ATTACHMENT A

Total Land Disturbance for Proposed Project with Revised Components Compared to 2013 RTRP EIR Table 1

Project Feature	Site Quantity		Work Area Disturbance Calculation (L x W in feet)		Permanent Disturbance Calculation (L x W in feet)		Work Area Disturbance (acres)		Temporary Disturbance (acres)		Permanent Disturbance (acres)	
	2013 EIR	Currently Proposed	2013 EIR	Currently Proposed	2013 EIR	Currently Proposed	2013 EIR	Currently Proposed	2013 EIR	Currently Proposed	2013 EIR	Currently Proposed
Overhead 230-kV Transmission Lines												
Guard Structures	16	14	150 x 100	100 x 50			5.5	1.6	5.5	1.6	0	0
Construct New LST	16	12	200 x 200	200 x 200	84 x 84 ¹	95, x <u>.951</u>	14.7	11.0	11.5	8.6	3.2	2.4
Construct New TSP	59	47	200 x 100	200 x 100	35-ft diameter ²	60-ft diameter ²	27.1	21.6	23.5	18.8	3.5	2.8
Construct New Riser Pole		4	200 x 100	200 x 100		<u>60</u> -ft ²		3.7		3.4		0.3
Modify Existing LST	1	1	200 x 200	200 x 200		4	0.7	0.9	0.7	0.9	0	0
230-kV Conductor & optical ground wire (OPGW) Stringing Setup Area - Puller ⁴	17	11	300 x 100	300 x 100		-	11.7	7.6	11.7	7.6	0	0
230-kV Conductor & OPGW Stringing Setup Area - Tensioner ⁴	17	11	400 x 100	400 x 100			15.6	10.1	15.6	10.1	0	0
230-kV Conductor Field Splice Area ⁵	2	2	50 x 50	50 x 50			0.1	0.1	0.1	0.1	0	0
New Roads (Downline, Access, and Spur)	7.5 miles	4.1 miles	Linear <u>feet</u> x 18 ⁶	Linear <u>feet</u> x 18 ⁶	Linear <u>feet</u> x 18 ⁶	Linear <u>feet</u> x 18 ⁶	16.4	8.9	0	0	16.4	8.9
Underground 230-kV Transmission Lines												
Vault Installation		32		150 x 100		8 x 5 (14 x 11 <u>at 8</u> <u>locations in</u> <u>soil or grass)</u>		11.0		11.0	<u></u>	<mark>.0.03</mark> 0 + 0.1
Conduit Duct Bank Installation		22,000 feet		Linear <u>feet</u> x 30				15.2		15.2		0
Distribution Lines												
Distribution Pole Removal	<mark>23</mark>	<mark>27</mark>	**30 x 150,	Xx30 x 150	<u>Xx 14</u>	Xx <u>14</u>	Xx <u>2.4</u>	Xx <u>2.8</u>	xx	xx	Xx <u>0.08</u>	Xx <u>0.1</u>
TSP Riser Pole or Distribution Pole Installation	14	11	xx 30 x 150, _	** <u>30 x 150</u>	X* 15 .	Xx 15	Xx <u>1.4</u>	Xx <u>1.1</u>	xx	x <u>x</u> 8	Xx <u>0.06</u>	Xx <u> 0.04</u> ⁸
Vault Installation	7	9	xx 30 x 150	<mark>xx</mark> 30 x 150	<u> </u>	<u> </u>	Xx <u>0.7</u>	Xx <u>0.9</u>	xx	xx	Xx <u>0.003</u>	Xx <u>0.003</u>
Conduit Duct Bank Installation	4,000 feet	5,850 feet	Linear <u>feet</u> x 30 or 32	Linear <u>feet</u> x 30	Xx Q _e	<mark>X*_0</mark>	2.7	4.5	xx	x <u>x</u>	0	0

Deleted: 84 Deleted: 841 Deleted: 35 Deleted: 35 Formatted: Superscript

> **Commented [RV1]:** This 8x5 dimension is of the concrete lids at the surface above each vault. But in roads this wouldn't be considered a permanent disturbance since the road use doesn't change. Formatted: Strikethrough

