

INTRODUCTION

Salt River Project Agricultural Improvement and Power District (SRP), under Arizona Revised Statute (A.R.S.) § 40-360 *et seq.*, submits this application (Application) for a Certificate of Environmental Compatibility (CEC) for the High-Tech Interconnect Project (HIP or Project). The Project consists of overhead and underground components, as shown on **Figure 1**, but this Application only seeks approval of the overhead components as shown on **Figure 2**. The HIP is a new high-voltage transmission line project designed to provide the power needed for Intel's \$20 billion expansion of its existing Ocotillo Campus.

The Intel expansion requires a direct connection to SRP's 230 kilovolt (kV) transmission network by constructing new transmission lines to connect Intel with two nearby 230 kV sources at the existing Henshaw and Schrader substations. Additionally, this request includes a new 230 kV substation on Intel's Ocotillo Campus referred to herein as RS-28.

FIGURE 1: Overhead and Underground Components of the HIP

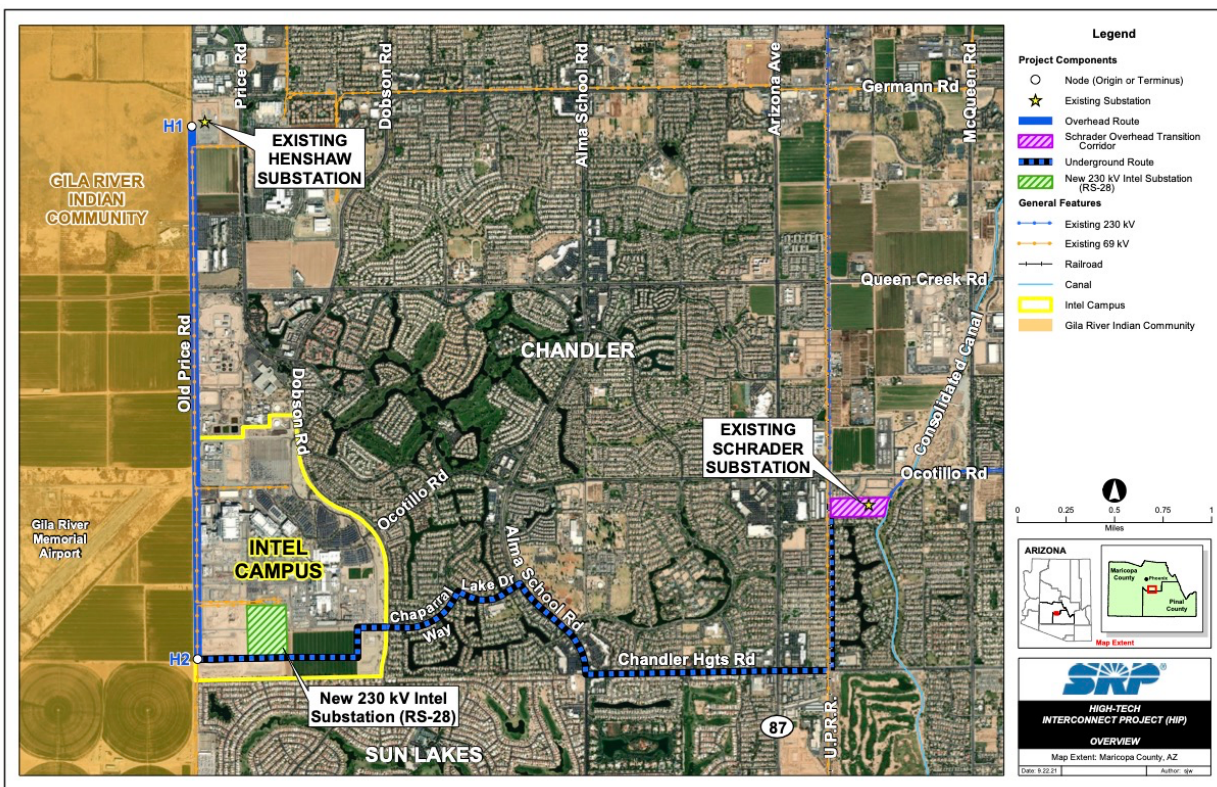
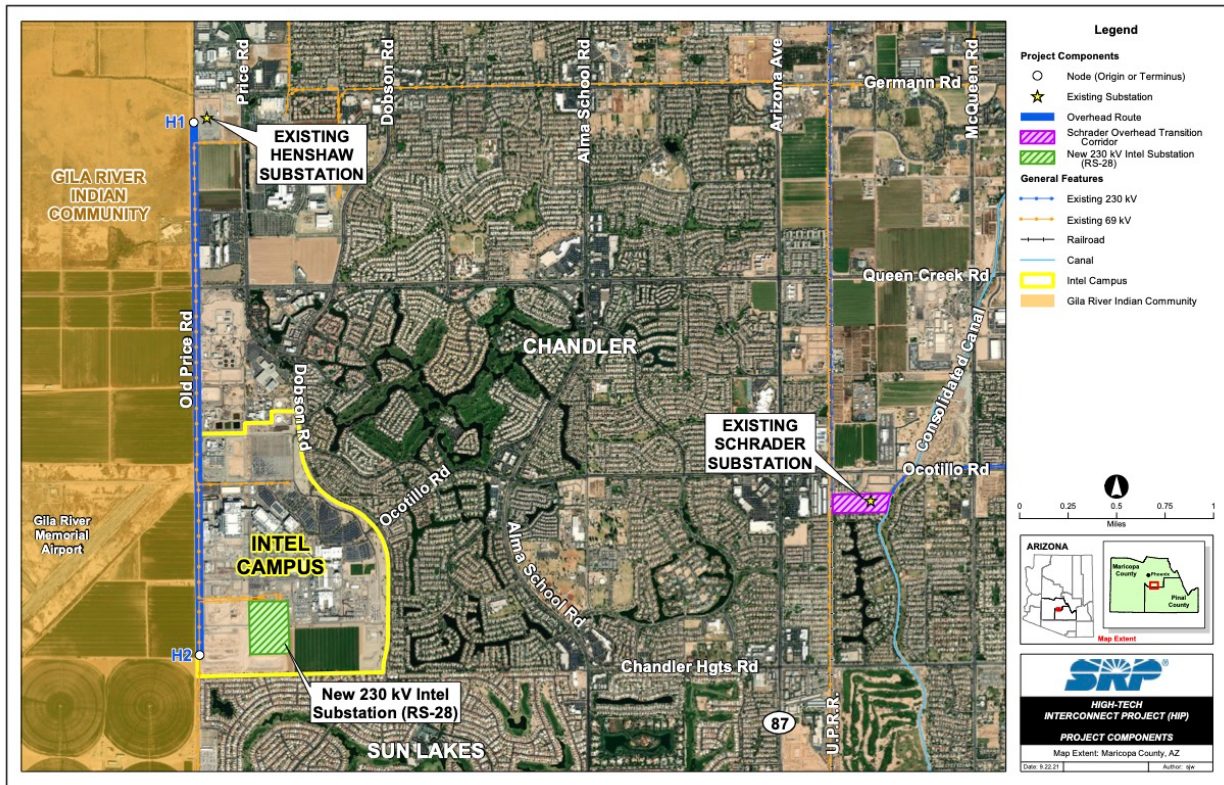


