Southern California Edison

FAA Filing Determination

TLRR Line Project: Gorman-Kern River

Segments 1, 2, 3, 4, and 5

December 27, 2021

Revision 2

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December 27, 2021

Prepared By:
Arcadis U.S., Inc.
445 South Figueroa Street, Suite 3650
Los Angeles
California 90071
Phone: 661 510 4003

Prepared For:
Jonathan Samson, PE
Southern California Edison
2 Innovation Way
Pomona, CA 91768

Our Ref:
30002905

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[Signature 1 Name]
[Title]

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[Signature 2 Name]
[Title]

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[Signature 3 Name]
[Title]

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Executive Summary

Arcadis reviewed the proposed engineering designs for the Gorman-Kern River Segments 1, 2, 3, 4, and 5 transmission line project to determine which structures and conductor spans (catenaries) will require filing with the FAA for obstruction evaluations. For the purposes of the FAA filing requirements, there are two basic areas: “Within the Airport Vicinity” (those structures and catenaries within 20,000 feet from the edge of a runway) and “Outside the Airport Vicinity’ (those structures and catenaries beyond 20,000 feet from the edge of a runway).

For the Gorman-Kern River Segments 1, 2, 3, 4, and 5 there are no structures outside the airport vicinity that are over 200 feet in height; however, there are cable catenaries with height that exceed the 200 feet limit which would prompt FAA filing. There are no structures within an airport vicinity that would prompt a FAA filing.

1 Geographic Segments

The construction activities proposed by the Gorman-Kern River project design is described in detail for each geographic segment, including the planned structure and conductor removals and installations and approximate line lengths values. For visual reference Figure 1 depicts the location of each segment along the project alignment. The project has been divided into the following phase arrangement segments in the PEA report submittal.

