E.4 Modified Route D Alternative – Contents

E.4.1	Description of the Modified Route D Alternative	E.4.1-1
E.4.2	Biological Resources	E.4.2-1
E.4.3	Visual Resources	E.4.3-1
E.4.4	Land Use	E.4.4-1
E.4.5	Wilderness and Recreation	E.4.5-1
E.4.6	Agriculture	E.4.6-1
E.4.7	Cultural and Paleontological Resources	E.4.7-1
E.4.8	Noise	E.4.8-1
E.4.9	Transportation and Traffic	
E.4.10	Public Health and Safety	E.4.10-1
E.4.11	Air Quality	E.4.11-1
E.4.12	Water Resources	E.4.12-1
E.4.13	Geology, Mineral Resources, and Soils	E.4.13-1
E.4.14	Socioeconomics	E.4.14-1
E.4.15	Fire and Fuels Management	E.4.15-1

E.4.1 Modified Route D Alternative

The Modified Route D Alternative is described in detail in Section E.4.1 below. It includes consideration the following route options, which are described and analyzed in the sections defined below:

- Star Valley Option: Draft EIR/EIS Section E.4
- Cameron Reroute: RDEIR/SDEIS Section 3.3.5
- Pacific Crest Trail Reroute Options: Draft EIR/EIS Section E.4
- Western Modified Route D Alternative Reroute: RDEIR/SDEIS Section 3.3.7
- Star Valley Option Revision: RDEIR/SDEIS Section 3.3.8

E.4.<u>1.</u>1 Description of the Modified Route D Alternative

This alternative was suggested by the Cleveland National Forest in an April 6, 2007 letter to the CPUC and BLM. It was identified as a route to be evaluated because the alternative transmission line route would be consistent with the Forest Land Management Plan's Land Use Zones and it would diverge from the existing SWPL at a point east of the area of greatest fire risk. This 39-mile alternative would replace the Interstate 8 Alternative between MP I8-47 and I8-71 (a 24-mile segment). Section 4.8.4 of Appendix 1 (Alternatives Screening Report; page Ap.1-234) describes the process used to refine the route of this alternative. Appendix 11C includes detailed maps of this alternative, including the location of each tower and other areas of direct impact.

The Modified Route D Alternative would also be within a potential utility corridor identified in the West-wide Energy Corridor Draft Programmatic Environmental Impact Statement (PEIS; published by the Department of Energy on November 9, 2007). Figure E.4.1-1a shows the Modified Route D Alternative and the corridor defined in the Draft Programmatic EIS.

The Modified Route D Alternative route is described in the following paragraphs.

MP MRD-0 to MRD-10 (see Figure E.4.1-1b). The Modified Route D Alternative route would start by diverging from the Interstate 8 Alternative near the I-8 Crestwood exit, east of the eastern boundary of the CNF. The route would head southwest for two miles, crossing the 69 kV transmission line that connects the Boulevard and Cameron Substations. It would turn west for 2.5 miles, following the southern boundary of the Forest, then turning south-southwest passing east of residences on Cameron Truck Trail, for 3.5 miles across private and BLM land, turning west at a point north of the Cameron Substation. After passing north of the substation, this point, the route would continue to the west, crossing Lake Morena Drive and Big Potrero Truck Trail, then joining SDG&E's "C-D Route" just south of the southern border of the CNF, primarily on BLM land.

MP MRD-10 to MRD-22 (see Figure E.4.1-1c). As shown on Figures E.4.1-1b and -1c, this east-west segment of the alternative would pass through the Potrero area between BLM's Hauser Mountain Wilderness area and the CNF's Hauser Wilderness. Portions of this route segment burned in the October 2007 Harris Fire. Most of this route segment follows the existing 69 kV line to the west, in remote and rugged terrain just south of the CNF's southern boundary.

MP MRD-22 to MRD-36.3 (see Figure E.4.1-1d). At MP MRD-22, the route would pass the Barrett Substation heading north and enter the CNF. This route would diverge from the SDG&E Route D (the existing Barrett-Descanso 69 kV corridor) five miles north of the substation, passing east of residences through the Japatul Valley. This segment would include the Modified Route D Substation at MP MRD-34.

The Modified Route D Alternative would add 14 miles to the length of the Interstate 8 Alternative. However, even with this additional length, the Interstate 8 Alternative with the Modified Route D segment would be 25 miles shorter than the portion of the Proposed Project it would replace.