FIGURE 2: Components of HIP CEC Application

As required by Arizona Administrative Code R14-3-219, this Application is structured as follows:

- Exhibit A – Project Location and Land Use
- Exhibit B – Environmental Studies
- Exhibit C – Areas of Biological Wealth
- Exhibit D – Biological Resources
- Exhibit E – Scenic Areas, Historic Sites and Structures, Archaeological Sites
- Exhibit F – Recreational Purposes and Aspects
- Exhibit G – Concepts of Typical Facilities
- Exhibit H – Existing Plans
- Exhibit I – Noise Emissions and Communication Interference
- Exhibit J – Special Factors

A list of acronyms is provided following the Table of Contents.

Purpose and Need

The HIP is designed to provide the energy needed for Intel's announced expansion of its existing Ocotillo Campus. The Intel Ocotillo Campus is in the City of Chandler near the intersection of Dobson Road and Ocotillo Road. This area of Chandler is referred to as the Price Road Corridor (PRC), which the City of Chandler has actively marketed as an area for high-wage jobs in knowledge-based industries and advanced business services. Along with Intel's planned expansion, this high-technology area continues to draw a large concentration of power users in aerospace and manufacturing business sectors. The PRC is a five square-mile area of Chandler and one of Arizona's fastest growing economic hubs. The Intel Ocotillo Campus is within the PRC on a 700-acre parcel of land in the southern portion of the PRC.

On March 23, 2021, Intel announced a \$20 billion expansion plan for its Ocotillo Campus adding two new factories (or fabs). The expansion is expected to create over 3,000 permanent high-tech, high-wage jobs; over 3,000 construction jobs; and approximately 15,000 local long-term jobs. According to the Arizona Governor's Office, the expansion represents the largest private sector investment in state history. Intel's current load is roughly 230 megawatts (MW). The Intel expansion is expected to increase the total campus load by 400 MW to approximately 630 MW, with the possibility of future expansion.

