PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

December 20, 2013

Ms. Jennifer Pierce
San Diego Gas and Electric Company
8326 Century Park Court
San Diego, CA 92123-4150

RE: Deficiency Report #2, Salt Creek Substation Project Application for a Permit to Construct (A. 13-09-014)

Dear Ms. Pierce:

The Energy Division of the California Public Utilities Commission (CPUC) has completed its review of San Diego Gas and Electric Company's (SDG&E) application (A. 13-09-014) and responses to Deficiency Report #1 for the Salt Creek Substation Project.

Section 15100 of the California Environmental Quality Act (CEQA) requires the agency responsible for the certification of a proposed project to assess the completeness of the project proponent's application. The Energy Division uses CPUC's Information and Criteria List and Proponent's Environmental Assessment (PEA) Checklist as the guides for determining the adequacy of project applications.

The CPUC identified deficiencies in the PEA in our October 25, 2013, deficiency report. SDG&E responded to the deficiency report on November 25, 2013. The deficiencies were corrected (subject to additional data needs), with the exception of deficiency item #12 and the visual analysis. SDG&E has requested an extension until March 3, 2014, to respond to deficiency item #12. The visual analysis is deficient because the methodology used to prepare the visual simulation does not conform to industry standards. The simulations should be prepared using baseline photos taken with a 50 millimeter (mm) lens or a 50 mm-equivalent focal length. Additional discussion is provided in the attached explanation of the deficiency.

Information provided by SDG&E in response to the Energy Division's second finding of deficiency should be filed as a supplement to Application A. 13-09-014. We request that SDG&E respond to this report no later than January 20, 2014. We understand that SDG&E's response to item #12 of Deficiency Report #1 will be delivered later than this, but preparation of the environmental document will continue.

The Energy Division will review all supplemental information to assess its adequacy and will issue a determination when information in SDG&E's application is deemed adequate and complete. The Energy Division reserves the right to request additional information at any point in the application proceeding and during subsequent construction of the project should SDG&E's Permit to Construct be approved.

Please direct questions related to this application to Jason Coontz at the CPUC.

Sincerely,

Jason Coontz
California Public Utilities Commission

DEFICIENCY REPORT #2 FOR THE SDG&E SALT CREEK SUBSTATION PROJECT APPLICATION (A. 13-09-014)

REPORT OVERVIEW

The California Public Utilities Commission (CPUC) has identified deficiencies in the application (A. 13-09-014) and Proponent's Environmental Assessment (PEA) for San Diego Gas and Electric Company's (SDG&E) Application A. 13-09-014 for a Permit to Construct the Salt Creek Substation Project. Deficiencies were identified using the CPUC PEA Checklist (November 2008) and the CPUC Information and Criteria List (July 2008). SDG&E provided responses to Deficiency Report #1 (submitted October 25, 2013), with the exception of item #12, which is anticipated to be addressed by March 3, 2014. The information provided in SDG&E's response to Deficiency Report #1 regarding the photo simulation methodology confirmed that the photo simulations were not prepared using industry-standard methods. Additional detail is provided in Table 1.

Table 1: SDG&E Salt Creek Substation Project Application A. 13-09-014 Deficiencies

#	Deficiency #	Deficiency
Aesthetics		
1	DR-3.1	**The photo simulations did not use industry-standard methods. Please prepare the simulations using current industry standards.** Visual simulations are used to analyze a proposed project's visual effects on the landscape. They also serve as a way to inform stakeholders of the expected project effects on private and public viewsheds. Visual simulation methodology is a science-based approach to accurately portray the baseline and post-project visual conditions. Visual simulations that do not adhere to industry-standard methodologies can lead to erroneous depictions of the project impacts on the visual environment, can bias the analysis, and are not defensible. An important part of the simulation includes capturing representative photographic images of the project's baseline visual conditions. Before digital cameras became mainstream this was relatively straightforward because 35 mm film was the medium used to capture the images (35 mm horizontal and 24 mm vertical). Baseline photos were taken with a single-lens reflex camera with a 50 mm lens, representing a horizontal view angle of ±40 degrees. The 50 mm equivalent focal length (EFL) produces a 38.6° horizontal field of view (HFOV), which best represents the human visual perception (National Research Council 2007: 353). Further, this setting represents the normal human eye magnification and the primary view cone (excluding peripheral vision). When digital single-lens reflex (DSLR) cameras became mainstream the 50 mm EFL equation became more complicated; 35 mm film was replaced with digital sensors that vary in size. The camera lens remained unchanged in the film to digital evolution. Professional DSLRs that cost thousands of dollars have a full-sized sensor, which means they are the same size as 35 mm film (i.e., 35 mm x 24 mm) and there is no conversion

