

SECTION 2.0

ALTERNATIVES TO THE PROPOSED PROJECT

Tehachapi Renewable Transmission Project

**TABLE 2-4 (CONTINUED)
ROUTING ALTERNATIVES CONSIDERED AND ELIMINATED**

Alternative Description	Project Objectives	Feasibility	Environmental Effects Compared to the Proposed Project
<p>Segments 6, 7, and 8) This alternative would route the proposed Mira Loma-Vincent 500 kV T/L from SCE's existing Vincent Substation east, towards the existing Lugo Substation where the route would turn south and travel through the Cajon Pass to the Mira Loma Substation. T/Ls and structures in the unutilized portions of the existing Antelope – Mesa 220 kV T/L through the ANF would require removal. All other currently existing T/L structures in ANF would remain.</p>	<p>alternative thus does not meet Objective 1 – Reliably Interconnect TWRA and Comply with RPS in an Expedited Manner.</p> <ul style="list-style-type: none"> • Would not meet the applicable planning and reliability criteria, thus not meeting Objective 2 • Would result in an increase to the maximum amount of transfer capability to the LA Basin from the north and would thus not meet Objective 5 – Increase Reliability in the LA Basin. • Would require establishment of a new R-O-W through undisturbed land in SBNF, not meeting Objective 6 – Maximize Use of Existing R-O-W and Corridors. 	<ul style="list-style-type: none"> • Would require implementation of a complex SPS which is not practical or feasible. Constructing a new transmission in the Cajon Pass would not result in increasing the overall system capability without the construction of additional new transmission facilities. 	<ul style="list-style-type: none"> • Would establish a new R-O-W between the Vincent Substation and the Lugo Substation area and within SBNF. Creating a new R-O-W through SBNF would result in greater environmental impact than the retained alternative, which would use an existing established utility R-O-W in the ANF.
<p>RA-Eliminated-6-Alternative Routing Through Chino Hills-Option 1 – 220 kV and 500 kV T/Ls through Chino Hills State Park (Alternative to Section within Segment 8A) This option would create new a 500 kV T/L corridor through Chino Hills State Park (Park), parallel to an existing 220 kV</p>	<ul style="list-style-type: none"> • Would require construction of a T/L through a Park, thus not meeting Objective 7 – Minimize Environmental Impacts. • Would result in a longer route than under retained Segment 8A (see Section 2.4.1); building a longer route would not meet Objective 8 – Select the Shortest Feasible Route. • Would result in greater costs and might require a longer implementation period than 	<p>Advantages</p> <ul style="list-style-type: none"> • None <p>Disadvantages</p> <ul style="list-style-type: none"> • The widened corridor from near the intersection of Pine Ave and State Highway 71 to the Chino Substation would be routed for approximately 4.5 miles through the developed areas of Chino, the remainder of the route widening would occur through the Chino Hills State Park. To route the new widened corridor 	<p>Advantages</p> <ul style="list-style-type: none"> • None <p>Disadvantages</p> <ul style="list-style-type: none"> • With the establishment of new access and spur roads associated with the widened R-O-W in the Chino Hills State Park, greater environmental impact in undeveloped areas is anticipated to occur under this option than the retained alternatives for Segment 8A.