Intel is currently the largest advanced semiconductor manufacturer in the United States. With this expansion, Intel has signaled its intent to increase overall production and bring more global semiconductor manufacturing to Arizona, of which 75% is currently manufactured in Asia. From a supply chain perspective, limited semiconductor capacity has already created a semiconductor chip shortage that is impacting the automotive industry and many other sectors that rely on the use of chips. Semiconductor manufacturing is also highly relevant to national security. The 2021 National Defense Authorization Act includes a provision called the CHIPS ACT to invest in domestic semiconductor manufacturing. Additionally, a recent Presidential Executive Order seeks to assess U.S. domestic capability to support national defense, considering the high reliance on foreign countries for semiconductor manufacturing and research.

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 connect 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 area

north of Loop 202, while the 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 MW to serve existing loads and the current 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.

Price Road Corridor Siting Background

SRP had two prior cases (Case 170 in 2015 and Case 175 in 2017) before the Arizona Power Plant and Transmission Line Siting Committee (Committee) related to transmission lines serving the PRC area. Notably, the 2015 project included some of the same transmission line segments proposed during the HIP process, although the purpose and scope of the previous siting cases and the HIP are different.

2015 Project (Case 170)

The 2015 project was originally developed to serve an expected load in the PRC area totaling 1,285 MW. Intel's ultimate load forecast at the time was 470 MW and was a component of the overall PRC forecast. Like the HIP, the project scope included a double circuit 230 kV transmission line from RS-27 (now Henshaw Substation) to the proposed RS-28 Substation on Intel's Ocotillo Campus. Unlike the HIP, the expected load only required a single 230 kV circuit from RS-28 to Schrader Substation.

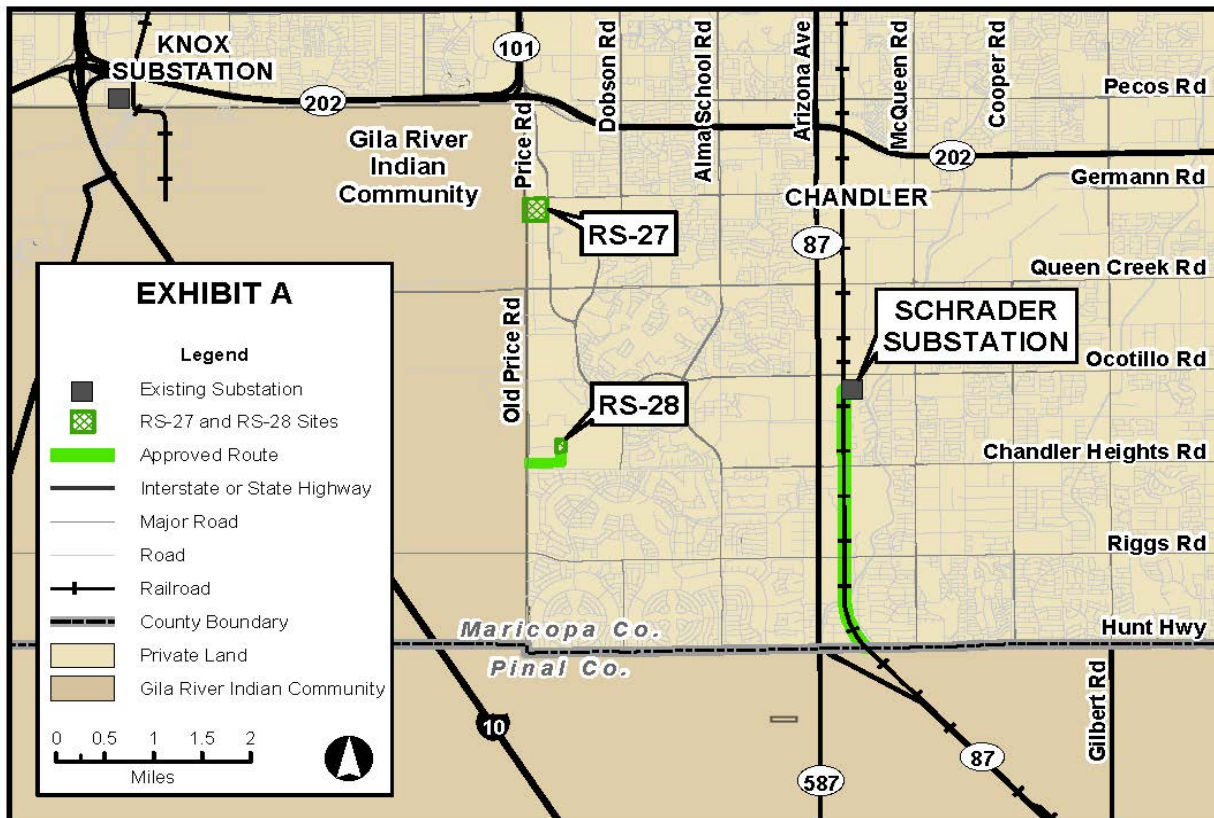
To minimize the impact of these new lines on existing homes and businesses, SRP attempted to site a significant portion of the project on tribal land with approximately three miles of new transmission line and two new substations constructed on non-tribal lands. The 2015 project routes and substation locations on non-tribal lands are shown on **Figure 3** below.

