

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 proposed South Mountain Transmission Project (SMT Project or Project). The Project includes two new 230-kilovolt (kV) double-circuit transmission lines that will range from approximately two to three miles in length depending on the selected routes.

This Application requests approval for construction of the SMT Project to provide the necessary energy and reliability to serve expected load growth in Laveen Village and to strengthen system reliability for the overall SRP transmission system.

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 South Mountain Loop 202 Freeway (Loop 202) is an important transportation corridor, and its surrounding area is experiencing significant growth. Since the opening of Loop 202, more than 800 acres have been planned and rezoned for economic development within the area identified by the City of Phoenix as the South Mountain Technology Corridor. The PlanPHX 2025 General Plan (City of Phoenix General Plan) characterizes the area in Laveen Village near Loop 202 as a Primary Core, which can “support a large concentration of employment and housing opportunities” (City of Phoenix, 2024). Through recent land use and zoning permits and plans, the City of Phoenix has approved proposals in Laveen Village to develop industrial and tech parks to accommodate warehouse and office uses. Such uses will attract high-wage jobs in technology, bioscience, light manufacturing, finance and other office and industrial uses to the area.

Mixed use commercial and residential and institutional uses are also proposed. In addition, based on discussions with the City of Phoenix, this area currently leads the City of Phoenix in new housing permit activity.

Planned and future growth and development along Loop 202 in and around the Laveen Village in Phoenix, Arizona requires new transmission facilities to ensure sufficient power and reliable electric service to the area. The existing electrical load near Loop 202 is served from the 69 kV transmission system out of the 69/12 kV SRP Cheatham Substation located on the southwest corner of Baseline Road and 57th Avenue, with support from the 69/12 kV SRP Irvin Substation located on the northeast corner of Dobbins Road and 47th Drive. The existing 69 kV transmission system does not have sufficient capacity to serve anticipated load growth in this area. As a result, SRP needs to construct additional transmission facilities to support the future growth within Laveen Village.

SRP performed a Load Impact Study to develop a transmission plan for the Laveen area. To serve projected power needs in the Laveen area, SRP needs to construct new 230 kV and 500 kV transmission lines to connect a new 500/230/69 kV substation (New Substation) to the existing SRP transmission system. The New Substation and 500 kV transmission lines, which will connect to an existing 500 kV transmission line, are non-jurisdictional and therefore are not a part of this Application. The two new double-circuit 230 kV transmission lines will extend and interconnect the existing double-circuit Anderson – Orme 230 kV transmission line to the New Substation, to be located west of Loop 202 and between Olney Avenue and Elliot Road.

In addition to meeting the expected load growth in the Laveen area, the SMT Project will strengthen the existing SRP electrical system by increasing the transmission system voltage support and increasing resiliency in the area. SRP expects the SMT Project to provide an additional 1200 MW of load serving capability. Further, upon completion of the SMT Project, SRP can delay upgrades at existing high voltage substations in the area. Accordingly, the SMT Project reduces short circuit issues on the SRP transmission system, voltage issues due to long 69 kV lines, and thermal overload issues under outage conditions.

