

APPLICATION

(Pursuant to Arizona Revised Statutes (A.R.S.) § 40-360.03 and 40-360.06)

1. Name and address of the applicant, or in the case of a joint project, the applicants.

Name: Salt River Project Agricultural Improvement and Power District (SRP)
Address: 1500 North Mill Avenue
Tempe, AZ 85281-1298

2. Name, address and telephone number of a representative of an applicant who has access to technical knowledge and background information concerning the application in question and who will be available to answer questions or furnish additional information.

Name: Zack Heim
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3. State each date on which the applicant has filed a ten-year plan in compliance with A.R.S. § 40-360.02 and designate each such filing in which the facilities for which this application is made were described. If they have not been previously described in a ten-year plan, state the reasons therefore.

In accordance with A.R.S. § 40-360.02, SRP has filed Ten-Year Plans annually with the Arizona Corporation Commission (ACC). In January 2012, and each January through 2017, SRP has described components of the High-Tech Interconnect Project (HIP or Project) which was initially described in the East Valley Industrial Expansion Project or generally described as the Price Road Corridor (PRC) project. The 2017 PRC project was approved under Case 175, which has since been placed in service. From 2018 to 2021 the project facilities were not included in SRP's Ten-Year Plans due to revised load forecasts which changed in March 2021 with the announcement of Intel's expansion. On September 15, 2021, SRP filed an amendment to its 2021 Ten-Year Plan (September 15, 2021) in the Twelfth Biennial Transmission Assessment Docket to include the HIP.

4. Description of the proposed facilities, including:

4.1 Description of electric generating plant.

Not Applicable.

4.2 Description of the proposed transmission lines.

4.2.1 General Description.

4.2.1.1 Nominal voltage for which the lines are designed.

The lines are designed for a nominal voltage of 230 kilovolts (kV).

4.2.1.2 Description of proposed structures.

Generally, the HIP proposes to use single shaft tubular steel structures (poles) configured to support either single or double circuit 230 kV with 69 kV underbuild, where applicable.

4.2.1.3 Description of proposed switchyards and substations.

The proposed RS-28 230 kV Substation would be located on a 23-acre parcel within a larger parcel of private land adjacent to the Gila River Indian Community boundary, east of Old Price Road and north of Chandler Heights Road. The facility would include a control house, bus work, circuit breakers, conduits, relaying and communication equipment, 230/34.5 kV transformers, 230/12 kV transformers and other related components.

The substation would be enclosed by a 12-foot tall decorative, masonry wall around the entire perimeter.

4.2.1.4 Purpose for constructing proposed transmission lines.

SRP supports long-term economic development in the communities it serves by providing reliable power to its customers. Due to the nature and type of industrial loads in the PRC, maintaining acceptable voltage and power quality is paramount to support the growth in the area. To meet the increased power demands of the Intel expansion and support reliability within the PRC, SRP has determined there is an immediate need to interconnect Intel to SRP's 230 kV transmission system.

The new transmission infrastructure must be operational by the third quarter of 2023 to support Intel's timeline for its expansion.

Most of the electrical load in the PRC is currently served from SRP's 69 kV transmission system out of the Schrader 230/69 kV Substation, located on the eastern boundary of the PRC near Arizona Avenue and Ocotillo Road, and the Henshaw 230/69 kV Substation at Price Road and Germann Road, both in the City of Chandler. Additional support comes from the Corbell 230/69 kV

Substation near McQueen Road (Mesa Drive south of Baseline Road), 1/2 mile north of Elliot Road in Gilbert on the Gilbert/Chandler border. Although there are 69 kV connections between the Schrader, Henshaw, and Corbell substations, Corbell Substation primarily supports the system north of Loop 202, while Schrader and Henshaw substations support the area south of Loop 202 and, therefore, most of the PRC.