The process to site the project on the Gila River Indian Community was extensive. To obtain permission to build on Gila River Indian Community lands, SRP conducted a process over a four-year period beginning in 2011, supported by the 2013 unanimous consent of the Tribal Council.

project would be on tribal lands (portions of the routes on Gila River Indian Community lands are not subject to the statutory siting requirements). The Committee conducted three days of hearings, heard comments from 27 interested persons, and granted intervention to three parties, including the City of Chandler.

On April 1, 2015, the Committee voted to grant a CEC for the project. The CEC included the alignments and substation locations as shown on **Figure 4** below.

FIGURE 4: Case 170 - Price Road Corridor Exhibit A



On May 7, 2015, the grant of right-of-way (ROW) for portions of the alignment to be located on Gila River Indian Community lands were brought before the Tribal Council for final approval. The Tribal Council unexpectedly voted against the project. Though SRP undertook significant efforts to persuade the Tribal Council to change its vote, these efforts were unsuccessful. By mid-2016, it was clear that the 2015 project could not go forward due to the non-approval by the Tribal Council. As a result, SRP ultimately withdrew its approved CEC application to conduct a new public process and examine alternative options.

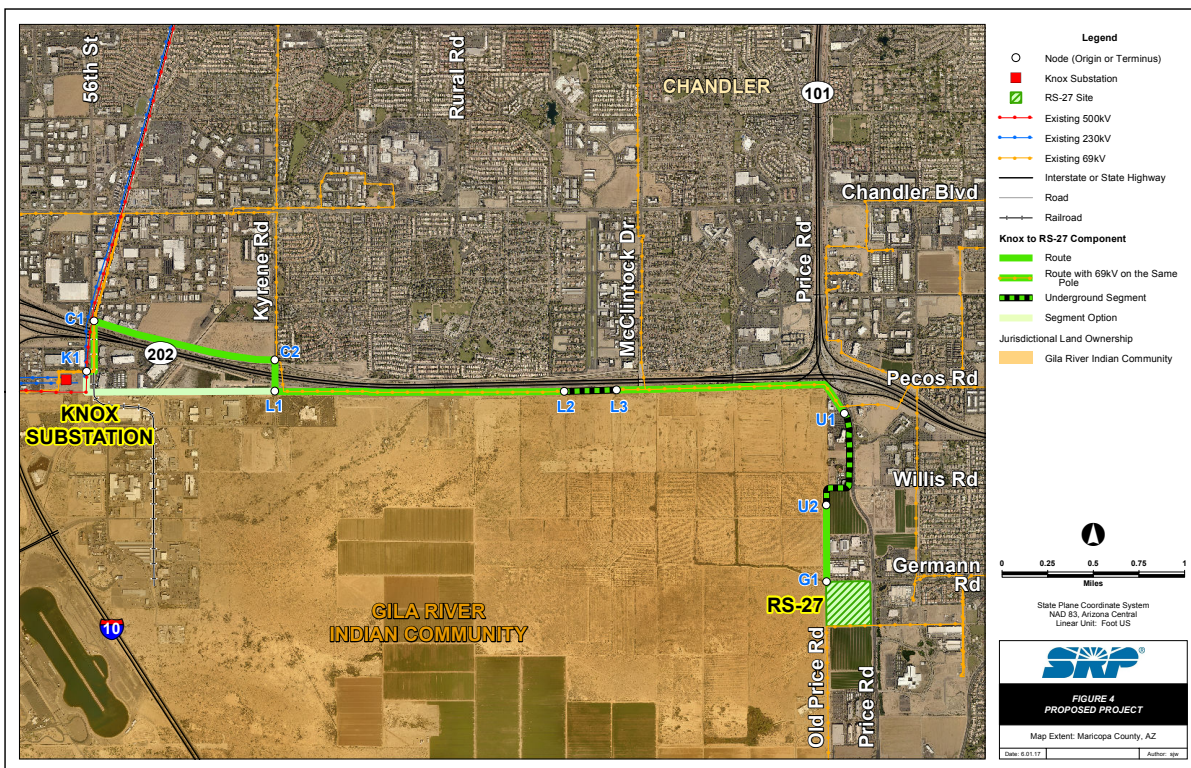
2017 Project (Case 175)

