Southern California Edison
Valley-Ivyglen 115 kV Subtransmission Line Project & Fogarty Substation Project
A.07-01-031, A.07-04-028

DATA REQUEST SET Valley-Ivyglen, Fogarty Energy Division-Attachment A

To: ENERGY DIVISION
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Question AQ-1:

Provide a quantitative analysis of greenhouse gas emissions. The analysis should cover relevant pollutants including, but not limited to sulfur hexaflouride

Response to Question AQ-1:

Greenhouse gases (GHG) from construction activities are expected to be emitted from burning of fuels in the on-site equipment and vehicles. The most common combustion related GHG pollutants are carbon dioxide (CO2), nitrous oxide (N2O) and methane (CH4). Water is also a common GHG compound that is emitted from combustion but is not generally listed as a man-made emission. The following table lists the estimated GHG emissions from the construction activities:

Project Element	Total Activity Emissions (tons)	Total Activity Emissions (tons)	Total Activity Emissions (tons)
	CO2	N2O (as CO2)	CH4 (as CO2)
Fogarty Substation			
Site Exhaust	393.6	7.9	0.4
On-Road	91.7	1.8	0.1
Subtotal	485.3	9.7	0.5
Ivyglen-Valley Modifications			
Site Exhaust	10.5	0.2	0.0
On-Road	10.1	0.2	0.0
Subtotal	20.6	0.4	0.0
115 kV Transmission Line			
Site Exhaust	2084.8	41.7	2.1
On-Road	313.6	6.3	0.3
Subtotal	2398.4	48.0	2.4
Grand Total	2904.2	58.1	2.9

Sulfur hexafluoride (SF6) emissions can be expected over a long period of time as a result of unintended leakage from transformers, breakers and other equipment associated with the project. SF6 is an insulating gas within the equipment that can leak out as a result of corrosion or other failure.

The new equipment to be installed that may contain SF6 are the circuit breakers. At this time we anticipate installing 5 new circuit breakers, each containing approximately 60 lbs of SF6 (total 300 lbs). The leakage rate for the new equipment is estimated to be less than 1 percent per year. Therefore, the estimated SF6 emissions from the new equipment is less than 3 lbs per year.