From: Redacted
Sent: Tuesday, December 04, 2012 3:52 PM
To: 'Hank Pielage (Hhp@cpuc.ca.gov)'; 'cqm@cpuc.ca.gov'
Cc: Allen, Meredith
Subject: FW: PG & E Response to DRA Overall Data Request, NERC Clearance Evaluation Project, Item # 3

Hank, Charles,

Below please find responses to the questions posed to us by DRA on November 26th regarding Advice Letters 4066 and 4058. Sally mentioned to me that she was able to drop off the electronic files related to questions b and c below. Glad that worked!

Thanks,

Redacted

Director
Regulatory Relations
Pacific Gas and Electric Company

Redacted

a. DRA is concerned that the LiDAR Survey Report PG & E provided to DRA is now presented as being for discussion purposes only. PG & E states that the analysis is performed using an "industry standard PLS-CADD software" without further information.

Please provide details of the specific analysis in accordance with the requirement of CPUC Rule 10.3.

The Priority 1 NERC Assessment Project used **PLS-CADD™ (Power Line Systems - Computer Aided Design and Drafting)** software for the modeling and analysis necessary to assess the as-built line rating and electrical clearances of each subject transmission line. Because it was the latest version at the time, Version 12.10 was used for the assessment project. The current version of the PLS-CADD software is version 12.30. In addition, the SAPS finite-element analysis module (also developed by Power Line Systems Inc.) was used within the PLS-CADD platform for additional analysis capabilities regarding the sag and tension of transmission conductors.

For further information regarding PLS-CADD and SAPS software, please refer to http://www.powline.com/products.html.

With respect to the specific analysis, we could meet with Mr. Pielage and run the model on a computer for him to review with an engineer so he can see the model as it presents itself on the software.

b. PG & E did not provide a description of the LiDAR used in the survey. Information is needed on the LiDAR surveying technology used.
(1) Please provide the name of the manufacturer, name and phone number to the technical contact person, the model number, a technical description of the total device and any associated drawings, diagrams or photographs.
(2) PG & E states that vegetative information is being disregarded. DRA notes that PG & E must also comply with the NERC Transmission Vegetative Management Standard FAC-003-1. What action does PG & E plan in compliance with that standard?

PG&E provided this information to DRA via electronic files delivered on December 4th, 2012.

c. Regarding altitude accuracy, please provide the following:
(1) A detailed description and associated drawings, diagrams or photos of the Gyro Stabilization System.
(2) Documentation and associated drawings, diagrams or photos that provide objective evidence of the traditional ground survey that verified the data collected during the flight.
(3) Provide a copy of the Aerial LiDAR Survey Specification.
(4) Provide all data, calculations, drawings, diagrams and graphs used to obtain the absolute vertical accuracy of 6 centimeters (2.36 inches) at the 2 sigma confidence level.

PG&E provided this information to DRA via electronic files delivered on December 4th, 2012.

Please provide a response by December 10, 2012.

Henry W. Pielage, P.E.
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California Public Utilities Commission
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