In the meantime, the projected development in the PRC area continued to evolve. The City of Chandler updated its General Plan on August 30, 2016, placing more emphasis on employment focused development in the PRC and less emphasis on data centers (which are high energy users, but offer limited employment opportunities). Because of these changes and additional information that had developed, SRP reduced its area load forecast to 1,003 MW. Intel's load forecast of 470 MW remained consistent with the 2015 project.

SRP engaged an independent engineering and transmission planning firm, Teshmont from Winnipeg, Manitoba, Canada, to re-evaluate the transmission options based on the new load forecast. The conclusion from Teshmont, as confirmed by SRP's own transmission planners, was that the lower load projections could be served with a single new substation (RS-27 from the 2015 project) and a double circuit 230 kV transmission line from the Knox Substation to RS-27. The need for RS-28 and the Schrader to RS-28 segment was eliminated.

SRP ultimately sought and gained approval from the Committee for 4.8 miles of new double-circuit 230 kV transmission lines from the Knox Substation to RS-27 as shown on **Figure 5**. The CEC was approved by the ACC on September 12, 2017 (Decision No. 76371, Case 175).

FIGURE 5: Case 175 - Price Road Corridor Figure 4



HIP Planning Process

As noted above, Intel's March 23, 2021, announcement of its planned expansion results in a need for approximately 630 MW of total transmission capacity with the potential for future expansion driving the need for nearly 900 MW of capacity, which includes Intel's current load of 230 MW. Intel's ultimate load forecast is 430 MW greater than the load forecasts relied upon for the 2015 and 2017 projects. This increase is driving the need for a new double-circuit 230 kV transmission line to be constructed from the existing Henshaw Substation to the Intel Ocotillo Campus and a new double-circuit 230 kV transmission line to be constructed from the existing Schrader Substation to the Intel Ocotillo Campus. These new lines would connect to a new 230 kV substation on Intel's Ocotillo Campus called RS-28.

The City of Chandler and SRP jointly developed the Project. In particular, the joint planning process sought to prioritize the City of Chandler's desire to avoid new overhead transmission lines in residential areas and to build the Project in such a way to limit repeated neighborhood construction disruptions if another expansion occurs in the future.

The joint planning process started by identifying the need to build a new 230 kV substation on Intel's Ocotillo Campus and new double circuit 230 kV lines connecting the Ocotillo Campus to the Schrader and Henshaw substations to provide the energy needed to serve Intel's expansion and potential load growth in the PRC. SRP and the City of Chandler jointly evaluated the route options for connecting the Intel Ocotillo Campus to the Schrader and Henshaw substations based on a variety of criteria including technical feasibility, alignment with existing linear features, the opportunity to co-locate the new lines with existing overhead transmission lines, the overall length and comparative costs, and a comparison of development characteristics among the feasible routes. The City's desire to fund undergrounding along portions of the route to avoid new overhead lines added another important set of criteria based on the unique cost and feasibility constraints of underground construction.

