Wednesday, June 19, 2024, from 6:00–7:00 p.m. at the Pinal County Fairgrounds, 512 S. Eleven Mile Corner Road, Casa Grande, AZ 85194.

Selma Energy Center, LLC, a wholly-owned indirect subsidiary of NextEra Energy Resources, LLC, plans to construct a new transmission line, referred to as the Selma Energy Center Interconnection Project (Interconnection Project). The Interconnection Project involves a new, approximately 2.5-mile-long, 230-kilovolt (kV) electrical generation-tie transmission line that would connect a new project substation at the proposed Selma Energy Center project to the regional electric grid at the existing Vah Ki Substation. The northern end of the proposed Interconnection Project would be located approximately three (3) miles south of the community of Randolph, Arizona. The Interconnection Project would originate at the Selma Energy Center project substation and parallel East Selma Highway to State Route (SR) 87 for approximately 0.5 miles, then traverse north along SR 87 for approximate one (1) mile, before heading east, north, and then northwest for another one-mile across lands north of East Earley Road and adjacent to and across the property of the Saint Solar project, connecting into the Vah Ki Substation.

The Interconnection Project will be reviewed by the Arizona Corporation Commission and Arizona Power Plant and Transmission Line Siting Committee (Siting Committee). Selma Energy Center, LLC plans to apply for a Certificate of Environmental Compatibility (CEC) in the coming months.

Selma Energy Center, LLC, welcomes feedback from the community and is soliciting public and stakeholder input on the Interconnection Project. If you would like to learn more, have questions or comments, you may talk with a project member at the in-person open house meeting or submit a comment via writing, email or voicemail through the forums listed below:

**Mail:** Ashley Johnson  
Lead Project Manager, Selma Energy Center, LLC  
c/o SWCA Environmental Consultants  
20 E Thomas Road, Suite 1700, Phoenix, AZ 85012  
**Email:** [SelmaSolar.SharedMailbox@nexteraenergy.com](mailto:SelmaSolar.SharedMailbox@nexteraenergy.com)  
**Voicemail:** 1 (520) 201-6289  
**Project Website:** [www.selmasolarproject.com](http://www.selmasolarproject.com)

In addition to an in-person open house, we are hosting an online virtual open house, linked below. The virtual open house will be live on June 19, 2024.

**Project Virtual Open House:** <http://SelmaEnergyOpenHouse.com>

Comments received before July 17, 2024, will be included in the CEC application. We look forward to receiving your input.

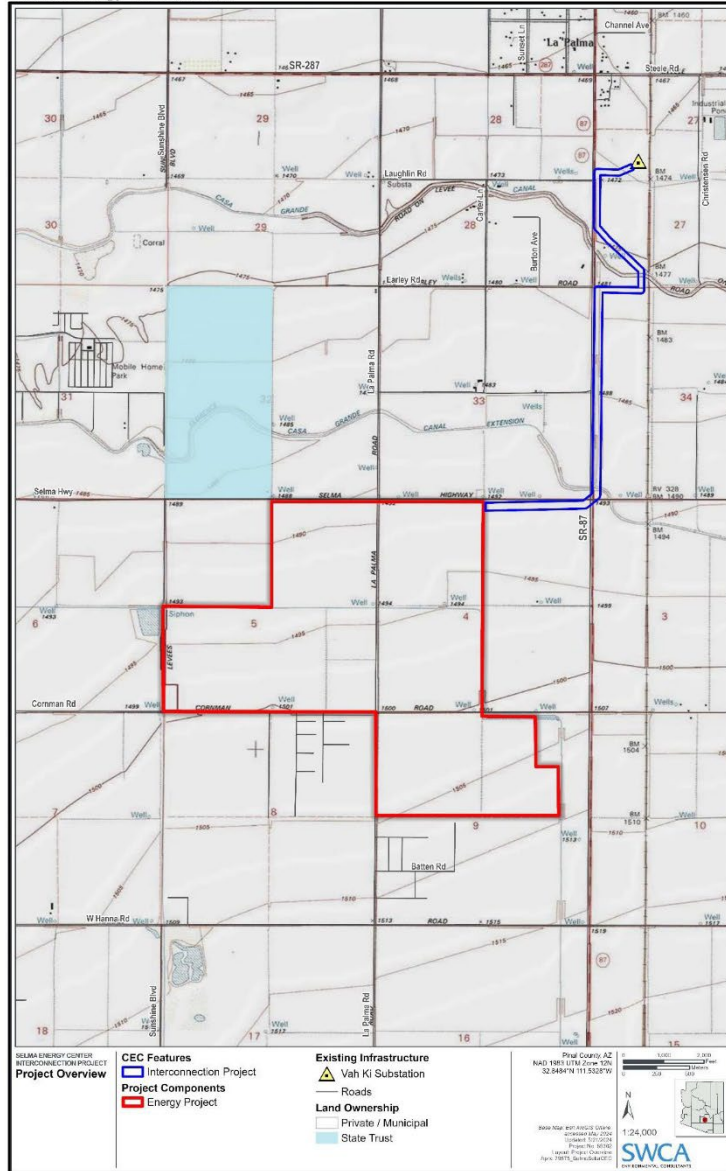
Sincerely,

Ashley Johnson, Lead Project Manager  
NextEra Energy, Inc.

700 Universe Boulevard, Juno Beach, FL 33408

**Exhibit J-1a. Project information letter (1 of 2).**

Selma Energy Center, LLC

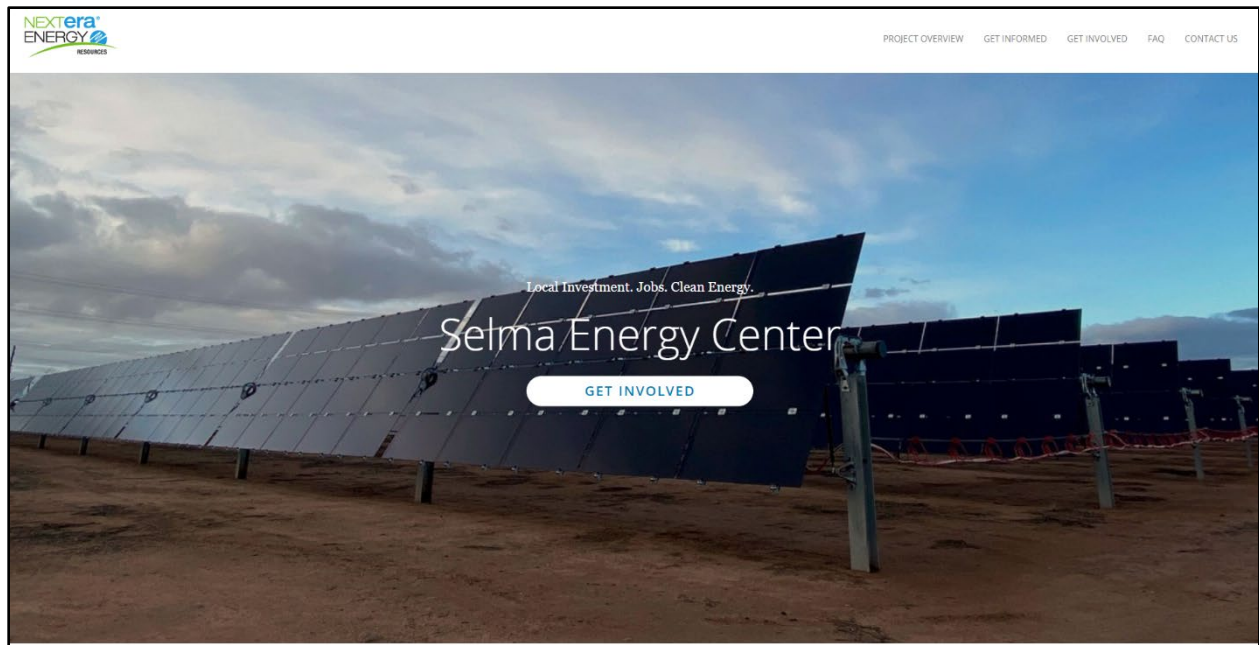


NextEra Energy, Inc.