The existing 69 kV transmission system that serves the PRC cannot deliver the power needed to meet Intel's announced expansion. Intel requires 630 megawatts (MW) to serve existing loads and the current planned expansion. If Intel proceeds with future expansions, its total energy demand could increase to nearly 900 MW, a 670 MW increase compared with its current demand. The capacity of the existing 69 kV transmission system serving Intel is approximately 250 MW and even with the addition of new 69 kV transmission lines, the 69 kV transmission system would not be able to meet Intel's future load projections. The announced Intel expansion requires a direct connection to SRP's 230 kV transmission network by constructing new transmission lines to connect Intel with two nearby 230 kV sources at the existing Henshaw and Schrader substations.

The HIP would provide high-voltage transmission system additions required to meet the energy and reliability needs for Intel while also supporting the needs of existing and future businesses within the PRC. Although the Project need and timing are a direct outcome of Intel's expansion, the additional 230 kV transmission system redundancy would create broader reliability benefits to the rest of SRP's transmission system in the PRC and the customers it serves. In conjunction with other system upgrades, the HIP would provide up to 900 MW of additional load serving capability within the PRC area.

4.2.2 General Location.

4.2.2.1 *Description of the geographic points between which the transmission line will run.*

The existing Henshaw Substation to Intel segment travels south from the existing Henshaw Substation along Old Price Road for 2.74 miles to a point on the western boundary of Intel's Ocotillo Campus.

The Schrader Overhead Transition Corridor includes an area that is about 16.6 acres, approximately 500 feet wide from north-to-south and 1,594 feet long from west-to-east.

4.2.2.2 *Straight-line distance between such geographic points.*

The existing Henshaw Substation to Intel segment straight-line distance from the existing Henshaw Substation to the turning point on Intel's Ocotillo Campus is 2.74 miles.

The Schrader Overhead Transition Corridor straight-line distance is approximately 0.3 mile.

4.2.2.3 *Length of the transmission line for each alternative route.*

There are no alternatives.

4.2.3 *Detailed Dimensions.*

4.2.3.1 *Nominal width of Right-of-Way (ROW) required.*

100 feet where available.

4.2.3.2 *Nominal length of span.*

The nominal length of span may vary from 200 to 850 feet.

4.2.3.3 *Maximum height of supporting structures.*

The nominal height of the proposed structures would be 100 to 185 feet. The maximum height of the proposed structures would not exceed 199 feet.

4.2.3.4 *Minimum height of conductor above ground.*

The minimum height of the 230 kV conductor above existing grade would be 26 feet. The average conductor height would be approximately 40-45 feet.

4.2.4 *To the extent available, estimate 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.)*

Proposed Route – \$56M (excludes undergrounding costs paid by others)
Substation – Costs paid by Intel

4.2.5 Description of the proposed route and substation locations.

Existing Henshaw Substation to Intel

Starting at the existing Henshaw Substation, in Section 7, Township 2 South, Range 5 East along the Gila River Indian Community boundary, the Proposed route leaves the existing Henshaw Substation (node H1) and travels south along Old Price Road for 2.74 miles to node H2.

New RS-28 Substation

The new 230 kV RS-28 Substation would be located in Section 19, Township 2 South, Range 5 East on approximately 23 acres within the Intel Ocotillo Campus between Old Price Road and Dobson Road.

Schrader Overhead Transition Corridor

Schrader Overhead Transition Corridor is located in Section 22, Township 2 South, Range 5 East. The Schrader Overhead Transition Corridor is approximately 16.6 acres and includes the Schrader Substation property, which is bordered to the east by the Consolidated Canal and includes an additional SRP-owned parcel that extends from the Schrader Substation to the eastern side of the Union Pacific Railroad (UPRR).