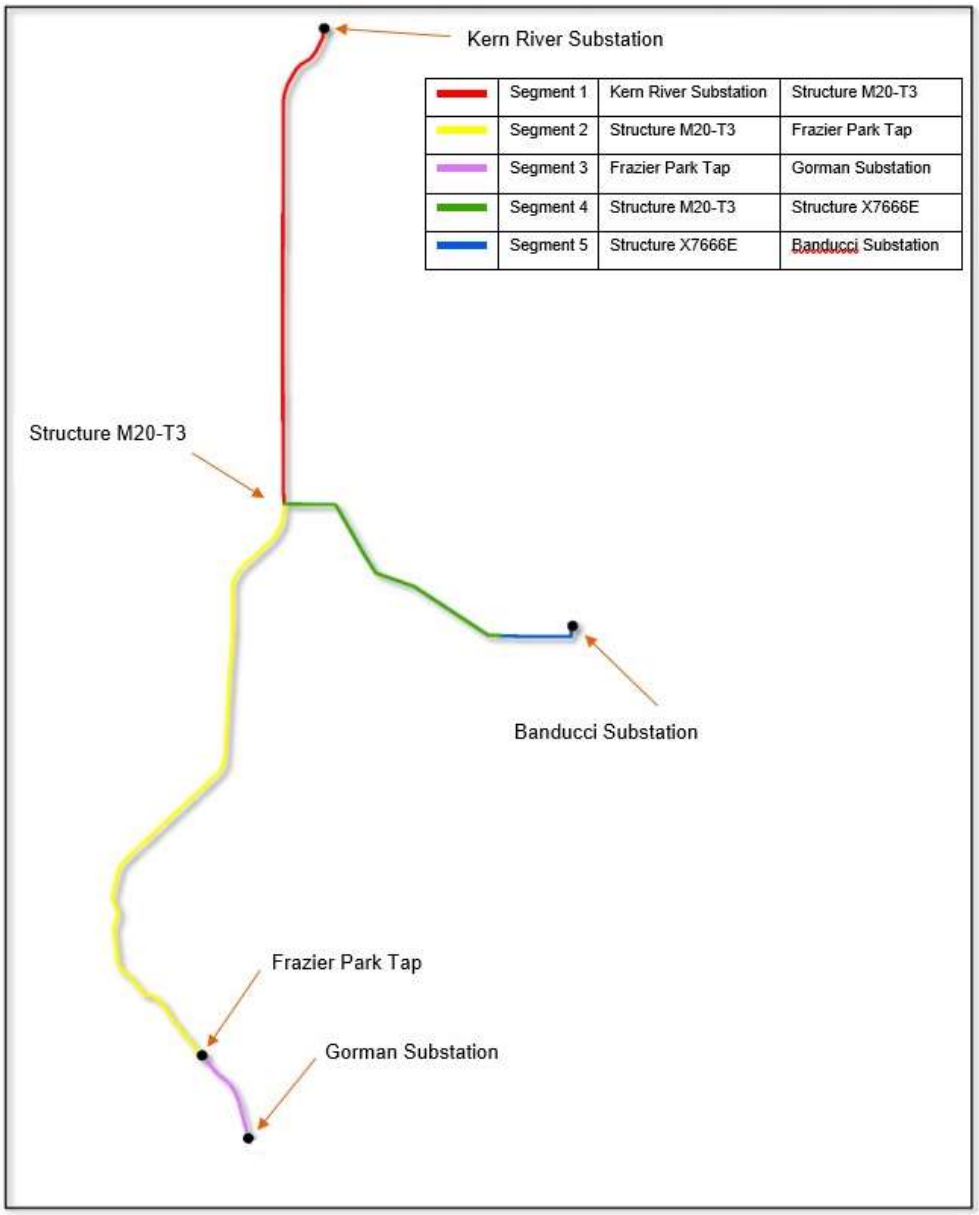

Figure 1: Gorman-Kern River Proposed Line Route Segments

2 Regulatory Framework

Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace, Section 9, Construction, or alteration requiring notice, requires that any type of construction or alteration of a structure that may affect the National Airspace System (NAS) must be noticed to the Federal Aviation Administration (FAA) by completing the Notice of Proposed Construction or Alteration form (FAA Form 7460-1). Section 9 also details the dimensions and locations of structures that require filing. Federal Aviation Administration Advisory Circular 70/7460-1L sets forth standards for marking and lighting obstructions that have been deemed to be a hazard to navigable airspace.

3 Filing Analysis Methodology

Arcadis performed a GIS-based analysis of each of the proposed structures and catenaries included in the Gorman-Kern River Segments 1, 2, 3, 4, and 5. Each structure and catenary were evaluated using the criteria in 14 CFR 77.9 to determine if the structure or catenary:

(a) Outside the Airport Vicinity: Is more than 200 feet above ground level (AGL) and beyond 20,000 feet from an airport runway at its location.

--or--

(b) Within the Airport Vicinity: Exceeds an imaginary surface extending outward and upward at any of the following slopes:

(1) 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 3,200 feet in actual length, excluding heliports.

(2) 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 3,200 feet in actual length, excluding heliports.

(3) 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.

There are no airports and runways identified from FAA data to be in the vicinity of the Gorman-Kern River project.

4 Results & Analysis of Structures and Catenaries

4.1 Gorman-Kern River: Segments 1, 2, 3, 4, and 5 Project

There are no structures above 200 feet in height on the Gorman-Kern River line; however, there are catenaries of some spans where cables heights exceed 200 feet above ground surface. These are listed in table 1 below. There are no structures within airport vicinities that need analysis. These structures and spans are listed in Table 1 and shown on the figure in Attachment A.

Table 1: Location of Structures and Spans Requiring FAA Filing

KERN Segment	Tower/Span ID	Latitude (Deg-Min-Sec)	Longitude (Deg-Min-Sec)	Ground Elevation (AMSL)	Structure/ Wire Height (AGL)	Total Height (AMSL)	Height Change/ New Pole/Wire
1	M0-T1 to M0-T2	35° 27' 19.5876" N	118° 46' 50.2464" W	974.797	260.644	1235.441	-3.155
1	M0-T1	35° 27' 34.242" N	118° 46' 47.381" W	937.565	100.63	1038.195	0
1	M0-T2	35° 27' 16.749" N	118° 46' 50.803" W	1185.776	115.61	1301.386	0
1	M0-T2 to M1-T1	35° 27' 7.5996" N	118° 46' 55.8264" W	910.419	327.319	1237.738	0.755
1	M0-T2	35° 27' 16.749" N	118° 46' 50.803" W	1185.776	115.61	1301.386	0
1	M1-T1	35° 26' 47.144" N	118° 47' 7.061" W	1355.712	101.9	1457.612	0
1	M1-T2 to M1-T3	35° 26' 32.5176" N	118° 47' 19.9932" W	1483.384	217.331	1700.715	-0.518
1	M1-T2	35° 26' 35.779" N	118° 47' 17.113" W	1601.582	115.98	1717.562	0
1	M1-T3	35° 26' 31.046" N	118° 47' 21.287" W	1574.503	124.91	1699.413	0
1	M1-T3 to M1-T4	35° 26' 25.044" N	118° 47' 32.604" W	949.97	327.162	1277.132	-0.751
1	M1-T3	35° 26' 31.046" N	118° 47' 21.287" W	1574.503	124.91	1699.413	0
1	M1-T4	35° 26' 16.208" N	118° 47' 49.243" W	800.264	103.03	903.294	0
1	M3-T5 to M3-T6	35° 24' 47.4084" N	118° 48' 29.3544" W	778.543	241.636	1020.179	56.303
1	M3-T5	35° 24' 51.749" N	118° 48' 29.383" W	933.804	75	1008.804	1.3
1	M3-T6	35° 24' 37.817" N	118° 48' 29.289" W	1041.36	65	1106.36	27.2
4	2145311E_2145312E to 2145308E_2145309E_2145310E	35° 10' 5.29" N	118° 45' 56.51" W	1427.537	255.721	1683.258	46.932
4	2145311E_2145312E	35° 10' 12.248" N	118° 46' 1.275" W	1488.227	52	1540.227	-0.5
4	2145308E_2145309E_2145310E	35° 9' 57.306" N	118° 45' 51.124" W	1871.581	60	1931.581	10.6