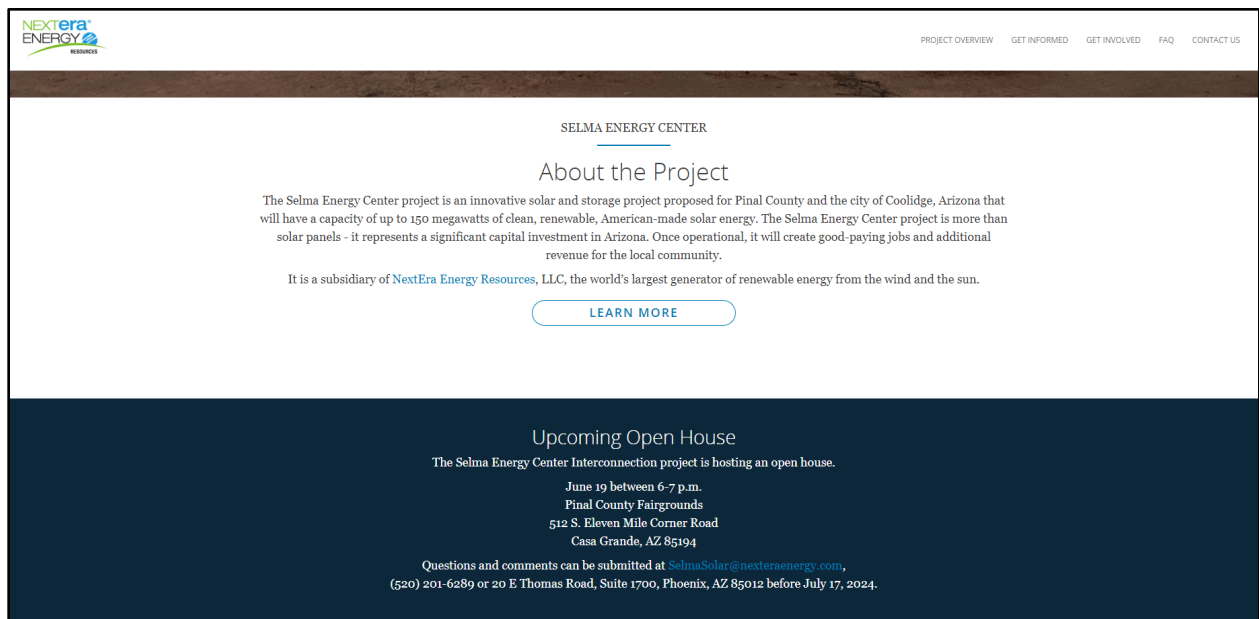
700 Universe Boulevard, Juno Beach, FL 33408

Exhibit J-1b. Project information letter (2 of 2).

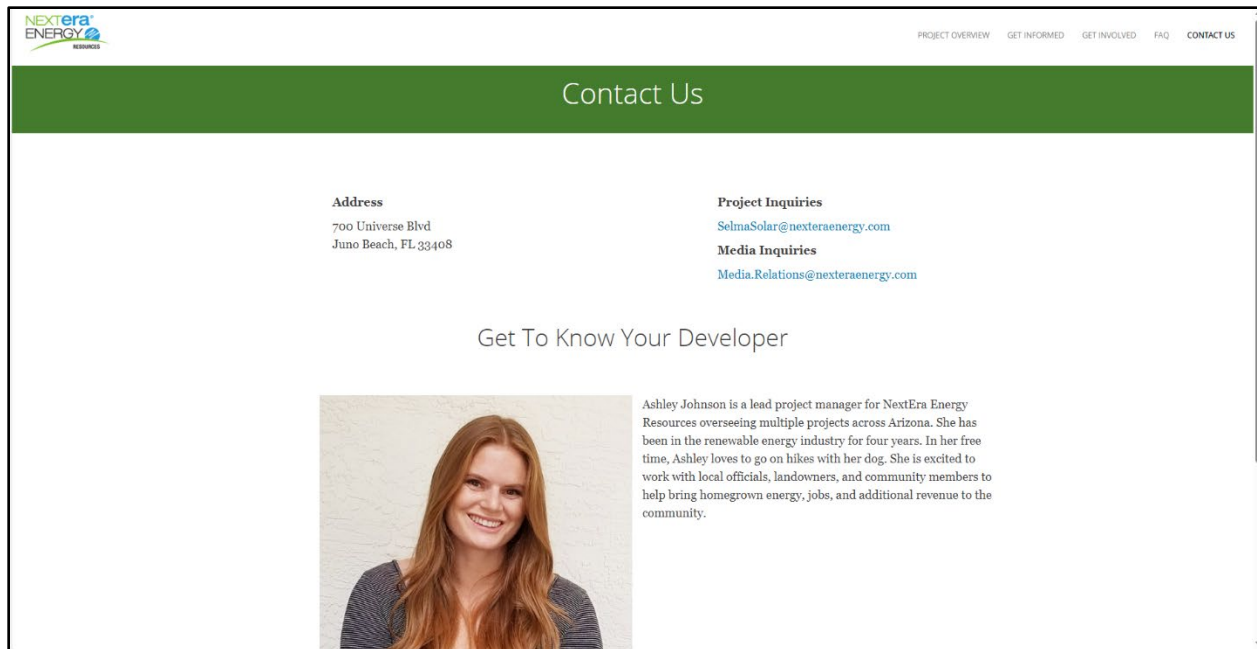




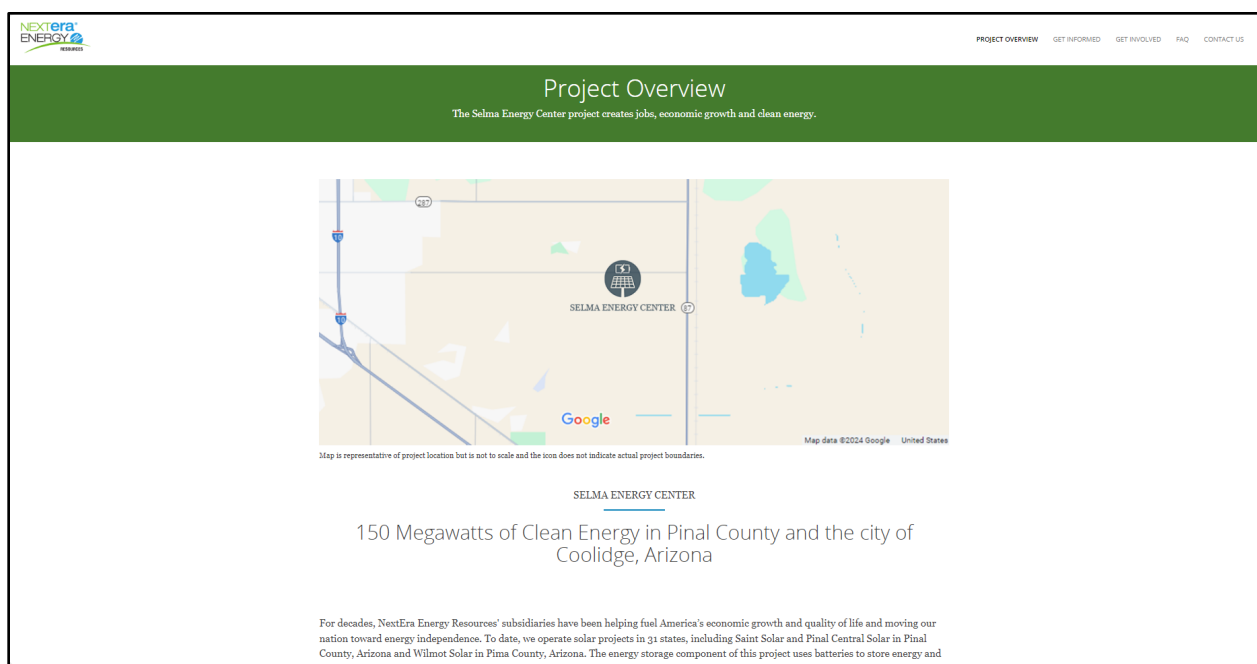
**Exhibit J-2a. Project website (1 of 4).**



**Exhibit J-2b. Project website (2 of 4).**



**Exhibit J-2c. Project website (3 of 4).**



**Exhibit J-2d. Project website (4 of 4).**



Selma Energy Center

June 3 · 🌐

...