The Modified Route D Alternative could also be used to connect with the Proposed Project route by remaining at 500 kV (no substation would be constructed), crossing Interstate 8 to the north and connecting with the Route D Alternative. The route would then continue north through the Boulder Creek area to the Central South Substation Alternative.

<u>E.4.1.2</u> Modified Route D Substation

As shown in Figure E.4.1-2, the Modified Route D Alternative Substation would be located on private land west of Japatul Valley Road. Overall, it would be the same size (about 40 acres) as the proposed Central East Substation, and it would accommodate four potential future 230 kV circuits exiting the substation when demand growth justifies the need for additional lines. It would also accommodate a future 500 kV circuit.

At the Modified Route D Alternative Substation, the 500 kV line would convert to 230 kV. The 230 kV line would exit the substation overhead, then continue north into the CNF, joining the Interstate 8 Alternative where it transitions to underground at the east end of Alpine Boulevard.

During preparation of the Draft EIR/EIS, another site was considered for the Modified Route D Alternative Substation. A large parcel owned by the City of San Diego for watershed protection was identified as having good transmission and construction access, and relatively flat topography. The parcel is located about six miles south of the substation that is illustrated in Figure E.4.1-2. This southern site was rejected because the City was not willing to allow the land to be taken from its watershed protection purpose.

E.4.1.3 Modified Route D Alternative Route Options

Star Valley Option

As an option to reduce the length of underground construction in Alpine Boulevard and to avoid cultural resources of concern, the Star Valley Option would exit the Modified Route D Alternative Substation to the west-northwest. This option would be an overhead double-circuit 230 kV transmission line, heading west and northwest for 2.2 miles, then north for approximately 0.3 miles to meet Star Valley Road, 0.7 miles east of I-8 Exit 33 for Willows Road. On the southwest side of the bend in Star Valley Road, the route would transition underground and continue north to Alpine Boulevard. This option would join the Interstate 8 Alternative at Alpine Boulevard. This option is illustrated in Figure E.4.1-3.

Star Valley Option Revision

This reroute was suggested by SDG&E in its comments on the Draft EIR/EIS in an effort to reduce visual impacts to residences. The impacts of the revision were included in the Recirculated Draft EIR/Supplemental Draft EIS because it would affect new private landowners. The 230 kV line exiting the Modified Route D Substation Alternative was modified to accommodate future transmission expansion and to be located further from residences. The reroute would extend in nearly a straight line between the Modified Route D Substation Alternative to a point where the Star Valley Option turns due north. It would replace with a straight alignment a portion of the Star Valley Option that has two dog legs in its alignment. The reroute would exit the Modified Route D Substation and travel west to the south side of the original route for 0.75 miles. Although in a straight line, because of a dogleg in the option, the reroute would fall to the north of the option alignment for one structure. The revised route would cross to the south of the original option at MP SVO-0.9. The reroute would then continue northwest for another 1.3 additional miles before rejoining the Star Valley Option at MP SVO-2.3.

This reroute is shown on revised Figure E.4.1-1d of the Final EIR/EIS and Figure 3-13 of the RDEIR/SDEIS. Impact analysis for this reroute is presented in Section 3.3.8 of the RDEIR/SDEIS.

Other Modified Route D Alternative Transmission Line Reroutes

In comments on the Draft EIR/EIS, SDG&E requested the following mitigation reroutes be considered. These reroutes are shown on revised Figure E.4.1-1b, E.4.1-1c, and E.4.1-1d of the Final EIR/EIS and Figure 3-10, Figure 3-11, and Figure 3-12 of the RDEIR/SDEIS. Impact analysis for these reroutes is presented in Section 3.3.5, 3.3.6, and 3.3.7 of the RDEIR/SDEIS.

Cameron Reroute. This reroute was suggested by SDG&E to reduce impacts to properties and avoid CNF back country non-motorized land use zone. The reroute would diverge from the Modified Route D Alternative just west of Buckman Springs Road. The reroute would head northwest for 0.6 miles converging again with the original alternative route near MP MRD-9.2. The reroute would again diverge from the Modified Route D Alternative at MP MRD-9.6, just west of Big Potrero Truck Trail. The rerouted line would be located a maximum of approximately 150 feet southeast of its original location for 0.3 miles in order that the line does not cross a corner of a CNF land use zone that does not allow transmission lines, and it would remain entirely on private land.