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#	**Deficiency #**	**Deficiency**
		necessary, so a 50 mm focal length is equivalent. Less expensive DSLRs have a smaller, less expensive sensor to digitally capture the images. This smaller sensor affects the resultant image by effectively magnifying it. This is often referred to as the crop factor. For instance, Nikon's entry-level DSLRs uses an APS-C sensor that is 25.1 mm x 16.7 mm. The mathematical formula used to calculate the EFL for this sensor dictates that a focal length of 34 mm will be a 50 mm EFL. In summary, the size of the digital sensor (analogous to film size) dictates the focal length used to record and properly capture baseline visual conditions. The camera metadata from the response to Deficiency Letter #1 (item 3.1) and response to Data Request #1 (item 51) shows that the key view baseline conditions were captured with two different cameras. The first camera is a Canon PowerShot SD1100 IS. The second is a GPS-enabled Panasonic DMC-ZS10. The Panasonic is the more sophisticated of the two cameras and includes a line item for the 35 mm equivalent. This information is excerpted below for Key View 9: Original date/time: 2013.07.09 14:02:21 Exposure time: 1/3200 F-stop: 3.3 ISO speed: 100 Focal length: 4.3000 **Focal length (35 mm): 26** Exposure bias: 0.0000 Metering mode: Pattern Digital zoom ratio: 0.0000 GPS Tag Version: 02,03,00,00 GPS Latitude: 32° 37' 15.3900" GPS Longitude: 116° 56' 57.9000" GPS Satellites: 5 GPS Status: A GPS Measure Mode: 2 GPS Degree of Precision: 0.8000 GPS Map Datum: WGS-84 Camera make: Panasonic Camera model: DMC-ZS10 X resolution: 180.0000 Y resolution: 180.0000 Resolution unit: Inches Camera version: Ver.1.0 Colorspace: sRGB The baseline images used in the visual simulations for the Salt Creek Substation and TL 6965 were taken with a 26 mm EFL. The 26 mm EFL used to capture the images is a wide-angle view. The wide-angle yields exaggerated horizontal and vertical fields of view; it also minimizes the size and mass of the elements in the view making all the project elements appear smaller in the visual simulations than they would appear in reality to the human eye. Exhibits 1 through 3 illustrate this point. Visual simulations

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#	**Deficiency #**	**Deficiency**
		prepared using the correct methodology will compare well to the existing visual conditions in the field and can be used to accurately quantify visual change. The simulations printed on 11 x 17 inch paper can be taken to the GPS provenienced Key View location and then held so that the size of the simulations is perceived to be in scale with the visual baseline. This is not possible with wide-angle views such as the 26 mm EFL used in Key View 9 above because of the reduced magnification of the view.

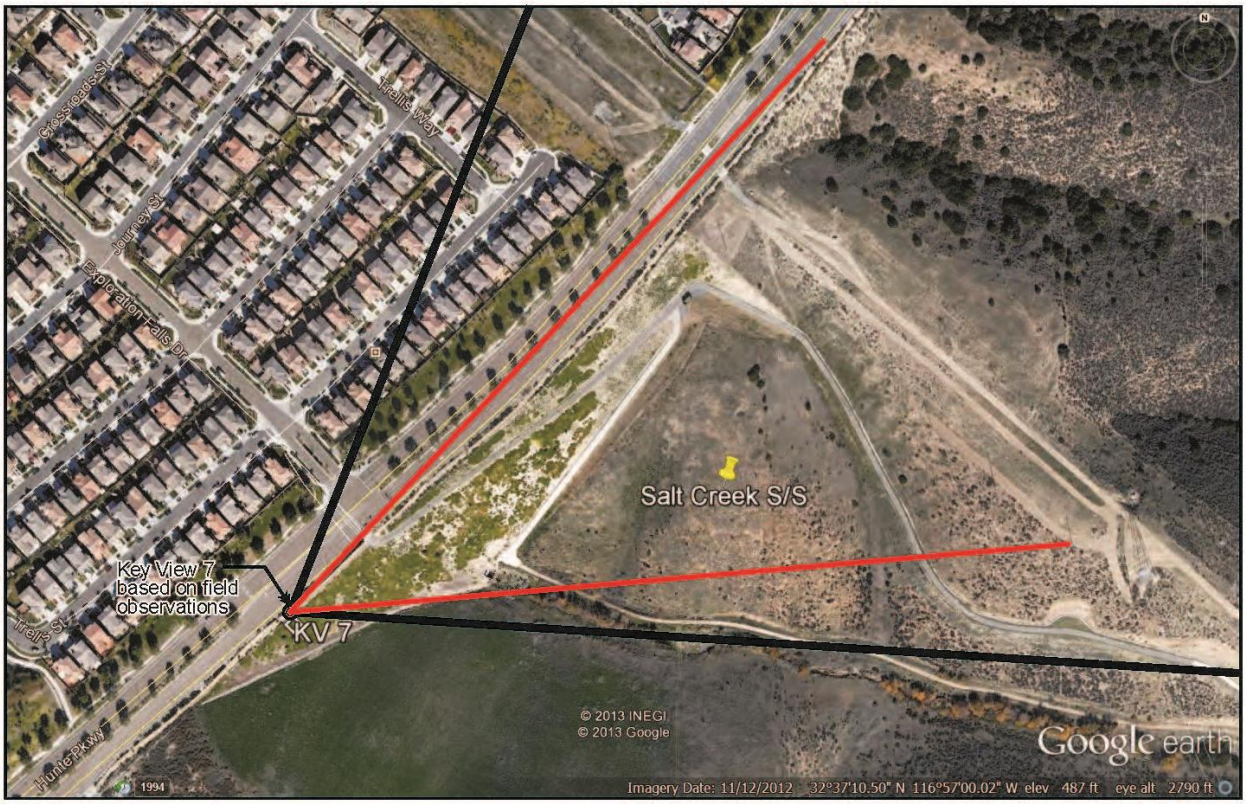

Exhibit 1 - This graphic shows the locations of the GPS supplied coordinates for Key View 7 and the location of the view from investigations on the site visit. The 2 black lines are the horizontal field of view shown in the SDG&E supplied baseline conditions and the visual simulations. The 2 red lines are the industry standard 40° view cone which would be captured using a 50mm focal length equivalent camera lens. Exhibits 2 and 3 graphically demonstrate the dichotomy that exists between the 2 approaches.

Exhibit 2 - SDG&E supplied visual simulation from Key View 7 using a 26mm equivalent focal length lens. The horizontal field of view for this photo is ±80°. Note the vertical dimension of the street light pole and the existing monopole of TL 6913.

Exhibit 3 - Key View 7 showing a ±40° horizontal field that a 50mm equivalent focal length lens would capture. Note the vertical dimension of the street light pole and the monopole.