

**Magnetic Field Analysis for Existing Conditions Along the Route of SDG&E's
Proposed Sycamore to Peñasquitos 230 kV Transmission Line**

In response to CPUC Data Request #3, Question #11, SDG&E has calculated the magnetic fields related to the existing power and transmission lines along the route of the proposed Sycamore to Peñasquitos 230 kV transmission line project. The amperages used for the "existing" calculation model were based on the Peak System Load Forecast case that yielded the amperages used in calculating the "proposed" field values identified in SDG&E's Magnetic Field Management Plan filed with the Application for the proposed Project. Since load cases are based on system-wide conditions, amperages for any single power or transmission line used for the "existing" calculations may differ substantially from those used for "proposed" calculations.

The analysis for the "existing" model looked only at Segments A, C and D, since there are no existing power or transmission lines in the proposed underground Segment B. Segment A has two parts, one for power line TL 13811 and one for TL 13820. The results of the analysis are shown in the table below, which is modified from Attachment A of the draft EIR Project Description. All values are presented in milligauss (mG) as calculated at the edge of the ROW.

Magnetic field calculations, whether for "existing" or "proposed" conditions, are based not on field measurement, but on modeling, which does not predict actual field levels. The CPUC has acknowledged that the purpose of magnetic field modeling is "to measure the relative differences between alternative mitigation measures," and that "modeling indicates relative differences in magnetic field reductions between different transmission line construction methods, but does not measure actual environmental magnetic fields."¹

Table 2.7-1: Existing and Proposed EMF by Transmission Line Segment			
Line Segment	Existing (mG)	Proposed (mG)	Change (mG)
Segment A East – TL 13811	13.0	46.5	
Segment A West – TL 13811	16.7	48.9	
Segment A East – TL 13820	17.1	46.5	
Segment A West – TL 13820	29.9	48.9	
Segment B North	0.0	0.1	
Segment B South	0.0	0.3	
Segment C East	4.5	91.0	
Segment C West	18.5	122.3	
Segment D North	21.2	9.5	
Segment D South	2.6	135.9	

¹ CPUC Decision D.06-01-042, p.11

