

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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Title:
Dated: 10/01/2007

Question AQ-2:

The cumulative analysis for air quality is overly general and should include a more in-depth discussion. Since the area exceeds standards for several air quality criteria it can be assumed that any additional contribution could be significant requiring best management practices to mitigate project air quality impacts. Please provide best management practices to be implemented during construction.

Response to Question AQ-2:

Air Quality Impact Analysis

Introduction

The cumulative analysis for Air Quality was revised and expanded to provide additional details. This analysis and discussion addresses the items listed below.

- Summary
- Air Quality Calculations
- Findings and Comparison of Results
- Best Management Practices Discussion
- General Assumptions

Summary

Revised analysis indicates that construction activities exceed two South Coast Air Quality Management District (SCAQMD) standards. In addition, these emissions contribute to cumulatively considerable impacts within a non-attainment basin. Applying Best Management Practices (BMPs) would minimize or reduce construction impacts to an acceptable level.

Air Quality Calculations

Air quality calculations presented in the original PEAs were modified in order to facilitate comparison of emissions associated with the proposed Valley-Ivyglen 115 kV Subtransmission Line and Fogarty Substation project components. Revised calculations employ consistent methodologies and assumptions. Worst-case construction emissions estimates for the Consolidated Valley-Ivyglen 115 kV Subtransmission Line and Fogarty Substation Project are summarized below in Table 1.

Table 1. Revised Air Quality Construction Emissions for Consolidated Valley-Ivyglen 115 kV Subtransmission Line and Fogarty Substation Project

Criteria Pollutant	Project Maximum Daily Emissions (lbs/day)	
	Fogarty Substation	115kV Line Ivyglen & Valley Substation Mods
NOx	70	7514160
VOC	17	10330
PM10	39	1117157
PM2.5	13	27444
SOx	0.1	0.10.00.2
CO	47	5612115

Attachment A provides background information used to generate the estimated emissions presented in Table 1. This information includes assumptions applied to calculations for each criteria pollutant listed.

Findings and Comparison of Results

There are two SCAQMD significance thresholds, generally referred to as Regional and Local Significance Thresholds. Potential impacts associated with construction activities were evaluated by comparing estimated emissions to both of these SCAQMD significance thresholds.

On a worst-case day, emission estimates for the consolidated project exceed the Regional Significance Thresholds for two criteria pollutants: NOx and PM10. Total project worst-case day construction emissions and SCAQMD air quality Regional Significance Thresholds are compared below in Table 2.

Table 2. Summary of Worst-Case Day Construction Air Emissions and SCAQMD Regional Construction Thresholds

Criteria Pollutant	Construction Threshold (lbs/day)	Total Project Emissions (lbs/day)	Construction Emissions Exceed Thresholds?
NOx	100	160	Yes
VOC	75	30	No
PM10	150	157	Yes
PM2.5	55	44	No
SOx	150	0.2	No
CO	550	115	No

Construction impacts are temporary in nature. They would contribute to short-term cumulative impacts. The project would have a minimal contribution to long-term cumulative impacts.

In contrast to Regional Significance Thresholds, Local Significance Thresholds are used to evaluate the construction impacts to nearby homes and other sensitive receptors. SCE evaluated construction emissions relative to Local Significance Thresholds for three project components: Fogarty Substation site, Valley-Ivyglen 115 kV Subtransmission Line route, and minor project-specific modifications at both Valley and Ivyglen Substations. Based on the revised analysis, it is anticipated that construction would not exceed local thresholds. Air quality calculation details are provided in Attachment A.

Best Management Practices

SCE's construction management plans include BMPs to address potential air quality impacts. BMPs are applied, in accordance with SCAQMD rules, to reduce or minimize criteria air emissions associated with construction activities. BMPs to be implemented during construction include, but are not limited, to the measures listed below.

- Use low-sulfur diesel fuel
- Water dirt access roads at least twice per day
- Certify that all construction equipment meets SCAQMD emission standards
- Cease grading activities when wind speeds are excessive

The air quality basin is non-attainment, under both the national and state ambient air standards, for three criteria pollutants (ozone, PM10 and PM2.5). Therefore, project construction emissions would include minor contributions to existing cumulatively considerable air quality impacts. Since construction impacts are short-term and temporary in nature, the project would have minimal contribution to long-term cumulative impacts. Applying BMPs during construction would reduce project contributions to cumulative impacts.

General Assumptions

It is assumed that all major activities associated with the 115kV line construction would occur simultaneously. That is, at different locations along the proposed route, road grading, hole drilling, pole setting, and conductor pulling all occur on the same day. Assumptions used in the air quality analysis are listed below.

- Maximum daily emissions from Fogarty Substation construction, project-related modification at Valley and Ivyglen Substations, plus Valley-Ivyglen 115 kV Subtransmission Line construction all occur on the same day
- Unpaved dirt road trips are 3 miles per day for most equipment using those roads
- Personal vehicle trips are 50 miles per day for most activities
- One personal vehicle per person travel to each work site
- Heavy equipment vehicle trips are 25 miles per day for most activities
- SCAQMD on-road and off-road emission factors used when possible
- SCAQMD CEQA Handbook or USEPA AP42 emission factors used for all other sources
- Spreadsheets are self-documented for emission factor references and assumptions