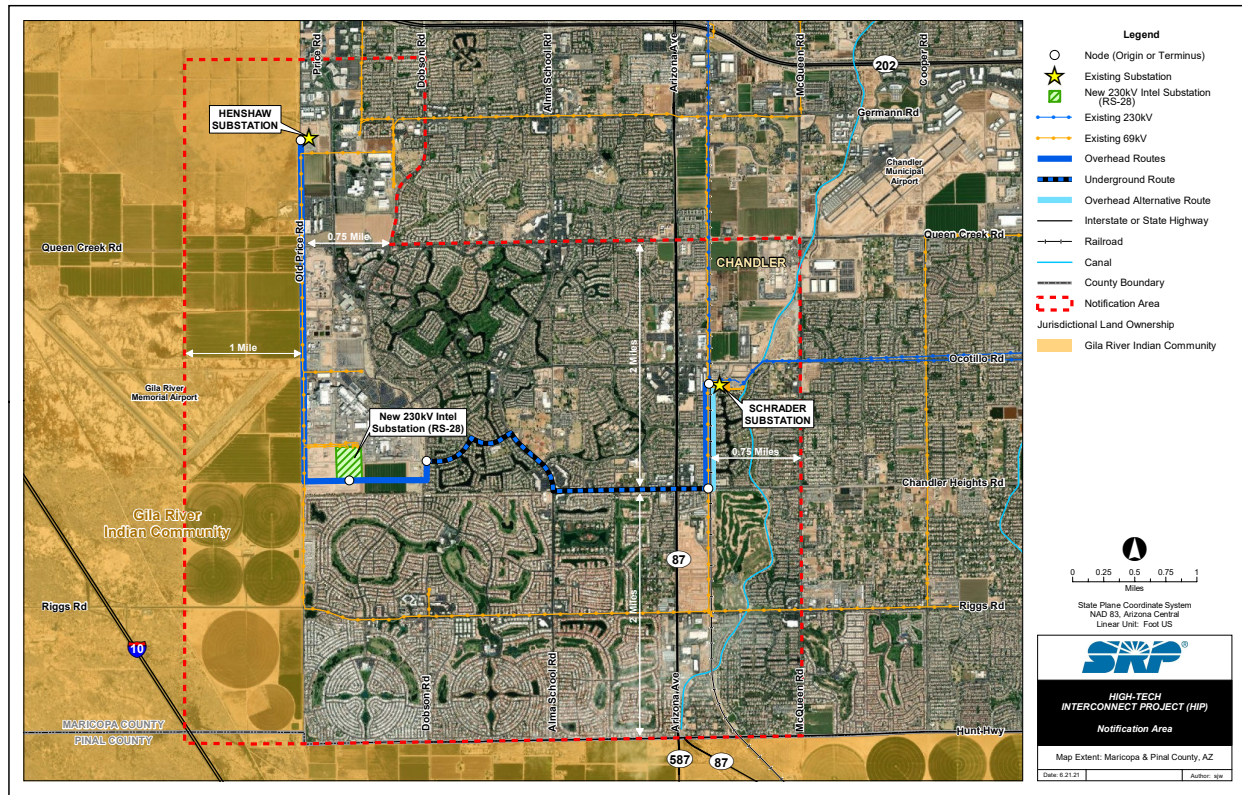
Based on above criteria, SRP proposed overhead route segments where overhead transmission lines exist. These routes included the existing 69 kV transmission lines along Old Price Road and the Union Pacific Railroad (UPRR). The Committee previously approved the route along the UPRR in Case 170.

Once the preferred routes were identified, SRP reached a formal agreement with the City of Chandler where the City would cover the added cost to construct the underground portion of the Project. SRP was then in a position to announce the Project and start its community outreach efforts.

Initial community outreach following the public announcement of the agreement between SRP and the City of Chandler on June 25, 2021, included a press release, the Project website launch, and phone calls and emails to HOAs, schools, and churches along the route. In early July 2021, SRP mailed postcards to customers and landowners in the notification area (see **Figure 6**) and followed with an email to customers and stakeholders. In addition, SRP posted targeted social media ads to customers in the notification area directing recipients to the virtual open house posted

on July 16, 2021. **Figure 6** shows the original Project scope, and as the routes have changed, the notification area has remained the same throughout the process.

FIGURE 6: HIP Notification Area



In early August 2021, SRP conducted the same process, including issuing a press release, making phone calls and sending emails to HOAs, schools, and churches along the route, mailing postcards to customers and landowners in the notification area and following with an email to customers and stakeholders as well as distributing social media ads to customers in the notification area directing recipients to four live on-line open houses scheduled for August 24 and 25, 2021.

The routes presented to the public in July and August 2021, were modified to expand the underground segments of those routes over the following months. The first addition to the underground segments of the Project occurred in August 2021, when Intel committed to pay the cost of undergrounding the portion of the line on the Intel Ocotillo Campus. This was done to improve land use on its campus and limit constraints on its above ground construction activities due to overhead transmission lines. Additionally, in mid-September 2021, Intel announced it would pay for the undergrounding of the overhead segment between the existing Schrader Substation and Chandler Heights Road as shown in **Figure 1**.