Meet the team, have your questions answered and learn more about the Selma Energy Center Interconnection project June 19.

Selma Energy Center is an indirect, wholly owned subsidiary of NextEra Energy Resources.



Learn more about the Selma Energy Center Interconnection project

A subsidiary of NextEra Energy Resources is proposing an energy center interconnection project in Pinal County. Residents are invited to stop in and meet our team to learn more about the proposed project at the upcoming neighborhood meeting.

**June 19 between 6-7 p.m.**  
Pinal County Fairgrounds  
512 S. Eleven Mile Corner Road  
Casa Grande, AZ 85194

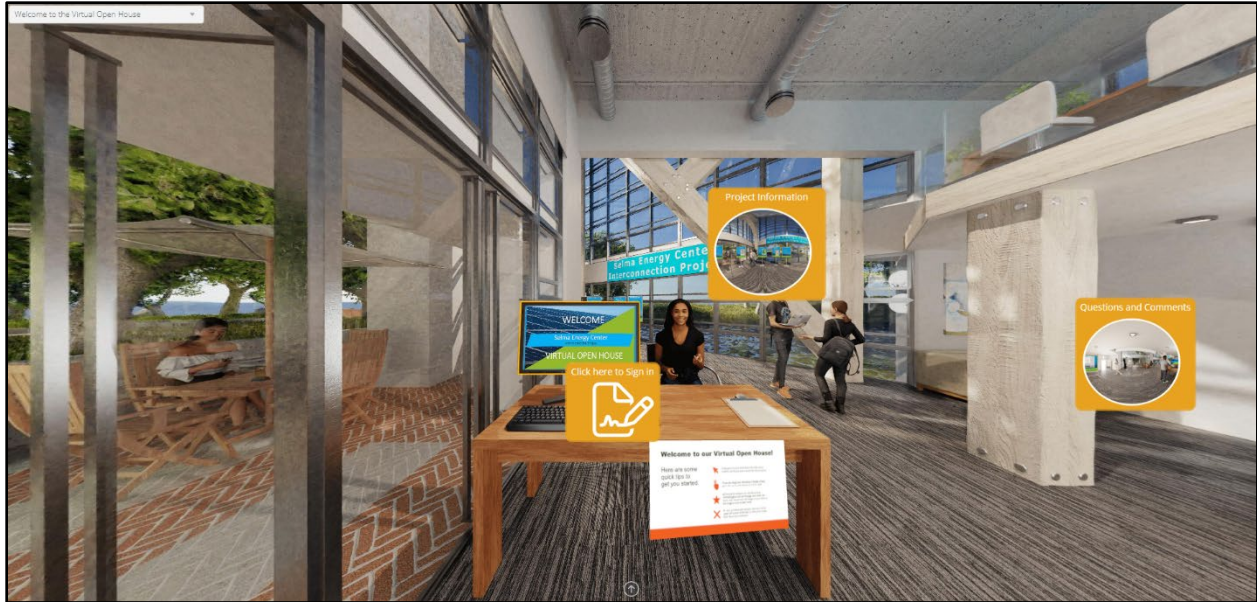
Questions and comments can be submitted at [SelmaSolar@nexteraenergy.com](mailto:SelmaSolar@nexteraenergy.com), (520) 201-6289 or 20 E Thomas Road, Suite 1700, Phoenix, AZ 85012 before July 17, 2024.

Learn more at [www.SelmaSolarProject.com](http://www.SelmaSolarProject.com)



**Exhibit J-3. Facebook advertisement.**





**Exhibit J-4a. Project virtual open house (1 of 4).**

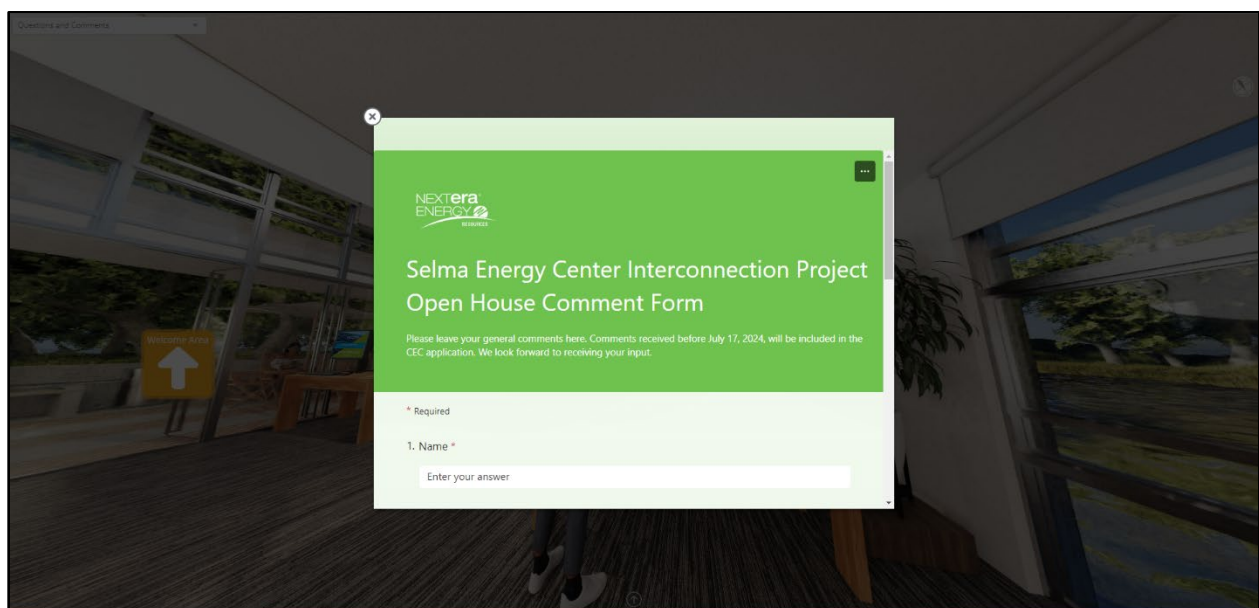


**Exhibit J-4b. Project virtual open house (2 of 4).**





**Exhibit J-4c. Project virtual open house (3 of 4).**



**Exhibit J-4d. Project virtual open house (4 of 4).**

Selma Energy Center Interconnection  
Project  
June 19, 2024

## Open House sign-in sheet

Please write legibly



Full Name	Email Address	Telephone	Want to receive project updates?

\*By providing your information, you agree NextEra Energy Resources may contact you at the number you provided above with information about the project in the future. We will not share your information with any 3rd party sources.

Exhibit J-5a. In-person public open house sign-in sheet.

## Comment Form

**NextEra Energy Resources**

## Selma Energy Center Interconnection Project

Open House Meeting – Certificate of Environmental Compatibility

Wednesday, June 19, 2024

6:00 -7:00 p.m.

Name:

Organization (if applicable):

Email:

Phone:

Address:

City

State

Zip

Comment(s):

*Please write on the back of this form if more space is needed.*

**Exhibit J-5b. Comment form.**

# Welcome

## We are here to:

- » Provide an overview of NextEra Energy Resources
- » Provide information about the proposed solar energy project
- » Receive your comments
- » Answer your questions



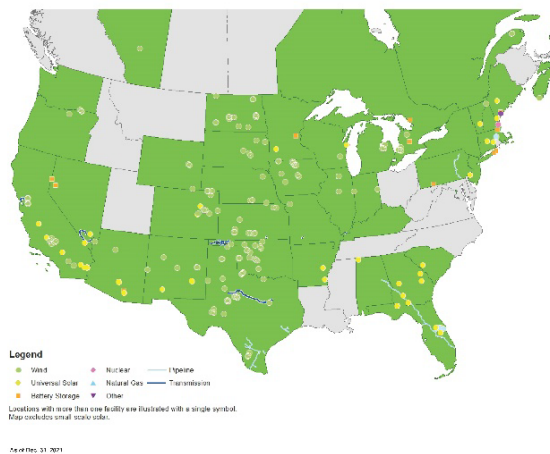
**Exhibit J-6a. Open house display.**



# NextEra Energy Resources Overview

## A Leader in Clean Energy

NextEra Energy Resources is the world's largest generator of renewable energy from the wind and sun, and a world leader in battery storage. The company had approximately 24,600 megawatts of total net generating capacity primarily in 38 states and four Canadian provinces as of year-end 2021. In 2022, NextEra Energy was again ranked No. 1 in its industry on Fortune's list of "Most Admired Companies" for the 15th time in 16 years. The company was also recognized on Fortune's list of companies that "Change the World" and named to the TIME100 Most Influential Companies list as a disruptor that is shaping a sustainable energy future.