KERN Segment	Tower/Span ID	Latitude (Deg-Min-Sec)	Longitude (Deg-Min-Sec)	Ground Elevation (AMSL)	Structure/ Wire Height (AGL)	Total Height (AMSL)	Height Change/ New Pole/Wire
4	2145305E_2145306E_2145307E to 2145303E_2145304E	35° 9' 45.67" N	118° 45' 43.15" W	1612.369	267.396	1879.765	48.616
4	2145305E_2145306E_2145307E	35° 9' 56.275" N	118° 45' 50.381" W	1872.664	60	1932.664	10
4	2145303E_2145304E	35° 9' 41.498" N	118° 45' 40.307" W	1838.377	60	1898.377	7
4	2145303E_2145304E to 2145301E_2145302E	35° 9' 35.2" N	118° 45' 36.01" W	1692.241	323.358	2015.599	39.422
4	2145303E_2145304E	35° 9' 41.498" N	118° 45' 40.307" W	1838.377	60	1898.377	7
4	2145301E_2145302E	35° 9' 30.062" N	118° 45' 32.516" W	2085.723	65	2150.723	14.9
4	2145301E_2145302E to M3-T2	35° 9' 25.15" N	118° 45' 29.17" W	1867.664	313.669	2181.333	51.388
4	2145301E_2145302E	35° 9' 30.062" N	118° 45' 32.516" W	2085.723	65	2150.723	14.9
4	M3-T2	35° 9' 19.173" N	118° 45' 25.077" W	2198.873	74.5	2273.373	21.5
4	M3-T3 to M3-T4	35° 9' 7.86" N	118° 45' 17.32" W	1979.129	327.161	2306.29	1.312
4	M3-T3	35° 9' 14.684" N	118° 45' 22.020" W	2196.836	50	2246.836	-2.8
4	M3-T4	35° 8' 57.595" N	118° 45' 10.356" W	2547.261	106	2653.261	40.5
4	M4-T3 to M4-T4	35° 8' 28.04" N	118° 44' 49.34" W	2633.289	325.859	2959.148	42.769
4	M4-T3	35° 8' 34.777" N	118° 44' 54.403" W	2880.914	70	2950.914	17
4	M4-T4	35° 8' 19.381" N	118° 44' 43.037" W	3107.894	65.5	3173.394	10.8
4	M4-T4 to M4-T5	35° 8' 15.64" N	118° 44' 40.19" W	2947.919	206.843	3154.762	24.611
4	M4-T4	35° 8' 19.381" N	118° 44' 43.037" W	3107.894	65.5	3173.394	10.8

KERN Segment	Tower/Span ID	Latitude (Deg-Min-Sec)	Longitude (Deg-Min-Sec)	Ground Elevation (AMSL)	Structure/ Wire Height (AGL)	Total Height (AMSL)	Height Change/ New Pole/Wire
4	M4-T5	35° 8' 9.320" N	118° 44' 35.608" W	3146.611	74.5	3221.111	13.8
4	M6-T1 to M6-T2	35° 7' 40.36" N	118° 43' 35.06" W	2906.242	230.635	3136.877	133.087
4	M6-T1	35° 7' 42.048" N	118° 43' 40.958" W	3047.556	120	3167.556	62
4	M6-T2	35° 7' 37.115" N	118° 43' 23.878" W	3139.199	79	3218.199	12.1

Arcadis U.S., Inc.
445 South Figueroa Street, Suite 3650
Los Angeles
California 90071
Phone: 661 510 4003

www.arcadis.com