Throughout this time, SRP continued its public outreach process for the Project which included a live on-line open house on September 23, 2021. This open house was publicized by issuing a press release, sending emails to customers, HOAs, schools, and churches along the route, and by mailing

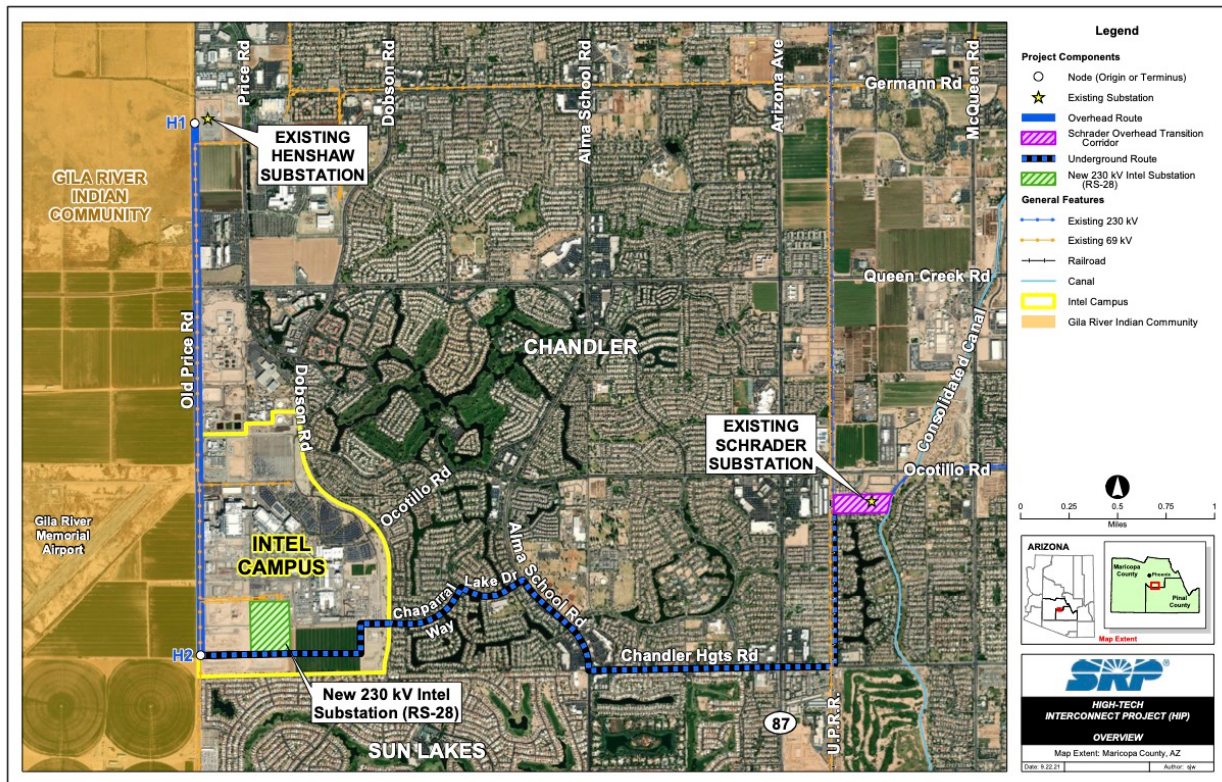
postcards to customers and landowners in the notification area. In addition, social media ads were directed to customers in the notification area.

HIP Project Description

Based on the changes to the routes during the planning phases from overhead to underground, the overall Project includes the following overhead and underground components (see **Figure 7**):

- New overhead double-circuit 230 kV transmission line from the existing Henshaw Substation to a turning point onto Intel's Ocotillo Campus (node H1 to H2);
- New underground double-circuit 230 kV transmission line from node H2 to RS-28*;
- New RS-28 Substation;
- New underground double-circuit 230 kV transmission line from RS-28, crossing Dobson Road along Chaparral Way, Lake Drive, Alma School Road and along Chandler Heights Road*;
- New underground double-circuit 230 kV transmission line from Chandler Heights Road to a point just west of the existing Schrader Substation*;
- The Schrader Overhead Transition Corridor would consist of two 230 kV transmission lines to the Schrader Substation through overhead and underground interconnection options that include converting the existing single circuit Corbell to Schrader 230 kV alignment inside the Schrader Overhead Transition Corridor to a new double circuit alignment.