**Exhibit J-6b. Open house display.**

# PROJECT AREA — INTERCONNECTION PROJECT

- ☞ Selma Energy Center, LLC proposes to construct an approximately 2.5- mile long 230-kilovolt (kV) transmission line. (Interconnection Project)
- ☞ The Interconnection Project includes two potential Interconnection Options to connect into the existing Vah Ki Substation. Only one option would be constructed.
- ☞ The Interconnection Project will connect the proposed Selma Energy Center Project to the existing Vah Ki Substation and the regional electric grid.
- ☞ The Selma Energy Center Project consists of a ~150 MW solar energy generating facility and 150 MW battery storage project (energy center) in the City of Coolidge and Pinal County.
- ☞ The Interconnection Project involves:
  - Overhead transmission structures and conductors.
  - Potential underground transmission structures and conductors.
  - Access roads.



**Exhibit J-6c. Open house display.**

- The Interconnection Project will cross private property in unincorporated Pinal County and the City of Coolidge. Canal and state highway crossings will also be required.
- The Interconnection Project will be reviewed by the Arizona Corporation Commission through its Certificate of Environmental Compatibility hearing process.

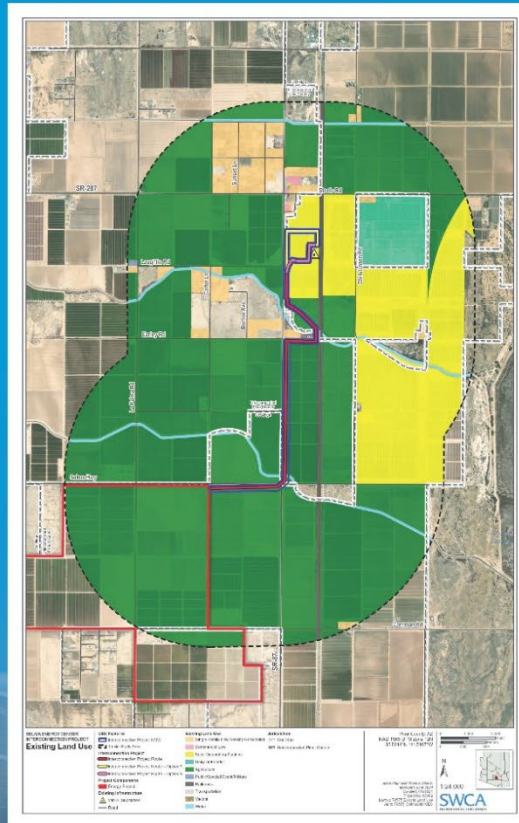


Selma Energy Center, LLC  
Interconnection Project  
CEC Application – Exhibit J



# EXISTING LAND USE

- Map showing existing land use with a 1-mile study area around the Interconnection Project.
- Existing land uses include agricultural, solar generation facilities, vacant, residential, commercial, and transportation.



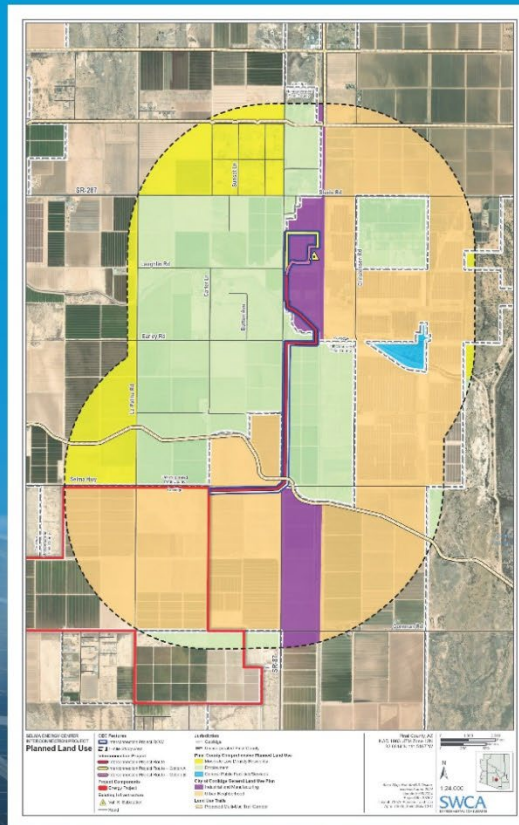
**NEXTERA**  
ENERGY  
RESOURCES

**Exhibit J-6e. Open house display.**



# PINAL COUNTY AND CITY OF COOLIDGE — COMPREHENSIVE PLAN

- Map showing planned land use, as designated by the respective Comprehensive Plan, with a 1-mile study area around the Interconnection Project.
- Planned land uses include residential, employment, industrial/manufacturing, and general public facilities/services.



NEXtera  
ENERGY  
RESOURCES

**Exhibit J-6f. Open house display.**

# KEY PERMITTING REQUIREMENTS

## Interconnection Project

### Local — Pinal County, City of Coolidge

- Commercial building permits

### State — Arizona Corporation Commission

- Certificate of Environmental Compatibility

### — Arizona Department of Transportation

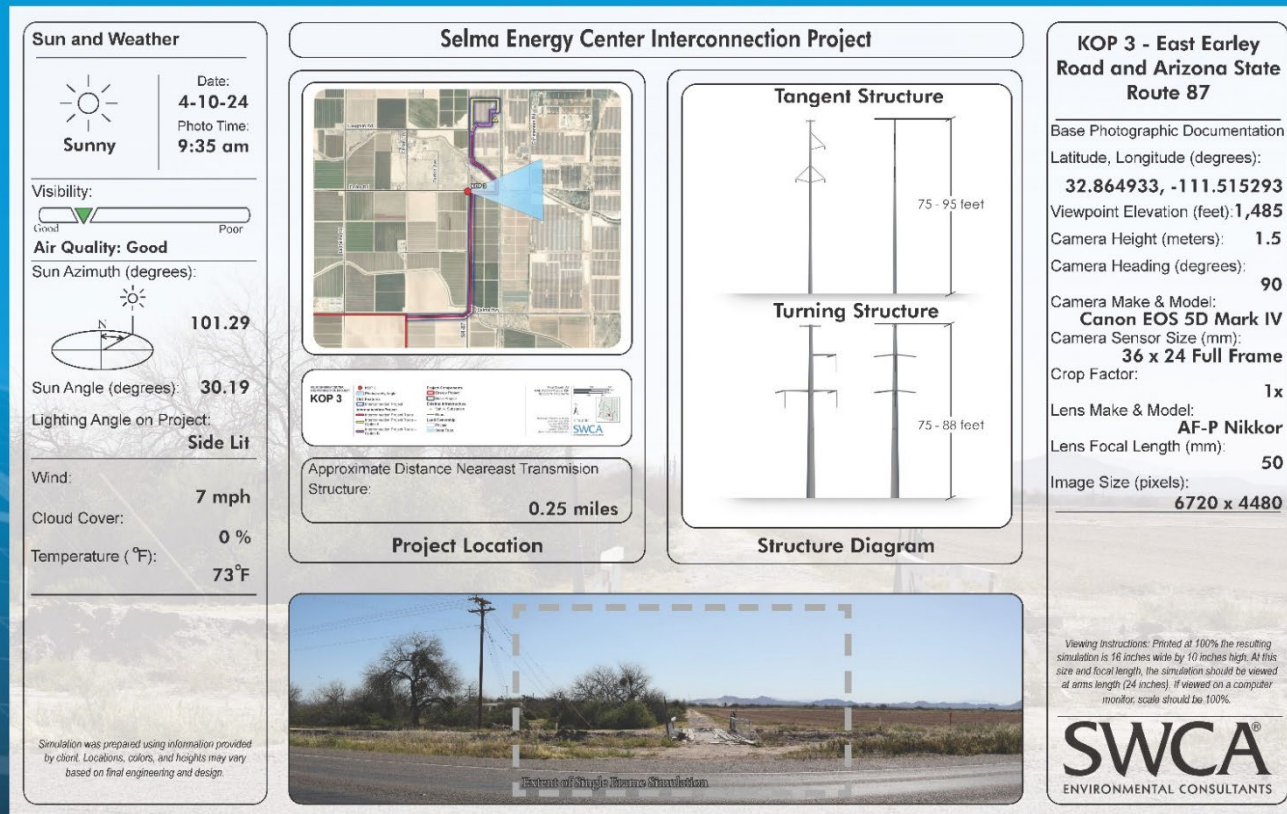
- Encroachment permit for overhead highway crossing

