PACIFIC GAS AND ELECTRIC COMPANY
2014 General Rate Case Phase I
Application 12-11-009
Data Response

PG&E Data Request No.:	CCSF_001-01		
PG&E File Name:	GRC2014-Ph-I_DR_CCSF_001-Q01		
Request Date:	April 12, 2013	Requester DR No.:	CCSF-PG&E 001-006
Date Sent:	April 26, 2013	Requesting Party:	City and County of San Francisco
PG&E Witness:	Steve Dannecker / Jeffery Hulon	Requester:	William K. Sanders

QUESTION 1

In Exhibit PG&E-1, pages 2-4-2-5, PG&E states that "GRCs are more than just a forum to consider the cost of utility service; they are also an opportunity to evaluate the safety and security of utility systems." In Exhibit PG&E-1, page 3-10, PG&E states that streetlights protect public safety.

a. Please explain how PG&E's proposals in its GRC will improve safety and reliability issues related to the frequency of burnouts of PG&E-owned streetlights in its service territory.

b. Please explain how PG&E's proposals in its GRC will improve safety and reliability issues related to repair times for PG&E-owned streetlights in its service territory.

c. Please explain how PG&E's proposals in its GRC will improve safety and reliability issues related to customer requests for increased lighting levels on PG&E-owned streetlights in its service territory.

d. Please explain how PG&E's proposals in its GRC will improve the safety and reliability issues identified above with respect to PG&E-owned streetlights in CCSF.

ANSWER 1

a. PG&E's mission is to provide safe and reliable service to its customers. This is in line with the General Order 95, 128 and 165 requirements to maintain a safe and reliable electric distribution system. Streetlights and their associated facilities enhance public safety by providing light to streets, roadways and other areas in PG&E's service territory to enhance public safety. The total cost of Streetlight Burnouts increased between 2007 and 2011, primarily due to an increase in the number of units (e.g., bulbs replaced), and an increased focus on replacing the bulbs in a more timely manner.

PG&E has implemented improvements to assist with more timely outage restoration for streetlights, including implementing an outage management tool to provide

greater visibility and tracking of streetlight outages and giving a single group responsibility over the program. As a result of the improvement initiatives described above, PG&E has seen improvements in average days to replace burnout bulbs and repair the facilities associated with streetlights from 18 days in 2011 to an average of 6 days currently. PG&E will continue to pursue these initiatives in the 2014 GRC period. PG&E's forecast supports addressing the corrective maintenance associated with Streetlight Burnouts.

b. As indicated in PG&E's response to Question 1.a, above, PG&E's Streetlight Burnout program has improved the average days to replace burnout bulbs in recent years, and PG&E will continue that initiative in the 2014 GRC period. PG&E is also forecasting proactive group streetlight replacements in the 2014 GRC which, if funded, will allow PG&E to address some streetlight burnouts before they occur. In addition, as part of its forecast Incandescent Streetlight program, PG&E will replace an obsolete regulated output (RO) Incandescent Streetlight system in San Francisco with a new system with High Pressure Sodium Lighting. The RO system, which has been outmoded for at least 50 years, requires special non-standard transformers and cable which are no longer manufactured, which has resulted in long outages when there have been issues with the system. Replacing the RO system with new streetlights will reduce repair time and improve streetlight reliability in the area serviced by that system. The three programs described above collectively improve safety and the reliability of the PG&E Streetlight System.

c. As indicated in PG&E's response to Question 1.a, above, streetlights and their associated facilities enhance public safety by providing light to streets, roadways and other areas in PG&E's service territory. PG&E's forecast to replace non-decorative High Pressure Sodium Vapor (HPSV) streetlights with LED streetlights as described in Exhibit (PG&E-4), Chapter 19, will result in improved reliability of streetlight service by reducing incidents of streetlight burnouts as a result of longer lamp life. LED lighting sources are forecast to maintain light output of at least 70 percent of initial delivered lumens for over 100,000 hours. HPSV sources have much shorter lives, and will reach their end of life with lamp failure projected at 26,000 hours. LED light sources improve lighting levels through the use of optics that direct more light to traveled surfaces more uniformly and lose less light upward (reducing street light contribution to sky glow) than traditional drop-lens style HPSV lighting. In addition, PG&E's forecast for proactive group streetlight lamp replacements will reduce the number of burnouts and therefore the amount of time some locations are without light.

d. Two of the items addressed above will provide direct benefits with respect to PG&E owned streetlights in CCSF. PG&E's forecast Incandescent Replacement program will greatly improve reliability of lighting for the areas served by the existing incandescent lights that are scheduled for replacement. Overall lighting levels will also be improved in most of these locations when the incandescent streetlights are replaced with HPSV streetlights: the two largest incandescent lamps offered (295 Watts and 405 Watts) have significantly lower initial delivered lumens (4000 and 6000 lumens, respectively) than the two smallest HPSV lamps offered (70

Watts/5800 lumens and 100 Watts/9500 lumens, respectively). Additionally, as stated in PG&E's response to Question 1.c, above, PG&E's forecast for proactive group streetlight lamp replacements will reduce the number of burnouts and therefore the amount of time some locations are without light. The third program, the LED Streetlight program, will not apply to PG&E owned lights serving CCSF.