Pacific Crest Trail (PCT) Route Options. The original Modified Route D Alternative, also called PCT Reroute Option A below, has been identified in this Final EIR/EIS as part of the Final Environmentally Superior Southern Route Alternative. PCT Reroute Option B was described and analyzed in the RDEIR/SDEIS because it was suggested by SDG&E as a route that could reduce impacts of the line crossing the PCT, but it has since been eliminated from consideration. Finally, PCT Reroute Option C/D, which is preferred by the USFS, has been analyzed in the Final EIR/EIS.



The three options are illustrated in the map above and described as follows:

- PCT Reroute Option A (original Modified Route D Alternative route). PCT Reroute Option A is the same as the original Modified Route D Alternative route that was analyzed in the Draft EIR/EIS. The route would be located on BLM land just south of the CNF boundary between MP MRD-11.7 and MP MRD-14. The route would follow the existing 69 kV transmission corridor, and would maximize use of existing access roads. Both the 69 kV and 500 kV lines would cross the PCT three times within a space of about 0.25 mile.
- PCT Reroute Option B (PCT Reroute from the RDEIR/SDEIS). This reroute, which was included in the RDEIR/SDEIS, was suggested by SDG&E, with input from the USFS, CPUC and BLM, to minimize impacts to its crossing of the Pacific Crest Trail; however, due to the development of PCT Reroute Option C/D, it has been eliminated from consideration and deleted from the text of the RDEIR/SDEIS. The reroute would diverge from the Modified Route D Alternative at MP MRD-11.7. The reroute would head southwest for 0.45 miles where it would cross the PCT and then would continue for another 0.15 miles before it would turn west. The route would travel west and west-northwest for approximately two miles, rejoining the original Modified Route D Alternative at MP MRD-14. The reroute would also include construction of a new access road on the BLM lands to support construction and maintenance of the transmission line and towers.
- PCT Reroute Option C/D. PCT Reroute Option C/D is a further revision by SDG&E, USFS, CPUC and BLM that replaces PCT Reroute Option B. PCT Reroute Option C/D would create a new transmission line right-of-way and feasible the towers would be constructed by helicopter (thus minimizing the need for access roads to the extent feasible). With this reroute, PCT users would cross under the 69 kV line, then cross below the 500 kV line only once farther to the southwest. This option would begin at MP MRD-11.0 and would travel southwest for approximately 1.7 miles before turning west-northwest for approximately 1.7 miles and rejoining the Modified Route D Alternative at MP MRD-14.

Similar to the PCT Option B, the PCT Option C/D would move a segment of the Modified Route D Alternative (PCT Reroute Option A) from its original location on BLM land in the Hauser area (adjacent to the SDG&E 69 kV transmission line and just south of the border of the Cleveland National Forest) further south onto a gifted parcel of BLM land that has been in federal ownership since it was donated to the BLM in 2005. The lands were donated to the BLM for wildlife habitat conservation and to support habitat linkages between Baja, Mexico and southern California. BLM accepted these lands under a donation agreement. The agreement specifically states that "BLM shall not construct roads, structures, and other improvements on the properties, except to the extent minimally necessary and consistent with the restoration and protection of the natural resources."

Western Modified Route D Alternative Reroute. This reroute was suggested by SDG&E after consultation with the U.S. Forest Service, CPUC, and BLM to minimize impacts to properties. The portion of the reroute around the Modified Route D Alternative Substation has been modified to fit updated substation civil and electrical engineering and to provide for increased separation between the incoming 500kV line and the outgoing 230kV line to accommodate future transmission expansion. The Western MRDA Reroute would parallel the Modified Route D Alternative, being alternately east or west of the alternative at various locations.

It would first diverge from the north side of Modified Route D Alternative at MP MRD-18.5, heading northwest for 0.4 miles, then west for 2.2 miles, and north for 1.5 miles before rejoining the alternative just north of MP MRD-23. The reroute would be separated from the Modified Route D Alternative by a maximum of 0.3 miles. At MP MRD-23.8 the reroute would jog west of the original alternative for two structures then return to the original alternative alignment. Beginning at MP MRD-25.7, it would again jog west of the original route for 2.7 miles and rejoin the alternative at MP MRD-28.5. From that point to MP MRD-31, the reroute and the alternative would be in close proximity. At MP MRD-31, the reroute would be located east of the original alternative until it would cross to its west and continue 0.2 miles into the alternative substation. Impact analysis for this reroute is presented in RDEIR/SDEIS Section 3.