### Federal — Irrigation Districts

- Encroachment permits and/or road use agreements



**Exhibit J-6g. Open house display.**



**Exhibit J-6h. Open house display.**





KOP 3: View from intersection of East Earley Road and Arizona State Route 87 looking east - Existing Condition

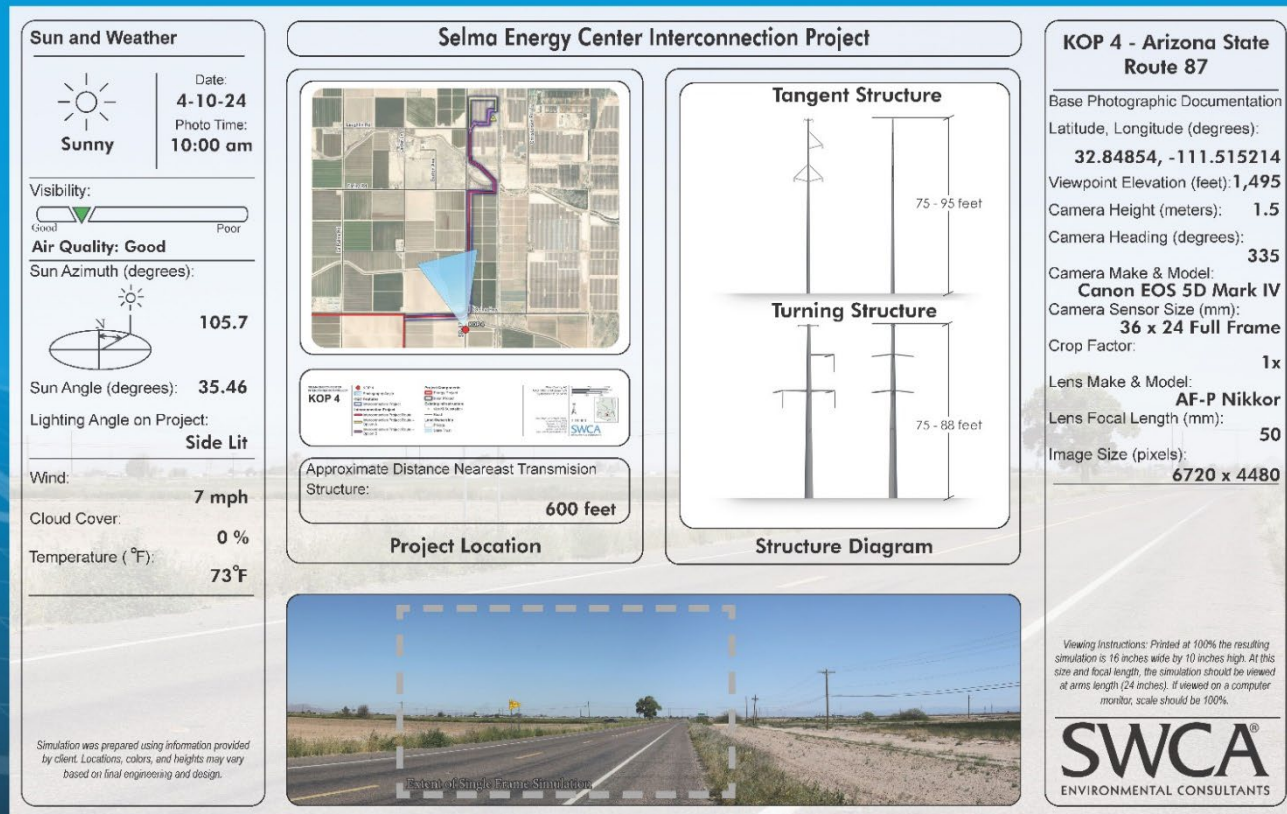


**Exhibit J-6i. Open house display.**





**Exhibit J-6j. Open house display.**



**Exhibit J-6k. Open house display.**





KOP 4: View from Arizona State Route 87 looking northwest - Existing Condition



**Exhibit J-6I. Open house display.**



KOP 4: View from Arizona State Route 87 looking northwest - Simulated Condition



**Exhibit J-6m. Open house display.**



# OPPORTUNITY FOR COMMENT

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## Project Phone

(520) 201-6289

## Project Website

[www.selmasolarproject.com](http://www.selmasolarproject.com)

## Project Virtual Open House

<http://selmaenergyopenhouse.com>

## Email

[SelmaSolar.SharedMailbox@nexteraenergy.com](mailto:SelmaSolar.SharedMailbox@nexteraenergy.com)

## Mail

Ashley Johnson – Lead Project Manager  
Selma Energy Center, LLC  
C/O SWCA Environmental Consultants  
20 E Thomas Road, Suite 1700  
Phoenix, AZ 85012

Please provide comment by July 17, 2024 for it  
to be included in the CEC Application



**Exhibit J-6n. Open house display.**



## US widens sanctions on Russia amid G7 summit

By EMMA BURROWS  
Associated Press

The United States widened its sanctions against Russia Wednesday as G7 leaders prepared to gather in Italy for a summit where the top priorities will be boosting support for Ukraine and grinding down Russia's war machine.

Wednesday's package targeted Chinese companies which help Russia pursue its war in Ukraine and raised the stakes for foreign financial institutions which work with Russian assets into billions of dollars of support for Kyiv.

The U.S. has sanctioned more than 4,000 Russian businesses and individuals since the war began, in an effort to choke off the flow of money and armaments to Moscow, whose superior firepower has given it an advantage on the battlefield in recent months. Nonetheless, new companies continually pop up as Russia attempts to rework supply chains.

"We have to be very honest with ourselves that Putin is a very capable adversary who is willing to adapt and find those willing collaborators," Aaron Forsberg, the State Department's Director for Economic Sanctions Policy and Implementation, told The Associated Press.

Sanctions against Russia, he said, are therefore a "dynamic affair."

While sanctions have not stopped the flow of illicit goods, the aim is to make it harder for Russia to source crucial technology as well as driving up the mark-up on the goods. Wednesday's package targets more than \$100 million in trade between Russia and suppliers for its war.

More than 300 new sanctions are largely aimed at deterring individuals and companies in countries including China, the United Arab Emirates and Turkey from helping Moscow circumvent Western blocks on obtaining key technology. They also threaten foreign financial institutions

with sanctions if they do business with almost any sanctioned Russian entity, underscoring the U.S. view that the Kremlin has pivoted the Russian economy onto a war footing.

Russia's military is "desperate for access to the outside world," said Treasury Secretary Janet Yellen.

The announcement came shortly before President Joe Biden arrived in Italy where he and other G7 leaders are reportedly looking at aiding Ukraine, including turning frozen Russian assets into billions of dollars of support for Kyiv.

Seven Chinese and Hong-Kong based companies were targeted Wednesday for shipping millions of dollars of material to Russia, including items which could be used in Russian weapons systems.

U.S. officials say China is the leading supplier of critical components to Russia, supplying both

Chinese and Western technology.

On Wednesday the U.S. sanctioned a Chinese state-owned defense company which officials said had shipped military equipment for use in the Russian defense sector.

The move sends the message that the U.S. is willing to scale into more treacherous territory by increasing the pressure on the Chinese government, said Benjamin Hilgert, senior economist at the Kyiv School of Economics.

"We will address (China's) support for the Russian defense industrial base. And we will confront China's non-market policies that are leading to harmful global spillovers," White House national security spokesman John Kirby told reporters Tuesday.

China did not sanction Russia after President Vladimir Putin, irred Russia, supplying both

emphasizing the two countries' burgeoning strategic ties.