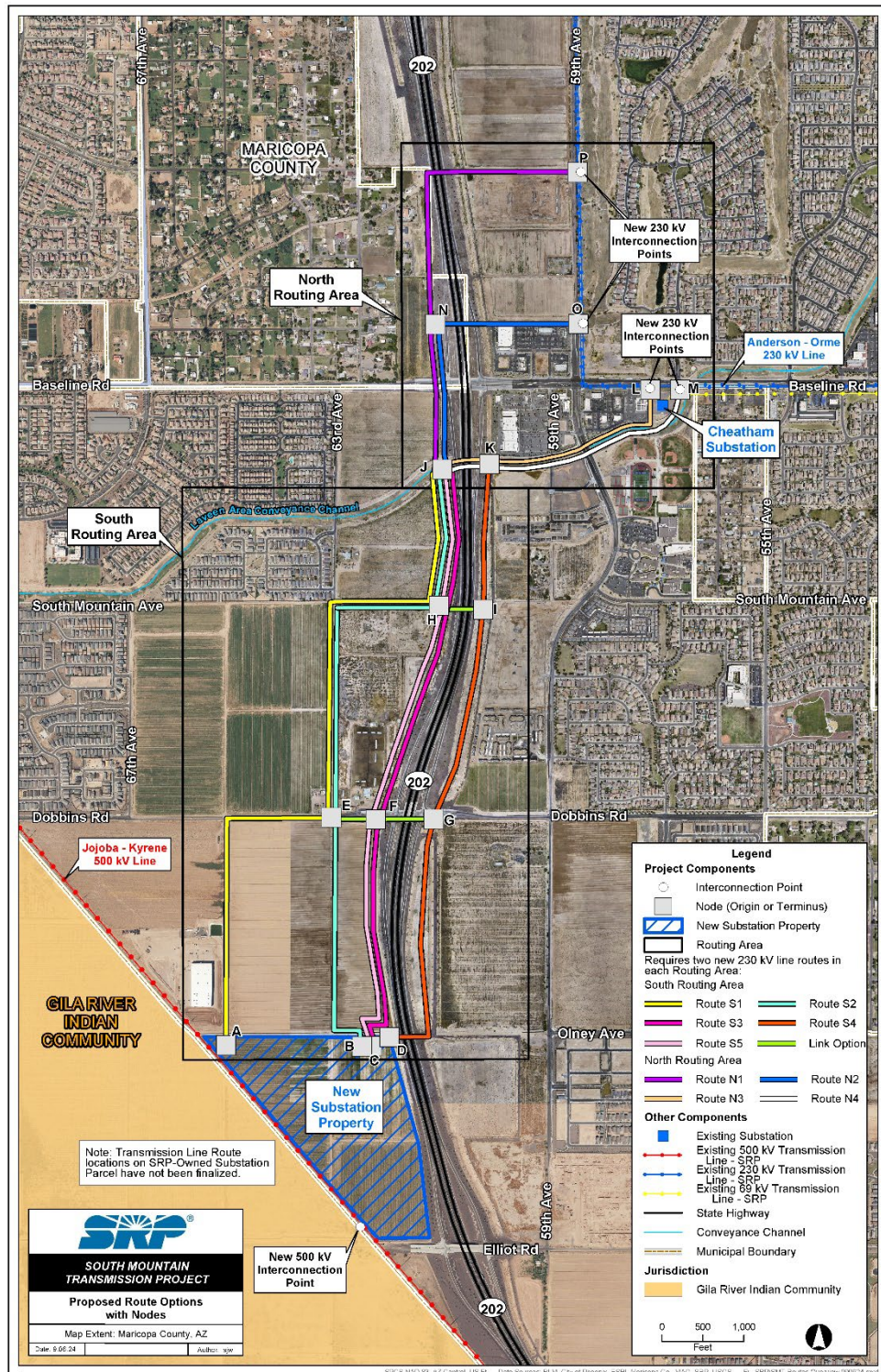
In sum, the SMT Project is needed to support growth and development along Loop 202 and in the Laveen area and to strengthen SRP's overall transmission system reliability.

Proposed Route Options

Pursuant to A.R.S. § 40-360, SRP is requesting a CEC for two new double-circuit 230 kV transmission lines that will extend and interconnect the existing double-circuit Anderson – Orme 230 kV transmission line to the New Substation. **Figure 1** below shows the details of the proposed SMT Project route options.¹

¹ In addition to the new 230 kV transmission lines covered by this Application, the SMT Project will include new non-jurisdictional components including the New Substation that will be constructed at the southern end of the Project and two new short 500 kV transmission line segments that will be constructed.

Figure 1



Project Description

For each of the two double-circuit 230 kV transmission lines, SRP would require up to a 100-foot right-of-way (ROW). To account for final design and pole placement along linear features, SRP is requesting up to a 350-foot corridor for each proposed transmission line. The proposed transmission line structures could be located on SRP-owned land, Arizona Department of Transportation (ADOT) ROW, City of Phoenix ROW, and ROW on privately owned land within the City of Phoenix and Maricopa County. The point at which the proposed transmission lines would cross Loop 202 could shift along the transmission line routes according to ADOT safety requirements and guidelines.