Deleted: xx

Formatted: Strikethrough

ATTACHMENT A

Project Feature	Site Quantity		Work Area Disturbance Calculation (L x W in feet)		Permanent Disturbance Calculation (L x W in feet)		Work Area Disturbance (acres)		Temporary Disturbance (acres)		Permanent Disturbance (acres)	
Telecommunication Fiber Optic Cables												
Vault Installation	6	25-22 (6 from 2013 EIR +16 for Hybrid Route)	6 x 6	<u>6 x 6 100x50</u> 7		8 x 5 4x4 (just the lid)	<u>0.13</u>	0.13 2.5 ⁷	0.13	<u>0.13_2.5</u> 7	<u>0</u>	0 (Since no change to ground surface use)
Conduit Duct Bank Installation	3,900 feet	17,700 feet (OK)	Linear <u>feet</u> x 1.5	Linear <u>feet</u> x <u>1.5</u> 30			0.005	0.005_12.2 ⁷	0.005	0.005 _12.2 ⁷	0	0
Fiber Optic Cable Pulling Site	6	6	40 x 60	40 x 60			0.33	0.33	0.33	0.33	0	0
Marshalling Yards												
Yard-1 - Material and Equipment Marshalling Yard ⁹	1 (15 acres)	1 (15 acres)										
Yard-2 - Material and Equipment Marshalling Yard ⁹	1 (4 acres)	1 (5.5 acres)										
Sum of Estimated Disturbance Acreage ¹⁰							xx	xx	xx	xx	xx	xx

Notes:

- Assumes permanent disturbance is comprised of the 45-foot-wide by 45-foot-long footprint for each LST and clearance of vegetation within 25 feet of the tower footprint inside the ROW (approximately 0.2 acre per LST). As each tower's actual permanent footprint varies with tower height and strength level, these values will adjust with final engineering.
- Assumes permanent disturbance is comprised of the 10-foot diameter footprint for each TSP and clearance of vegetation within 25 feet of the TSP inside the ROW (approximately 0.06 acre per TSP). As each TSP's actual permanent footprint varies with TSP height and strength level, these values will adjust with final engineering.
- A riser pole is assumed to have the same permanent disturbance as a TSP.
- 4 This structure has pre-existing permanently disturbed area for ongoing operations and maintenance access by SCE
- ⁴ Based on 9,000 feet conductor reel lengths, number of circuits, and route design.
- ⁵ Includes anchoring and dead-end hardware and/or equipment needed to temporarily secure conductor wire to the correct tension.
- ⁶ Based on length of road in miles x road width of 14 feet with 2 feet of shoulder on each side of road.
- ⁷ The telecommunications fiber optic cables would be installed at the same time as and within the same duct banks the underground 230-kV transmission lines and the distribution lines. As such, the work areas and associated work area and temporary disturbance would not increase.
- ⁸ TSP riser poles for distribution line locations 7 and 8 would be placed in locations where existing distribution poles are removed; therefore, there would be no new permanent impact areas. Temporary impact areas for riser pole installation are accounted for in the pole removal disturbance acreage.
- $^{\rm 9}$ $\,$ Material and Equipment Marshalling Yards to be located in previously disturbed areas.
- ¹⁰ The disturbed acreage calculations are estimates based upon SCE's preferred area of use for the described project feature, the width of the existing ROW, or the width of the proposed ROW; they are subject to revision based upon final engineering and review of the project by SCE's Construction Manager and/or contractor awarded project.

Footing Volume and Area Calculations:

LST depth +/- 60 ft. deep, 4-ft. diameter, qty 4 per LST: earth removed for footing = +/- 28 cu. yds. x 4 = 112 cu. yds.; surface area = 12.57 sq. ft. x 4 = 50.28 sq. ft.

TSP depth +/- 60 ft. deep, 10-ft. diameter, qty 1 per TSP: earth removed for footing = +/- 175 cu. yds.; surface area = 78.54 sq. ft.

Formatted: Strikethrough

Formatted: Strikethrough

Formatted: Superscript

Formatted: Strikethrough

Formatted: Strikethrough

Formatted: Strikethrough

Deleted: xx

Formatted: Strikethrough

Formatted: Strikethrough

Formatted: Strikethrough

Formatted: Strikethrough

Deleted: P
Deleted: 34
Deleted: -long
Deleted: 34
Deleted: P
Deleted: ¶