

PACIFIC GAS AND ELECTRIC COMPANY
Wildfire Mitigation Plans
Rulemaking 18-10-007
Data Response

PG&E Data Request No.:	MGRA_010-Q09		
PG&E File Name:	WildfireMitigationPlans_DR_MGRA_010-Q09		
Request Date:	February 25, 2021	Requester DR No.:	WMP-2021 MGRA PGE DataRequest 4
Date Sent:	March 2, 2021	Requesting Party:	Mussey Grade Road Alliance
PG&E Witness:		Requester:	Joseph Mitchell

The following data requests are being issued to PG&E.

QUESTION 09 (24)

On p. 416 of its WMP, PG&E discusses its satellite monitoring program. With regard to this program:

- a. What fraction of the alerts are “false alarms” that do not correspond to wildfires, and how has this changed as the project has matured?
- b. What fraction of alerts are “first alerts” that are received prior to wildfires being reported by other means?
- c. What is the mean time between the point at which a wildfire becomes visible on a wildfire camera and the time that an alert is received from satellite monitoring?
- d. What is the mean time between updates for a typical location in the PG&E service area from any satellite with a polar orbit?

ANSWER 09 (24)

- a. PG&E is unable to provide a fraction of alerts that are “false alarms”. PG&E does not track the number of alerts which turn up to be false. PG&E has worked to limit the number of false alarms, mainly by masking out locations that more frequently provide false alarms, such as solar panels, bodies of water, and agricultural areas where agricultural burns are frequent. These locations occasionally cause false alarms by confusing the satellite detection system imager. . The system also cannot differentiate between prescribed burns and wildfires, nor can it differentiate between some larger structural and industrial fires and a wildfire.
- b. PG&E is unable to answer this question with a fraction. Satellite detections are invaluable for “first alert” detections in areas with limited populations and internet/mobile connections for reporting. For other areas, satellite detections can serve as first alerts or help corroborate other intelligence sources. In practice, given the many other sources that are brought together to verify ignitions, PG&E is unable to precisely calculate which alerts which “first alerts” of an ignition.
- c. PG&E cannot answer this question with certainty because there are too many variables involved. Every fire is different, and the location, size, and temperature of a fire can all impact satellite detection times. The satellite must complete its scan

before sending the ignition data to SSEC for processing. The data is then sent to PG&E for additional processing. Accordingly, PG&E does not track “mean” alert times in this manner.

- d. The polar orbiting satellites PG&E pulls into the MODIS portion of the satellite fire detection system are the MODIS imager carrying Aqua and Terra satellites. These satellites collect images of the same area of earth approximately 3 hours apart. At a minimum, the PG&E territory is passed over twice per day by each of these satellites.
- e. The polar orbiting satellites PG&E pulls into the VIIRS portions of the satellite fire detection system are the VIIRS imager carrying SUOMI-NPP and NOAA-20 satellites. These satellites are designed to capture the earth’s surface twice a day, and passes are separated by approximately 50 minutes. At a minimum, the PG&E territory is passed over twice per day by these satellites.