To develop and describe the route options presented in this Application, SRP created two Routing Areas – a South Routing Area and a North Routing Area. The South Routing Area shows the route options from the New Substation, which is on SRP-owned property, to a point where the routes intersect with the Laveen Area Conveyance Channel (LACC). The North Routing Area shows the route options from the same points on the LACC to proposed interconnection points on the Anderson – Orme 230 kV transmission line.

SRP is proposing route options in both the South Routing Area and North Routing Area. In addition, SRP is proposing Link Options that provide flexibility for multiple route combinations (**Figure 1**). Transmission line locations within the New Substation property have not been finalized.

The following summarizes the location of the route and Link Options shown in the South Routing Area and the North Routing Area.

South Routing Area

Route S1: starts at the northwest corner of the New Substation site, travels north along an irrigation channel to West Dobbins Road, then travels east along West Dobbins Road to South 63rd Avenue and travels north along South 63rd Avenue to West South Mountain Avenue. The route then goes east on West South Mountain Avenue, north on the west side of Loop 202 until intersecting the LACC.

Route S2: starts at the northeast corner of the New Substation site, runs north on South 63rd Avenue, then travels east on West South Mountain Avenue and travels north on the west side of Loop 202 until intersecting the LACC.

Route S3: starts at the northeast corner of the New Substation site and runs north on the west side of Loop 202 until intersecting the LACC.

Route S4: starts at the northeast corner of the New Substation site, immediately going east to cross Loop 202 along West Olney Road, then runs north on the east side of Loop 202 until intersecting the LACC.

Route S5: a second transmission line that starts at the northeast corner of the New Substation site and runs north on the west side of Loop 202 until intersecting the LACC.

Link Options

To provide flexibility for multiple route combinations, Link Options are included in this Application. Link Options denote where a route segment can connect to a different route segment. Link Options allow different combinations of route segments to form a new route option. For ease of description, Nodes are also included in this Application to delineate the path a route option will follow. **Figure 1** shows the Nodes along with the route options and Link Options.

Specifically, the Link Option on West Dobbins Road (Segments E-F-G) would allow Route S1 and Route S2 to connect and form different routes with Route S3, Route S4, or Route S5. There is also a Link Option that runs along West South Mountain Avenue (Segment H-I) and connects Route S1, Route S2 and Route S3 to Route S4 or Route S5.

North Routing Area

Route N1: runs north on the west side of Loop 202, past West Baseline Road, then turns east on West Vineyard Road to connect to the Anderson – Orme 230 kV transmission line.

Route N2: runs north on the west side of Loop 202, past West Baseline Road, then turns east just north of the Laveen Spectrum shopping center, to connect to the Anderson – Orme 230 kV transmission line.

Route N3: travels east on the LACC, then travels north on the western side of Cheatham Substation to connect to the Anderson – Orme 230 kV transmission line.

Route N4: travels east on the LACC, then travels north on the eastern side of Cheatham Substation to connect to the Anderson – Orme 230 kV transmission line.

Summary of Public Process and Routing Study

SRP has conducted a public process comprised of numerous outreach activities to gain input and feedback concerning the Project as described in detail in **Exhibit J** of this Application. The outreach process informed the public, public officials, jurisdictional agencies, customers, and stakeholders of the Project. The process included briefings and meetings, live online open houses, in-person open houses, postcard mailings, phone calls, and emails. In addition, social media was used to inform the public and stakeholders. A toll-free information phone line and a Project website were implemented to allow the public to obtain information about the Project and provide comments on proposed routes.

The SMT Project public process consisted of two phases. In each phase, SRP employed various methods of outreach to inform the public of the Project and solicit feedback on the route options. This process ultimately informed SRP's decision to provide route options in each Routing Area along with Link Options. This provides maximum flexibility in creating routes.

Throughout the public process, SRP identified, analyzed, modified, and removed or added route options based on feedback from stakeholders, the public and agencies. The development of routes included in this Application through the public process is summarized in **Exhibit J**.