"The Chinese leadership is not interested in making these sanctions a success," said Janis Kluge, a Russia sanctions specialist at the German Institute for International and Security Affairs in Berlin (SWP).

Beijing, Kluge said, is reluctant to stop a valuable trade in worth large amounts of money and it does not want to "add to the pressure on Putin in this war."

Imports from China are vital to Russia because China is a major producer of critical components, including for Western companies. Chinese companies also act as intermediaries for the sale and shipment of Western components to Russia.

But while Chinese technology has been found on the battlefield in Ukraine, most of the components still come from Western nations including those which are "overwhelm-

ingly" found in high-tech drones and ballistic missiles, said Hilgert.

As well as China, the U.S. targeted businesses in Turkey and the United Arab Emirates which officials said sent high-priority items to companies in Russia, including to businesses which were already sanctioned.

In December, the White House said foreign financial institutions could be sanctioned if they worked with entities in Russia's defense sector. Wednesday's expansion of sanctions now means that those institutions could face sanctions if they work with almost any sanctioned Russian entity.

The fear of triggering secondary sanctions is an effective threat, analysts said.

While President Xi Jinping may not want to facilitate Western sanctions on Russia, "Chinese banks have always been very careful not to become a target of secondary sanc-

tions because it would be very costly," Kluge said, pointing to cases where Chinese banks have ended relationships with Russian customers.

Wednesday's package targeted Russia's financial infrastructure, including the Moscow Stock Exchange, in an attempt to limit the amount of money flowing in and out of Russia.

It also aims to hobble the development of Russia's energy sector and future sources of cash, including Arctic liquefied natural gas projects which have been shipped critical LNG technology by a Chinese company.

In addition, the package targeted people involved in the forced transfer and deportation of Ukrainian children to Russia. Five people in Russia and Russian-occupied Ukraine were sanctioned after participating in the forced militarization and reeducation of the children and of providing them with Russian passports.



### Learn more about the Selma Energy Center Interconnection project

A subsidiary of NextEra Energy Resources is proposing an energy center interconnection project in Pinal County. Residents are invited to stop in and meet our team to learn more about the proposed project at the upcoming neighborhood meeting.

**June 19 between 6-7 p.m.**

Pinal County Fairgrounds  
512 S. Eleven Mile Corner Road  
Casa Grande, AZ 85194

Questions and comments can be submitted at [SelmaSolar@nexteraenergy.com](mailto:SelmaSolar@nexteraenergy.com), (520) 201-6289 or 20 E. Thomas Road, Suite 1700, Phoenix, AZ 85012 before July 17, 2024.

Learn more at [www.SelmaSolarProject.com](http://www.SelmaSolarProject.com)



## Every day, safe and informed

### Be in the know if the power goes out.

Summer storm season is here. To prepare, we work year round to be ready. Yet, an outage can happen. We care about your safety and want to keep you informed with alerts if there's an outage in your area. You can help us by making sure your contact information is up to date. Learn more about managing your alert preferences at [aps.com/alerts](https://aps.com/alerts).

View our outage map. And report an outage.

You can report an outage at [aps.com/outagecenter](https://aps.com/outagecenter), by using our free APS mobile app or by calling (602) 371-3680 (metro Phoenix) or (855) 688-2437 (other areas).

Learn more about staying safe and informed this summer at [aps.com/outagecenter](https://aps.com/outagecenter).



**Exhibit J-7b. Newspaper advertisement– Tri Valley Dispatch (2 of 2).**



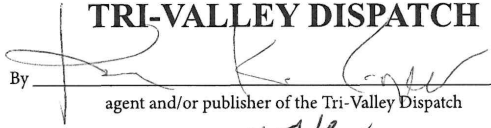
**Affidavit of Publication**

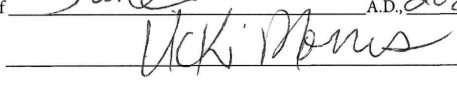
STATE OF ARIZONA }  
COUNTY OF PINAL } ss.

**Kara K. Cooper**, first being duly sworn deposes and says:  
That he/she is a native born citizen of the United States of  
America, over 21 years of age, that I am an agent and/or  
publisher of the Tri-Valley Dispatch, a newspaper published at  
Casa Grande, Pinal County, Arizona, Thursday of each week;  
that a notice, a full, true and complete printed copy of which  
is hereunto attached, was printed in the regular editions of said  
newspaper, and not in a supplement thereto, for TWO issues.  
The publications thereof having been on the following dates:

06/06/2024  
06/13/2024

**TRI-VALLEY DISPATCH**

By   
agent and/or publisher of the Tri-Valley Dispatch

Sworn to before me this 17th  
day of June A.D., 2024  


Notary Public in and for the County  
of Pinal, State of Arizona

**Exhibit J-7c. Newspaper affidavit– Tri Valley Dispatch.**



# ation

## Biden prepares to limit asylum requests

By SELINA MIN KIM, STEPHEN GROVES and COLLEEN LONG  
Associated Press

WASHINGTON — The White House is telling lawmakers that President Joe Biden is preparing to sign off on an executive order that would shut down asylum requests at the U.S.-Mexico border once the average number of daily encounters hits 2,500 or more, with the border accepting only one case that number declines to 1,500, according to several people familiar with the discussions.

The impact of the 2,500 figure means that the executive order could go into immediate effect because daily figures are higher than that now.

The Democratic president is expected to unveil the action — his most aggressive unilateral move yet to control the numbers of the border — at the White House on Tuesday at an event to which border migrants have been invited.

Five people familiar with the discussion on Monday confirmed the 2,500 figure, while two of the people confirmed the 1,500 number. The figure was an daily average over the course of a week. All of the people insisted on anonymity to discuss an executive order that is not yet public.

While other border activity, such as trade, is expected to continue, the 1,500 threshold at which the border would be open for asylum seekers could be hard to reach. The last time the daily measure dipped to 1,500 encounters was in July 2020, at the height of the COVID-19 pandemic.

Senior White House officials, including chief of staff Jeff Zients and legislative affairs director Shantana Goff, have been reviewing legislation on Capitol Hill of details of the planned order of the formal rollout on Tuesday. But several people have insisted that the executive order would work, particularly how



President Joe Biden arrives Sunday on a Marine One at Delaware Air National Guard Base in New Castle, Del.

much cooperation the U.S. would need from Mexican officials to carry out the executive order.

The president has been deliberating for months over how to act on his own after bipartisan legislation to clamp down on asylum at the border collapsed because Republicans defected from the deal on issues at the spring of Donald Trump, the former president and presumptive Republican presidential nominee. Biden continued to consider executive action even though the number of illegal crossings at the southern border has declined for months partly because of a steep drop-off by Mexico.

Biden administration officials had wanted until late Mexico's presidential elections, held Sunday, to move on the U.S. president's border actions. Mexico's first female leader, and Biden said in a statement Monday that he was committed to "advancing the values and interests of both our

nations to the benefit of our people." The two spoke on the phone Monday, although White House press secretary Karine Jean-Pierre declined to say whether they spoke about the pending order.

"We continue to look at all options on the table," Jean-Pierre told reporters Monday on a briefing with Biden on Air Force One on Monday evening.

The executive order will allow Biden to declare that he has pushed the boundaries of his own power of executive lawmakers, specifically congressional Republicans, killed off what would have been the toughest border and asylum restrictions in some time. Biden's order is aimed at trying to head off any potential spike in border encounters that could happen later this year, closer to the November elections.

For Biden's executive order, the White House is adopting some policies directly from the bipartisan Senate border deal, including the idea

of limiting asylum requests once the encounters hit a certain number. The administration wants to encourage migrants to seek asylum at ports of entry by using the U.S. Customs and Border Protection's CBP One app, which schedules about 1,000 appointments per day.

Administration lawyers have been planning to sign executive power contained in Section 212(d) of the Immigration and Nationality Act, which gives a president broad authority to block entry of certain immigrants into the U.S. if it is deemed "adversely to the national interest. It is the same legal rationale used by Trump to take some of his toughest actions on migration as president.

That has advocacy groups already preparing to challenge Biden's immigration order in court.

"She will need to review the (executive order) before making final litigation decisions," said Lee Gelsman, an attorney for the American Civil Liberties Union who led several of the most high-profile challenges to Trump's border policies. "But a policy that effectively shuts down asylum would raise clear legal problems, just as (it) did when the Trump administration tried to end asylum."

