## PACIFIC GAS AND ELECTRIC COMPANY General Rate Case 2011 Phase I Application 09-12-020 Data Response

PG&E Data Request No.:	DRA_232-05		
PG&E File Name:	GRC2011-Ph-I_DR_DRA_232-Q05		
Request Date:	March 24, 2010	Requester DR No .:	DRA-232-SWC
Date Sent:	April 7, 2010	Requesting Party:	DRA
PG&E Witness:	David Meisel	Requester:	Sophie Chia

#### EXHIBIT REFERENCE: PG&E-7, CHAPTER 3

## SUBJECT: FLEET SERVICES

#### **QUESTION 5**

In Exhibit PG&E-7, Chapter 3, page 3-11, lines 4 to 10, PG&E states, "The In-Use Off Road Diesel Regulation will address diesel-powered equipment greater than 25 horsepower, such as backhoes, forklifts, graders, dump trucks and scrapers. This regulation will require either the installation of emission control equipment or replacement to meet a series of increasingly stringent emission standards. The Company has 200 pieces of equipment that will have to be replaced through 2013 in order to meet these standards, based on current emission estimates."

- a. Please provide a copy of all analysis performed to determine that 184 pieces of equipment need to be replaced outside of the normal replacement lifecycle versus the installation of emission control equipment to comply with the In-Use Off-Road Diesel Regulation.
- b. Please provide a break-down of the calculation for each year of 2010 to 2013 of the costs to replace the vehicles/equipment that needs to comply with the In-Use Off-Road Diesel Regulation as found on Table 3-5 on page 3-13.
- c. Please create a table with the type of In-Use Off-Road Diesel vehicle/equipment, the cost to install emission control equipment, the cost to replace the equipment for each category, and the number of In-Use Off-Road Diesel vehicle/equipment in the category.

#### ANSWER 5A

a. The Air Resources Board (ARB) Off-Road Regulation requires that PG&E meet both PM and NOx annual emission standards. Please see GRC2011-Ph-I\_DR\_DRA\_232-Q05aAtch01.doc for a list of available retrofit kits. The only Retrofit

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kit available that does reduce NOx only reduces it by 40% and is based on a requirement that the engine must have a duty cycle with an exhaust temperature greater than 260 degrees Celsius for at least 70 percent of the time and has a minimum horsepower rating of 150HP. Of the 184 Off-Road units targeted for replacement, only nine (9) units fell within the horsepower range. Based on PG&E's operation practices, most of these types of equipment would not meet the engine temperature requirements of the retrofit kit.

Since the regulation requires PG&E to meet both PM and NOx reductions standards, and based on the unavailability of NOx retrofit kits, PG&E has elected to replace the equipment.

# ANSWER 5B

b. Please see GRC2011-Ph-I\_DR\_DRA\_232-Q05b-Atch01.xls for a breakdown of offroad vehicle costs by class description and detailed at the unit level. The actual calculation for each year is the number of vehicles and the estimated replacement cost of those vehicles.

#### ANSWER 5C

c. We are unable to produce a table since none of the kits identified reduce both PM and NOx. For the small number of vehicles identified above that fell within the horsepower range for the one kit that does reduce NOx, most would not meet the temperature ranges required to burn on the Hydrocarbons or NOx.