Preferred Routes

The routes identified throughout the public process were further analyzed to select preferred routes for this Application. During the public and siting process, routing criteria was discussed and agencies, stakeholders and the public weighed in on opportunities for siting transmission lines and also constraints associated with the line routes. This input was used to help develop criteria to determine the preferred routes.

The criteria established for this Project Study Area (PSA) are listed below. As described throughout this Application, the Project area is quickly transitioning and developing to accommodate the proposed South Mountain Tech Corridor and associated development. Property ownership and plans are changing rapidly, and all land has some type of recent development in construction, rezoning, is a Planned Area Development or under permit/site plan review.

- Minimize impacts to natural, cultural and social resources
- Minimize impacts to existing residences, schools, and other routing constraints
- Minimize impacts to future or planned residences, schools, and other routing constraints
- Maximize use of existing linear features (routing opportunities) like Loop 202, roadways and manmade water features.
- Minimize impacts to individual parcels/properties by minimizing number of routes on one property (Project requires two 230 kV transmission lines)
- To serve South Mountain Tech Corridor's future load, route as close to future large load land use and parcels
- Minimize overall length
- Minimize impacts to Planned Developments

Exhibit J-6 includes tables that analyze the proposed routes against the above listed criteria in the South Routing Area and the North Routing Area. Ultimately, based on stakeholder and public input along with the routing criteria and analysis, routes depicted in **Figure 2** were selected as Preferred Routes.

South Routing Area

Preferred Routes:

S2

S3 to Segment H-I-K

Alternative Routes:

S1

S5

North Routing Area

Preferred Routes:

N2

N3

Alternative Routes:

N1

N4

Contingent Preferred Segments:

S5 Segment H-J-K

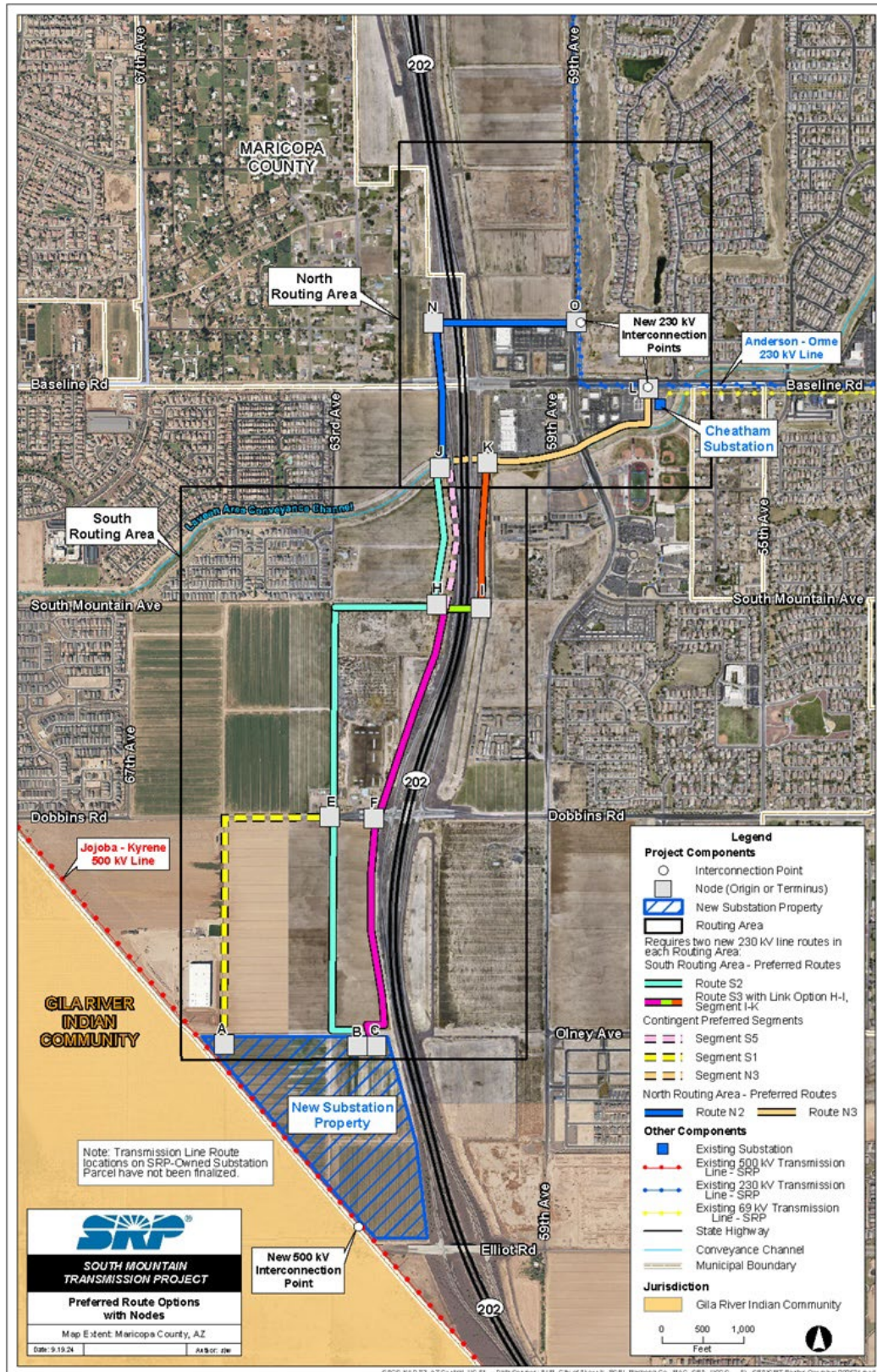
The Applicant is currently working with ADOT to study the feasibility of a route or route segments on the east side of Loop 202. If ultimately the studies deem the east side of Loop 202 incompatible with transmission infrastructure, then Route S4 and Segments H-I-K would not be feasible. Therefore, the Applicant is requesting Contingent Preferred Segment Route S5 Segment H-J-K displayed on **Figure 2** be approved.