The White House is also sure to encounter vocal resistance from many Democratic lawmakers. California Sen. Alex Padilla, an outspoken critic of the Senate's earlier border bill, said the pending executive order was "just not the solution we need and it's very incomplete as a strategy."

Padilla, who was also elected by the White House on the proposal, wants a proposal that works with countries throughout Latin America to address the poverty and unrest that drives millions to the United States. In recent weeks, Padilla has also pressed the White House for executive actions that benefit immigrants and said that the message he has heard in return is:

"We're working on it."

Biden will unveil his executive order flanked by several border migrants whom the White House invited for the announcement. Texas Mayor John Cornyn of Houstonville and Ramiro Garcia of Hialeah both confirmed their invitations, and San Diego Mayor Todd Gloria's office also said the White House invited the mayor, but that he could not attend due to scheduling difficulties.

Rep. Henry Cuellar, a Texas Democrat who said he was invited on the plan, said he wished the White House would've taken executive action a long time ago and said that cooperation from Mexico would continue to be critical to the administration implementation of the order.

"If you think about the logistics, where else can they go?" Cuellar said. "If they're not going to let them in, where do they go? Do they return them to Mexico, or do they try to deport as many as they can. We did add a lot more money into it so they can deport, but the current thing of, 'crisis is just send them back to Mexico. You've got to have the help of Mexico to make this work.'"

Kenneth Babas, an attorney at Las American Immigration Advocacy Center in El Paso, Texas, said she would be alarmed if Biden issued formal deportation orders without an opportunity to seek asylum. Advocacy groups that he may attempt that under the 212(d) provision.

Pandemic-era expulsion authority known as Title 42 had "a silver lining" for migrants because they could try again without facing legal consequences, Babas said. But a formal deportation order would expose them to kicking prosecution if they attempted again and it would impact them on legally entering the country in the future. This is even more onerous than Title 42, which still put people in harm's way," Babas said.

## Jury chosen in Hunter Biden's firearms case

By CLAUDIA LAUBER, MICHAEL KURTZMAN, COLLEEN LONG and RANDALL CHASE  
Associated Press

WILMINGTON, Del. — A jury was seated Monday in the federal gun case against President Joe Biden's son Hunter, after prospective panelists were questioned about their thoughts on gun rights and drug addiction while the first lady walked down the front row of the courtroom.

Opening statements were set to begin Tuesday after the jury began — six men and six women plus two women serving as alternates — were instructed by Judge Margaret Norfolk to talk to read about the case. Hunter Biden has been charged in Delaware with three felonies stemming from a 2018 firearm purchase when he was, according to his attorney, in the throes of a crack addiction. He has been accused of lying to a federally licensed gun dealer, making a false claim on the application by saying he was not a drug user and illegally having the gun for 11 days.

The case is going to trial following the collapse of a plea deal that would have avoided the prospect of a trial scheduled to the 2024 election. Hunter Biden has pleaded not guilty and has argued he's being unfairly targeted by the Justice Department, after Republicans decried the now-defunct plea deal as special treatment for the Democratic president's son.

The proceedings are unfolding just days after Donald Trump, the presumptive 2025 Republican presidential nominee, was convicted of 34 felonies in New York City. A jury found the former president guilty of a scheme to cover up a hush money payment to a porn actor to fend off damage to his 2016 presidential campaign. The two criminal cases are unrelated, but their proximity underscores how the courts have taken center stage during the 2024 campaign.

Jury selection moved at a clip. The pool was chosen from roughly 65 people. Those who answered "yes" on an initial questionnaire were questioned individually by Norfolk to determine whether they could be fair and impartial. Their names were not made public.

The questions tested their knowledge of the case, assessed their thoughts about gun ownership and inquired whether they or anyone close to them have struggled with substance abuse or addiction. Other questions focused on the role politics may have played in the charges. One potential juror who was sent home said she didn't know



Hunter Biden arrives at federal court Monday in Wilmington, Del.

whether she could be impartial because of the opinion she had formed about Hunter Biden based on media reports.

"It's just a good one," she replied when an attorney asked her opinion.

Another was excused because he was aware of the case and said, "It seems like politics is playing a big role in who gets charged with what and when."

Jurors who were chosen included a woman whose sister was convicted about 10 years ago of credit card fraud and drug charges in Delaware. One male juror's father had been killed in a crime involving a gun, and his brother went to jail for possession of a narcotic. Another woman on the panel has a husband who is a gun owner and formerly in law enforcement. A third juror, also a woman, got her news from YouTube and said she was vaguely aware of the case.

Hunter Biden also faces a

separate trial in California in September on charges of failing to pay \$1.1 million in taxes. Both cases seem to have been resolved through the deal with prosecutors last July, the culmination of a yearlong investigation into his business dealings.

But Norfolk, who was nominated to the bench by Trump, questioned some unusual aspects of the deal, which included a proposed guilty plea to misdemeanor offenses to resolve the tax crimes and a diversion agreement on the gun charge, which meant as long as he stayed out of trouble for two years the case would be dismissed. The lawyers could not come to a resolution, and the deal fell apart. Attorney General Merrick Garland then appointed the top investigator, former U.S. attorney for Delaware, David Weiss, as a special counsel in August, and a month later Hunter Biden was indicted.

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Exhibit J-7d. Newspaper advertisement— Casa Grande Dispatch (1 of 2).

# Blinken pushes Israel on postwar Gaza plans

By MATTHEW LEE  
AP Diplomatic Writer

TEL AVIV — U.S. Secretary of State Antony Blinken urged top Israeli officials on Monday to accept and implement a plan for postwar Gaza as he pushed for more international pressure on Hamas to agree to a cease-fire proposal newly endorsed by the U.N. Security Council.

On his latest expert mission to the Middle East — his eighth in the last two years — Blinken met with Israeli Prime Minister Benjamin Netanyahu and Defense Minister Yoav Gallant after talks in Cairo with Egyptian President Abdel Fattah el-Sisi to push the proposal, which faces new uncertainty following Israel's hostage rescue operation that killed many Palestinians and forced many others to flee.

Blinken told Netanyahu that the United States and other world leaders will stand behind the comprehensive proposal outlined by President Biden that would lead to an immediate ceasefire in Gaza, the release of all hostages, and a significant and sustained increase in humanitarian assistance for the displacement throughout Gaza, the State Department said.

After the U.N. Security Council passed a U.S.-sponsored resolution endorsing the cease-fire proposal, Hamas said it welcomed the move and was ready to work with mediators in indirect negotiations with Israel to implement it. The statement was among the strongest from Hamas to date but did not mention the group would continue "its struggle" to end the Israeli occupation and work on setting up a "fully sovereign" Palestinian state.

However, the military group still has not formally responded to the proposal it received 10 days ago. Blinken again urged Hamas to accept it, say-



Palestinians mourn Monday over the bodies of relatives killed in an Israeli airstrike, outside the morgue in Al-Aqsa Martyrs Hospital in Deir al Balah, the Gaza Strip.

ing it has wide international support and Israel has accepted it, though Netanyahu has expressed skepticism.

"I know that there are those who are pessimistic about the prospects," Blinken told reporters before leaving Cairo for Israel on the trip that also will take him to Jordan and Qatar, among the strongest international support for the cease-fire and reconstruction in Gaza.

Netanyahu and his government have insisted calls for any "day after" plan that would bar Israel from having some form of security presence in the territory. Blinken said he would urge Israel to come up with alternatives that would be acceptable.

It would be very good if Israel put forward its own ideas on this, and I'll be talking to the government about that," Blinken said. "But one way or another, we've got to have these plans, we've got to have them in place, we've got to be ready to go if we want to take advantage of a cease-fire."

The three-phase plan calls for the release of more hostages and a temporary pause in military operations that will let long as it takes to negotiate the second phase, which aims to bring the release of all hostages, a "full withdrawal of Israeli forces from Gaza" and "a permanent end to hostilities," according to the American drafted resolution.

Netanyahu's foreign office has threatened to collapse his government if he implements the plan. Benny Gantz, a popular centrist, resigned on Sunday from the three-member War Cabinet after saying he would do so if the prime minister did not formulate a new plan for postwar Gaza.