The Schrader Overhead Transition Corridor includes two new overhead single-circuit 230 kV transmission lines that would exit Schrader Substation: one along the south side (southern alignment) of the station and one along the north side (northern alignment). Constraints on the underground routing between Schrader Substation and Chandler Heights Road may require the proposed circuits to exit Schrader to the west or the east within the alignments described below:

- Southern Alignment – The 230 kV circuit (Circuit One) along the southern alignment would generally be located underground. Whether the circuit is exiting to the west or the east, SRP would place up to three overhead structures within the Schrader Overhead Transition Corridor to make the overhead 230 kV connection in the substation bay and transition to the underground line outside of the corridor.
- Northern Alignment – The 230 kV circuit along the northern alignment (Circuit Two) would exit the Schrader Substation to the west using the existing Corbell to Schrader 230 kV transmission line alignment approved in Decision No. 59791 as modified by Decision No. 60099 (Corbell to Schrader alignment). At the point where

Circuit Two joins the Corbell to Schrader alignment, the two lines would be constructed as above ground, double-circuit 230 kV transmission lines on monopole structures. The new double-circuit 230 kV transmission line would continue along the existing ROW for the Corbell to Schrader alignment within the Schrader Overhead Transition Corridor. The approval to co-locate Circuit Two with the Corbell to Schrader alignment as requested in this Application would amend Decision No. 59791 and Decision No. 60099 to authorize the reconstruction of the Corbell to Schrader alignment within the existing ROW as a double-circuit 230 kV transmission line inside the Schrader Overhead Transition Corridor. SRP would place additional overhead structures within the Schrader Overhead Transition Corridor to transition between the Corbell to Schrader alignment, the overhead 230 kV connection within the substation, and the underground transmission line segment.

If the circuit exits Schrader Substation to the east within the northern alignment, SRP would place up to three overhead structures within the substation to make the overhead 230 kV connection in the substation bay and transition to the underground transmission line outside of the corridor, but would not use the Corbell to Schrader transmission alignment.

4.2.6. Land Ownership

All lands crossed by the proposed route are under private ownership unless they share portions of the ROW with UPRR, Arizona Department of Transportation (ADOT), city or county infrastructure. No Federal lands would be impacted by these segments or substations.

5. Jurisdiction.

5.1 Areas of jurisdiction (as defined in A.R.S. § 40-360) affected by this route.

The Project would be constructed within the jurisdiction of the City of Chandler, Arizona.

5.2 Designation for proposed sites or routes, if any, which are contrary to the zoning ordinances or master plans of affected areas of jurisdiction.

Not Applicable.

6. Description of the environmental studies the Applicant has performed or intends to perform.

KP Environmental, Inc. (KPE) has conducted environmental studies, including field studies and routing analyses, to support this Application. Potential environmental effects of construction and implementation of the Project are included in the exhibits to this Application.

In addition, a Class I Cultural Resources Report has been provided (see **Exhibit E-1**). Prior to construction, the Applicant would conduct a Class III pedestrian survey for disturbed areas of the parcel not previously surveyed.

7. *Rationale for route selection/preference.*

The Project described in this Application was selected and supported by environmental studies, customer needs and electrical system planning. Advantages of this Project include the following:

- Routes were developed in coordination with the City of Chandler.
- No significant or detrimental effects to fish, wildlife, plant life, and associated forms of life upon which they are dependent.
- No significant or detrimental effects associated with noise emission levels and interference with communication signals.
- Neither SRP nor jurisdictional agencies have any plans for future development of recreational facilities associated with the Project.
- Project implementation would be consistent with safety considerations and regulations.
- No significant or detrimental effects to existing scenic areas, historic sites and structures, or archaeological sites at or in the vicinity of the Project.
- No significant or detrimental effects to geology and soils, surface water, or groundwater quality and availability.
- The Project is environmentally compatible with the total environment of the area.

Based on the information provided above, SRP hereby affirms, upon thorough expert scientific environmental evaluation and analysis, that the Project is environmentally compatible and respectfully requests the Arizona Power Plant and Transmission Line Siting Committee issue a Certificate of Environmental Compatibility (CEC), with a term of 10 years.

By:



Zack Heim

ORIGINAL and 25 copies of the foregoing hand delivered and filed with the Director of Utilities, Arizona Corporation Commission, this September 28, 2021.