S1 Segment A-E

Through stakeholder outreach, the Applicant heard that the Project could better support future planned development if it is close to parcels south of West Dobbins Road and west of South 63rd Avenue (**See Ex J-6**). Therefore, the Applicant is requesting Contingent Preferred Segment Route S1 Segment A-E displayed on **Figure 2** be approved.

From the time of filing this Application to the time of the Arizona Power Plant and Transmission Line Siting Committee Hearing, SRP will continue to meet with agencies, stakeholders, and the public and based on these discussions, and may include additional details and refined routing preferences in the Arizona Power Plant and Transmission Line Siting Committee Hearing.

Figure 2



Summary of Environmental Analysis

In support of this Application, SRP performed various studies that analyzed the impact of the SMT Project under the factors identified in A.R.S. § 40-360.06 (Environmental Factors). The following provides a summary of the conclusions reached regarding the compatibility of the Project under the Environmental Factors:

- 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 will be consistent with safety considerations and regulations.
- No significant or detrimental effects to existing scenic areas, historic sites, structures, or archaeological sites at or in the vicinity of the Project.
- No significant or detrimental effects to surface water or groundwater quality and availability.
- The Project is environmentally compatible with the total environment of the area.

Conclusion

As outlined, the SMT Project is needed to support growth and development along Loop 202 and in the Laveen area and to strengthen SRP's overall transmission system reliability. The route options presented in this Application are all environmentally compatible and are proposed in this Application based on feedback from an extensive outreach process and the routing analysis.

Accordingly, SRP requests that the Arizona Corporation Commission grant a CEC for the SMT Project by selecting two routes in the South Routing Area and two routes in the North Routing Area. All route options presented will satisfy the needs for the Project and are environmentally compatible, however, the Preferred Routes, for reasons in the Routing Summary (**Exhibit J-6**), meet Project criteria the best and are requested for approval.

References

City of Phoenix. 2024. PlanPHX 2025 General Plan. Accessed 7/3/24. Located at:
https://www.phoenix.gov/pddsite/Documents/City%20Council%20Adopted_PlanPHX%202025%20Update%20Final_8.5x11.pdf.