* These Project components are not subject to this Application

FIGURE 7: Overhead and Underground Components of the HIP

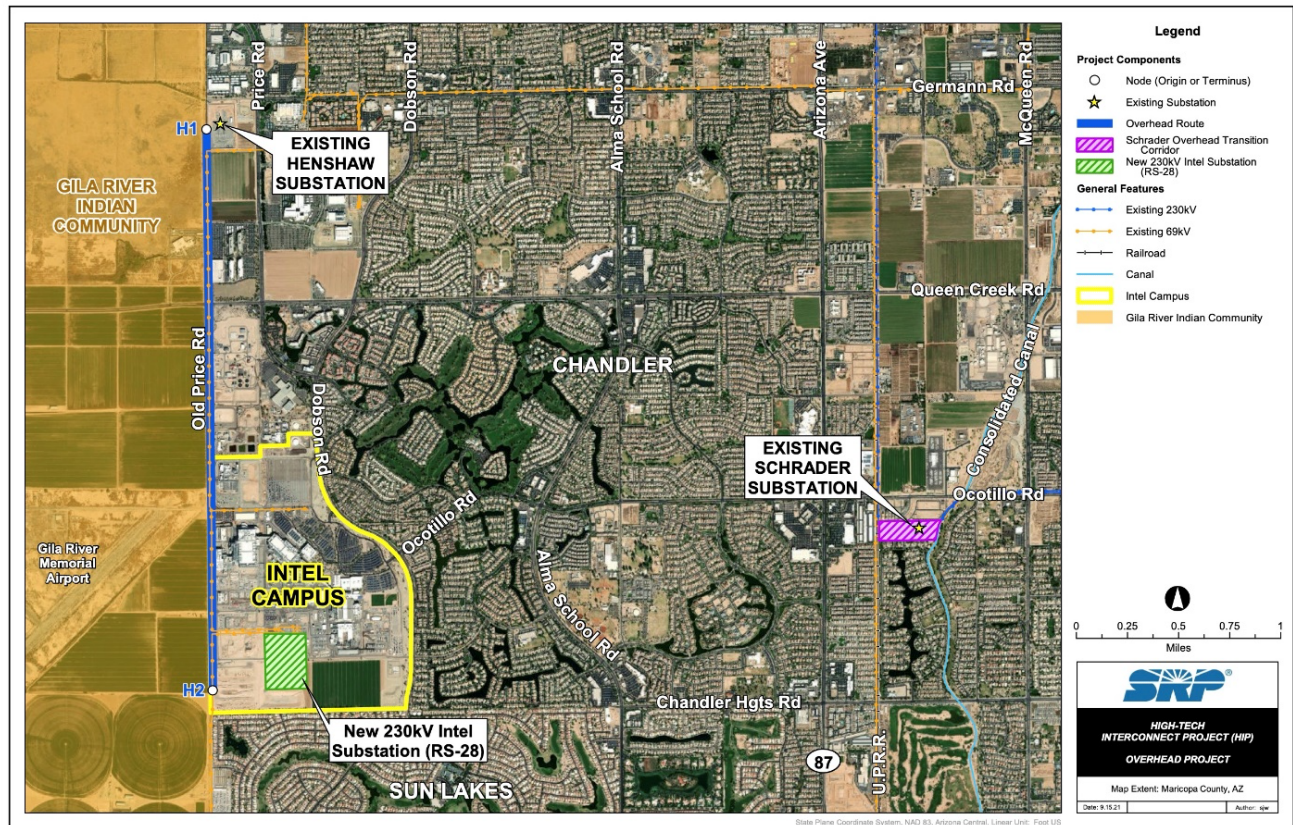
SRP specifically requests permission to construct the following components as part of this Application (see **Figure 8** below):

- **Existing Henshaw Substation to Intel:** Approximately 2.74 miles of overhead double-circuit 230 kV transmission line from the existing Henshaw Substation traveling south from node H1 down Old Price Road to a turning point onto Intel's Ocotillo Campus at node H2.
- **New RS-28 Substation:** A new substation located on approximately 23 acres of land on Intel's Ocotillo Campus.
- **Schrader Overhead Transition Corridor:** Two new overhead single-circuit 230 kV transmission lines 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 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.

FIGURE 8: Components of HIP CEC Application

Summary of Public Process

SRP has conducted a public process comprised of numerous outreach activities as described above during the planning phase of the Project. The outreach process informed the public, public officials representing the region, jurisdictional agencies, key landowners, and stakeholders. The process included briefings, virtual meetings and live on-line open houses, post card mailings, phone calls, and emails to inform the public. In addition, social media was used to inform the public and stakeholders. A toll-free information phone line and a Project website were developed to allow members of the public to obtain information about the Project and provide comments. This process is described in further detail in **Exhibit J**.

Summary of Environmental Compatibility

The following provides a summary of the environmental compatibility of the Project sought in this Application:

- 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.

References

“Executive Order on America’s Supply Chains” <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/02/24/executive-order-on-americas-supply-chains/>

“Strengthening the Global Semiconductor Supply Chain in an Uncertain Era.”
https://www.semiconductors.org/wp-content/uploads/2021/05/BCG-x-SIA-Strengthening-the-Global-Semiconductor-Value-Chain-April-2021_1.pdf