<u>E.4.1.4</u> Future Transmission System Expansion

For the Proposed Project and route alternatives along the Proposed Project route, Section B.2.7 identifies Future Transmission System Expansion routes for both 230 kV and 500 kV future transmission lines. These routes are identified, and impacts are analyzed in Section D of this EIR/EIS, because SDG&E has indicated that transmission system expansion is foreseeable, possibly within the next 10 years. For the SWPL alternatives, 500 kV and 230 kV expansions would also be possible. The potential expansion routes for the Route D Alternative are described in the following paragraphs.

230 and 500 kV Future Transmission System Expansion

The Modified Route D Alternative would begin at approximately Interstate 8 MP-47 and would head southwest then northward until it reached the Interstate 8 Alternative at approximately MP I8-71. A substation could be built to convert the 500 kV line to 230 kV at approximately MD-34, the Modified Route D Substation Alternative. The double-circuit 230 kV line would exit the substation overhead, then continue north into the CNF, joining the Interstate 8 Alternative at approximately MP I8-71 where it transitions to underground at the east end of Alpine Boulevard. The Modified Route D Substation would accommodate up to six 230 kV circuits and a 500 kV circuit. Only two 230 kV circuits are proposed at this time, but construction of additional 230 kV circuits and a 500 kV circuit out of the Modified Route D Substation may be required in the future. There are three routes that are most likely for these future lines; each is addressed below. Figure E.1.1-6 illustrates the potential routes of the future transmission lines.

• Two additional 230 kV circuits could be installed underground within Alpine Boulevard, with appropriate compact duct banks and engineering to avoid, or possibly relocate, existing utilities.

This route would follow the Interstate 8 Alternative route from the Interstate 8 Alternative Substation until MP I8-70.8 where it would transition underground until MP I8-79 where it would transition overhead again. The future transmission line route would continue to follow the Interstate 8 Alternative's overhead 230 kV route to the point where it meets the Proposed Project at MP 131. The future transmission route would then join the proposed route corridor to the west, continuing past the Sycamore Canyon Substation to the Chicarita Substation. It could then follow the Proposed Project's 230 kV Future Transmission Expansion route (see description in Section B.2.7) from Chicarita to the Escondido Substation shown in Figure B-12a.

- Additional 230 and/or 500 kV circuits could follow the Route D Alternative corridor (see description in Section E.3.1) to the north of Descanso, after following the Interstate 8 Alternative 230 kV route from the Interstate 8 Substation to MP I8-70.3. The Route D corridor would connect with the Proposed Project corridor at MP 114.5, and could then follow either: (1) the Proposed Project southwest to the Chicarita Substation and then follow the Proposed Project's 230 kV Future Transmission Expansion route (see description in Section B.2.7) from Chicarita to the Escondido Substation; or (2) the Proposed Project northeast to the Proposed Central East Substation and then follow the Proposed Project's 500 kV Future Transmission Expansion route shown in Figure B-12b (see description in Section B.2.7).
- The future 230 and/or 500 kV lines could follow the Modified Route D Alternative corridor (within the 368 Corridor identified by the Department of Energy's Draft West-wide Corridor Programmatic EIS) south for 8 miles to MP MD-26 (See Section E.4.1 for a description of this route). At MP MD-26, new 230 and/or 500 kV circuits would turn west and connect with the northernmost segment of the West of Forest Alternative route as described in Section E.1.1. This route would meet up with the Interstate 8 Alternative at approximately MP I8-79 and would follow the Interstate 8 Alternative's overhead 230 kV route to the point where it meets the Proposed Project at MP 131 (for a description of the Interstate 8 transmission corridor see Section E.1.1). The future transmission route would then join the proposed route corridor to the west, continuing past the Sycamore Canyon Substation to the Chicarita Substation. It could then follow the Proposed Project's 230 kV Future Transmission Expansion System (see description in Section B.2.7) from Chicarita to the Escondido Substation

Figure E.4.1-1a. Modified Route D Alternative – Overview and Draft 368 Corridor **CLICK HERE TO VIEW**

Figure E.4.1-1b. Modified Route D Alternative (MPs MRD-0 to 12) CLICK HERE TO VIEW

Figure E.4.1-1c. Modified Route D Alternative (MPs MRD-12 to 22) CLICK HERE TO VIEW

Figure E.4.1-1d. Modified Route D Alternative (MPs 22-36.3) CLICK HERE TO VIEW

Figure E.4.1-2. Modified Route D Alternative Substation **CLICK HERE TO VIEW**

Figure E.4.1-3. Modified Route D Alternative: Star Valley Route Option and Revision **CLICK HERE TO VIEW**

Figure E.4.1-4. Modified Route D Alternative: PCT Option C/D CLICK HERE TO VIEW