

CO2e Emissions

Category	CO2	CH4	CO2e	
GWP		1	21 --	
	2019	8401.2	1.2	8426.1
	2020	3624.0	0.5	3634.0

Southern California Edison
ELM Project A.18-05-007

DATA REQUEST SET A1805007-ED-SCE-DEF-002

To: ENERGY DIVISION
Prepared by: Rey Gonzales
Title: Environmental Project Manager
Dated: 08/27/2018

Question 58:

Under 5.3 Air Quality, the CPUC 2008 checklist specifies two items: “Provide supporting calculations / spreadsheets / technical reports that support emission estimates in the PEA.” & “Identify Project Greenhouse Gas (GHG) Emissions” – both of which require itemized quantification of emissions.

Supporting calculations for the emissions estimates remain incomplete. In our June 1, 2018 completeness review letter, we noted that the PEA Appendix F included emission factors. However, the PEA’s information did not include: supporting calculations for the emissions estimates; emission factors from current versions of models; or activity assumptions. SCE’s Response to Question 46 includes updated activity assumptions and emission factors. Supporting calculations appear to still be missing from SCE’s Response to Question 46. The Response to Question 46 says “emissions...were calculated separately, then combined to generate the total Project emissions” without showing the separate calculations or the itemized separate results that must have been combined to arrive at the sum of emissions.

Q58. Please provide the spreadsheets that were used to arrive at the tables in SCE’s Response to Question 46: “ATTACHMENT D: ATTACHMENT D: UPDATED CRITERIA AIR POLLUTANT AND GREENHOUSE GAS EMISSIONS.” To provide complete supporting calculations of emissions estimates, the work leading to itemized quantifications of emissions from separate sources need to be shown, and the sums of emissions from the separate sources that were combined to arrive at the totals need to be shown. This information is necessary for the CPUC to verify each criteria air pollutant and GHG emission rate total in each timespan reported (daily or per year) and in each jurisdiction (California air districts and Nevada).

Response to Question 58:

A comprehensive spreadsheet detailing the calculations used to quantify the anticipated criteria air pollutant (CAP) and greenhouse gas (GHG) emissions is being submitted as ELM_Q#58_AQ Calc Spreadsheet_20180925. During the preparation of this spreadsheet, a minor error was fixed in the input data and the emissions were recalculated. Revised versions of Table 4.3-8: Uncontrolled Construction Emissions and Table 4.3-9: Controlled Construction Emissions from the Proponent’s Environmental Assessment (PEA) have been included below to document the revised emissions. As shown, the uncontrolled CAP emissions will continue to exceed applicable thresholds in California for particulate matter 10 micrometers or less in diameter (PM₁₀) in 2019

and 2020 and particulate matter 2.5 micrometers or less in diameter (PM_{2.5}) in 2019. However, Table 4.3-9: Controlled Construction Emissions from the Proponent’s Environmental Assessment (PEA), displays the PM₁₀ totals in California less than the Applicable Thresholds in 2019 and 2020, and displays the PM_{2.5} in California less than the Applicable Thresholds in 2019. Therefore, air quality emissions will continue to remain Less Than Significant with mitigation.

Table 4.3-8: Uncontrolled Construction Emissions

Pollutant	Uncontrolled Emissions (Tons per Year)					
	ROGs	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
California						
2019	1.9	17.4	16.2	0.6	79.2	9.3
2020	1.0	7.9	8.6	0.5	37.2	4.6
Applicable Threshold	25	25	100	25	15	12
Threshold Exceeded?	No	No	No	No	Yes	Yes
Nevada						
2019	1.1	9.9	9.1	0.5	41.8	5.2
2020	0.3	2.6	2.7	< 0.1	19.1	2.1
Applicable Threshold	100	100	100	100	100	100
Threshold Exceeded?	No	No	No	No	No	No

Notes: ROGs = reactive organic compounds, NO_x = nitrogen oxides, CO = carbon monoxide, SO₂ = sulfur dioxide

Table 4.3-9: Controlled Construction Emissions

Pollutant	Controlled Emissions (Tons per Year)					
	ROGs	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
California						
2019	1.0	6.0	18.5	0.6	14.3	2.4
2020	0.7	3.5	9.7	0.5	7.0	1.4
Applicable Threshold	25	25	100	25	15	12
Threshold Exceeded?	No	No	No	No	No	No
Nevada						
2019	0.7	4.0	10.5	0.5	12.4	2.0
2020	0.2	0.9	2.9	0.0	5.4	0.6
Applicable Threshold	100	100	100	100	100	100
Threshold Exceeded?	No	No	No	No	No	No

In addition, a revised version of Table 4.7-1: Greenhouse Gas Construction Emissions and Table 4.7-3: Total Annual Greenhouse Gas Emissions has been provided to present the anticipated GHG emissions from the construction phase of the project. All remaining GHG emissions will be below applicable thresholds. As a result, these revised conclusions will not change the conclusions from the PEA and will remain Less Than Significant.

Table 4.7-1: Greenhouse Gas Construction Emissions

Category	GHG Emissions (Tons per Year)		
	CO ₂	CH ₄	CO ₂ e
GWP	1	21	N/A
Annual Construction Emissions			
2019	8,401.2	1.2	8,426.1
2020	3,624.0	0.5	3,634.0

Notes: "N/A" = Not Applicable, CO₂ = carbon dioxide, CH₄ = methane, CO₂e = carbon dioxide equivalent

Table 4.7-3: Total Annual Greenhouse Gas Emissions

Source	GHG Emissions (Tons of CO ₂ e per Year)
2019 Construction and Fugitive SF ₆ Emissions	9,171.0
2020 Construction and Fugitive SF ₆ Emissions	4,378.9
Threshold	100,000

Attachment:

ELM_Q#58_AQ Calc Spreadsheet_20180925

Southern California Edison
ELM Project A.18-05-007

DATA REQUEST SET A1805007-ED-SCE-DEF-002

To: ENERGY DIVISION
Prepared by: Rey Gonzales
Title: Environmental Project Manager
Dated: 08/27/2018

Question 59:

The initial examination of the PEA identified that survey information had been included in the PEA. However, a closer examination of the 1,400 pages has identified deficiencies. A central difficulty is relating the information in the biological report information to specific locations. Some information appears to be lacking. Below is an itemization of identified deficiencies:

1. The Revised Biological Resources Technical Report (BRTR), Section 2.4.2, indicates that a total of 8.8 acres would be permanently disturbed, and 385.2 acres would be temporarily disturbed. The project description and route maps indicate that these disturbance areas would be at a number of separate locations. Additionally, the BRTR identifies 17 Potential Staging Yard Locations (Table 1).

Q.59. Are the permanent and temporary disturbances of potential staging yards included in the total disturbance area figures cited above?

Response to Question 59:

All 17 of the potential staging yards identified in Table 1 from the Biological Resources Technical Report (BRTR) were surveyed and accounted for when preparing the permanent and temporary impact calculations and maps. However, as described in response to the California Public Utilities Commission's Deficiency Request #1, since the submittal of the Proponent's Environmental Assessment and the development of the BRTR, the Proposed Project's total footprint has been reduced due to recent minor design modifications. The latest Proposed Project design (GIS Data dated August 9, 2018) is anticipated to result in approximately 368.4 acres of temporary impacts and 7 acres of permanent impacts.