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<p>TL traversing the Park. Portions of the existing R-O-W for the Mira Loma-Olinda and Mira Loma-Walnut 220 KV T/Ls and portions of the existing Chino-Serrano and Chino-Vejeo 220 KV T/Ls would be widened by up to 200 feet to accommodate the new 500 KV T/L. In urban areas, the new 500 KV T/L R-O-W would be required from a point near Pine Ave and State Highway 71 to the Chino Substation. An existing idle 220 KV T/L would be removed.</p>	<p>the retained alternatives, thus not meeting Objective 9 – Meet Project Needs in a Cost-effective and Timely Manner.</p>	<p>through urban areas, residences and other structures, such as schools, in densely populated areas would be affected.</p> <ul style="list-style-type: none"> Avoidance of the Chino Hills State Park features and residential and other structures, the corridor might not be routed in a straight line, i.e., the shortest route possible. It is possible that public opposition would affect the implementation schedule. 	<ul style="list-style-type: none"> The 500 KV T/L section between the Mesa and Chino substations would be longer than constructing it under the retained Segment 8A (approximately 29 miles as compared to 26 miles). Routing additional TL through the Chino Hills State Park would result in greater visual impacts from viewpoints in the Park Avoiding features in the Chino Hills State Park and other may result in increased environmental impacts
<p>RA-Eliminated-6, Alternative Routing Through Chino Hills-Option 2 – 500 KV T/L through Chino State Park; 220 KV T/L through Chino Hills (Alternative to Section within Segment 8A)</p>	<ul style="list-style-type: none"> Implementation of this option would require construction for replacement of a TL through Chino Hills and construction for a replacement of a TL through Chino Hills State Park, thus not meeting Objective 7 – Minimize Environmental Impacts. It would also result in a longer route than under retained Segment 8A (see Section 2.4.1); building a longer route would not meet Objective 8 – Select the Shortest Feasible Route. 	<p>Advantages</p> <ul style="list-style-type: none"> None <p>Disadvantages</p> <ul style="list-style-type: none"> The widened corridor from the intersection of Pine Ave and State Highway 71 to the Chino Substation would be routed for approximately 4.5 miles through the developed areas of Chino; the remainder of the route widening would occur through the Chino Hills State Park. To route the new widened corridor through urban areas, residences and other structures, 	<p>Advantages</p> <ul style="list-style-type: none"> None <p>Disadvantages</p> <ul style="list-style-type: none"> With the establishment of new access and spur roads associated with the widened R-O-W in the Chino Hills State Park, greater environmental impact in undeveloped areas is anticipated to occur under this option than the retained alternatives for Segment 8A. A new switching station near the intersection of Pine Ave and State Highway 71 will result in
<p>This option would replace the existing idle 220 KV T/L in Chino Hills with a new double-circuit 220 KV T/L, remove existing</p>			

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<p>double-circuit 220 kV T/L through the Chino Hills State Park towards the intersection of Pine Ave and State Highway 71 in Chino and replace with new 500 kV double-circuit, new 220 kV switching station near Pine Ave and State Highway 71, and new 500 kV double circuit T/L from the intersection of Pine Ave and State Highway 71 towards Chino Substation. The existing R-O-W for the double circuit Mira Loma-Olinda and Mira Loma-Walnut 220 kV T/Ls would be widened by up to 100 feet to accommodate the new 500 kV T/L. The new 500 kV T/L corridor would be required from the intersection of Pine Ave and State Highway 71 to the Chino Substation.</p>	<ul style="list-style-type: none"> This option would result in greater costs and might require a longer implementation period than the retained alternatives, thus not meeting Objective 9 – Meet Project Needs in a Cost-effective and Timely Manner. 	<p>such as schools, in densely populated areas would be affected.</p> <ul style="list-style-type: none"> Avoidance of Chino Hills State Park features and residential and other structures, the corridor might not be routed in a straight line, i.e., the shortest route possible. It is possible that public opposition would affect the implementation schedule. 	<p>additional land disturbance not required under the retained alternatives for Segment 8A.</p> <ul style="list-style-type: none"> The 500 kV T/L section between the Mesa and Chino substations would be longer than constructing it under the retained Segment 8A (approximately 29 miles as compared to 26 miles). Routing additional T/L through the Chino Hills State Park would result in greater visual impacts from viewpoints in the Park. Avoiding features in the Chino Hills State Park and other may result in increased environmental impacts
<p>RA-Eliminated-7, T/L Whitwind to Cottonwind to Windhub (Alternative to Segment 10) This alternative would route the</p>	<ul style="list-style-type: none"> Could potentially interfere with reliably interconnecting to TWRA and compliance with the RPS in an expedited manner (Objective 1). The new corridor could interfere with wind generation projects planned in the area to meet the RPS. 	<p>Advantages</p> <ul style="list-style-type: none"> Adjacent to existing R-O-W for a short distance <p>Disadvantages</p> <ul style="list-style-type: none"> New R-O-W and access roads would need 	<p>Advantages</p> <ul style="list-style-type: none"> None <p>Disadvantages</p> <ul style="list-style-type: none"> Greater impacts to previously undisturbed land due to required R-O-W acquisition