Blinken has met with Netanyahu, Gantz and Israeli opposition leader Yair Lapid on nearly all his previous trips to Israel. Officials said Blinken is expected to meet on Tuesday with Gantz, whom Netanyahu had urged not to step down in the aftermath of the hostage rescue.

put before the U.N. Security Council. The third phase calls for reconstruction in Gaza.

Although the deal has been described as an Israeli initiative and thousands of Israelis have demonstrated to support it, Netanyahu has been skeptical, saying what has been presented publicly is not accurate and that Israel is still committed to destroying Hamas.

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Despite Blinken's roughly once-a-month visits to the region since the war began, the conflict has ground on with more than 37,120 Palestinians killed, according to the Gaza Health Ministry, which does not differentiate between civilians and combatants in its counts. Hamas and other militants killed some 1,500 people in the Oct. 7 attack, mostly civilians, and took around 200 people hostage.

The war has severely hindered the flow of food, medicine and other supplies to the Palestinians in Gaza, who are facing widespread hunger, U.N. agencies say. More than 1 million people in the territory could experience the highest level of starvation by mid-July. In Jordan, Blinken will take part in an emergency international conference on improving the flow of aid to Gaza.

## Baltimore shipping channel fully reopens after collapse

By LEA SKENE  
Associated Press

BALTIMORE — The main shipping channel into Baltimore's port has fully reopened to its original depth and width following the March 26 collapse of the Francis Scott Key Bridge, which blocked most maritime traffic into the harbor.

Officials announced the full reopening in a news release Monday evening. It comes after a massive cleanup effort as crews removed an estimated 50,000 tons of steel and concrete from the collapsed bridge.

The channel was blocked by wreckage of the fallen bridge, which collapsed after a container ship lost power and crashed into one of its supporting columns, sending six members of a roadwork crew plunging to their deaths.



Tugsboat escort the cargo ship Dali on May 20 after it was refloated in Baltimore.

All of the victims were Latino immigrants working an overnight shift to fill potholes on the bridge.

The Port of Baltimore, which processes more cars and farm equipment than any other

in the country, was effectively closed for several weeks while the wreckage was removed. Crews were able to reopen portions of the deep-draft channel in phases, restoring some commercial traffic in recent weeks.

On May 20, the wayward cargo ship Dali was refloated and guided back to port. The vessel had been stuck amid the wreckage for almost two months, with a massive steel truss draped across its deck.

After the Dali was moved, crews opened a channel that was 50 feet (15 meters) deep and 400 feet (122 meters) wide. The full federal shipping channel is 700 feet (213 meters) wide, which means two-way traffic can resume, officials said. They said other additional safety requirements have also been lifted because of the increased width.

Thousands of longshoremen, mariners and small-business owners have seen their jobs impacted by the collapse, prompting local and state officials to prioritize reopening the

port and restoring its traffic to normal capacity in hopes of easing the economic ripple effects.

The announcement Monday marks the commerce that depends on the busy port can begin ramping back up.

Officials said a total of 56 federal, state and local agencies participated in the salvage operations, including about 300 specialists from around the world who operated a fleet of 18 barges, 22 tugboats, 13 floating cranes, 10 excavators and four survey boats.

"I cannot overstate how proud I am of our team," said Col. Ester Trachten, Baltimore district commander for the Army Corps of Engineers. "It was incredible seeing so many people from different parts of our government, from around our country and all over the world, come together in this

United Command and accomplish so much in this amount of time."

In a statement Monday, Trachten also acknowledged the loss of the victims' families.

"Not a day went by that we didn't think about all of them, and that kept us going," she said.

The Dali lost power shortly after leaving Baltimore for Sri Lanka in the early hours of March 26. A National Transportation Safety Board investigation found it experienced power outages before starting its voyage, but the exact causes of the electrical issues have yet to be determined. The FBI is also conducting a criminal investigation into the circumstances leading up to the collapse.

Officials have said they hope to rebuild the bridge by 2028.

## Rev. Lawson Jr. has died at 95, civil rights leader's family says

By CHRISTOPHER WEBER,  
TRAVIS LOLLER  
AND ADRIAN SANCHEZ  
Associated Press

LOS ANGELES — The Rev. James Lawson Jr., an apostle of nonviolent protest who schooled activists to withstand brutal reactions from white authorities as the Civil Rights Movement gained traction, has died, his family said Monday. He was 95.

His family and Lawson died on Sunday after a short illness in Los Angeles, where he spent decades working as a pastor, labor movement organizer and university professor.

Lawson was a close adviser to the Rev. Martin Luther King Jr., who called him "the leading theorist and strategist of nonviolence in the world."

Lawson met King in 1957, after spending three years in India seeking up knowledge about Mahatma K. Gandhi's independence movement. King would travel to India himself two years later, but at the time, he had only read about Gandhi in books.

The two Black pastors — both 28 years old — quickly bonded over their enthusiasm for the Indian leader's ideas, and King urged Lawson to put them into action in the American South.

Lawson soon led workshops in church basements in Nashville, Tennessee, that prepared John Lewis, Diane Nash, Robert LaFollette, Marion Barry, the Franklin Dimes and many others to peacefully withstand vicious responses to their civil rights protests and protests.

Lawson's lessons led Nashville to become the first major city in the South to desegregate its downtown. On May 10, 1960, after hundreds of well-organized students staged lunch-counter sit-ins and boycotts of discriminatory businesses.



Rev. James Lawson Jr.

that wrong. That's also Jesus." Years later, in 1968, it was Lawson who organized the sanitation workers strike that famously drew King to Memphis. Lawson said he was at first paralyzed and forever saddened by King's assassination.

"I thought I would not live beyond 40 myself," Lawson said. "The immensity of death was a part of the discipline we lived with, but no one as much as King."

Still, Lawson made it his life's mission to preach the power of nonviolent direct action.

"To still amaze and frustrate," Lawson said as he marked the 50th anniversary

of King's death with a march in Memphis. "The task is unfinished."

Civil rights activist Diane Nash was a 21-year-old college student when she began attending Lawson's Nashville workshops, which she called life-changing.

"His passing contributes a very great loss," Nash said. "He bears, I think, more responsibility than any other single person for the civil rights movement of Blacks being nonviolent in this country."

James Meeks Lawson Jr. was born on Sept. 22, 1928, the son and grandson of ministers, and grew up in Mason, Ohio, where he became ordained himself as a high

school senior.

He told The Tennessean that his commitment to nonviolence began in elementary school, when he told his mother that he had slapped a boy who had used racial slurs against him.

"What good did that do, Jimmy?" his mother asked. "That simple question forever changed his life," Lawson said. He became a pacifist, refusing to serve when drafted for the Korean War, and spent a year in prison as a conscientious objector. The Fellowship of Reconciliation, a pacifist group, sponsored his trip to India after he finished a sociology degree.

Gandhi had been assassinated by then, but Lawson met people who had worked with him and explained Gandhi's concept of "satyagraha," a relentless pursuit of truth, which encouraged Indians to peacefully resist British rule. Lawson then saw how the Christian concept of turning the other cheek could be applied in collective actions to challenge morally indefensible laws.

Lawson was a divinity student at Oberlin College in Ohio when King spoke on campus about the Montgomery bus boycott. King told him, "You can't wait, you need to come on board now."

Lawson recalled in an Associated Press interview.

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That he/she is a native born citizen of the United States of America, over 21 years of age, that I am an agent and/or publisher of the Casa Grande Dispatch, a newspaper published at Casa Grande, Pinal County, Arizona, Tuesday, Thursday, and Saturday of each week; that a notice, a full, true and complete printed copy of which is hereunto attached, was printed in the regular edition of said newspaper, and not in a supplement thereto, for TWO issues. The publication thereof having been on the following dates:

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06/11/2024

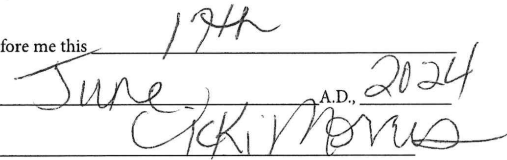
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Sworn to before me this

day of

  
19th  
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A.D.

Notary Public in and for the County  
of Pinal, State of Arizona

**Exhibit J-7f. Newspaper affidavit– Casa Grande Dispatch.**