



Case: A.20-09-019
ALJ: Nojan
Witness: PG&E - Cullings

TURN Cross Examination Exhibit

Exhibit Number: TURN-

PG&E Responses to Data Request

TURN 022, Questions 2 and 3

Regarding Overhead System Hardening

PACIFIC GAS AND ELECTRIC COMPANY
Wildfire Mitigation and Catastrophic Events
Application 20-09-019
Data Response

PG&E Data Request No.:	TURN_022-Q02		
PG&E File Name:	2020WMCE_DR_TURN_022-Q02		
Request Date:	May 20, 2021	Requester DR No.:	022 (SH)
Date Sent:	June 4, 2021	Requesting Party:	The Utility Reform Network
PG&E Witness:	Sandra Cullings	Requester:	Marcel Hawiger

SUBJECT: OVERHEAD SYSTEM HARDENING

QUESTION 02

PG&E's response to TURN-17, Question 6d, states "When PG&E hardens a circuit, we create a wider footprint associated with the assets on that circuit because we are installing covered conductor that requires larger equipment and increased spacing between equipment."

- a. Please quantify (in feet) and explain the "wider footprint" mentioned by PG&E. Please provide all supporting documentation and calculations. Please also explain which asset requires the "wider footprint."
- b. Please provide the average footprint in feet of overhead wire that does not have covered conductor installed. Please provide all supporting documentation and calculations.
- c. Please provide the average footprint in feet of overhead wire that does have covered conductor installed. Please provide all supporting documentation and calculations.
- d. Please provide the dimension(s) (length) of existing crossarms that supported bare wire and were replaced during system hardening and the dimensions of crossarms installed to support covered conductor. TURN is not asking for the dimension of each crossarm, but the list of crossarm lengths that were removed and installed. If PG&E knows the number of crossarms of each length, then please provide that number.
- e. Did trimming a "wider footprint" necessitate changing PG&E's right of way. Please explain.

ANSWER 02

- a. The existing bare wire construction was based on the standard at the time of the original installation of the line. The wider footprint is a result of updated construction standards since the original line installation. Any of PG&E's construction programs would result in a wider footprint (i.e. deteriorated conductor replacement, etc.). The wider footprint is not a result of the system hardening program. The current standard (which applies to both bare and covered conductor installation) has a footprint that is approximately 2-4 feet wider. Therefore, the "wider footprint" would have been

necessary even if the line had been replaced with bare conductor as opposed to covered for conductor for system hardening.

- b. Please see response 2.a. above. For all new construction, the overhead footprint is based on the same standard for both bare conductor and covered conductor.
- c. Please see responses 2.a. and 2.b. above.
- d. PG&E constructs based on our standards and does not maintain or collect data on dimensions of existing crossarms, as it is not necessary for operational purposes.
- e. PG&E's prior response to TURN-17, Question 6d referred to the hardening of a circuit which creates a wider footprint - specifically, the increased physical space occupied by the assets due to larger equipment and/or increased spacing between equipment. Vegetation along the right of way would be cleared to comply with the clearance requirements in General Order 95.

In general, PG&E's existing land rights include the express right to perform vegetation management and there has not been a need to modify PG&E's land rights to perform this maintenance work. In instances where existing right of way is insufficient for the current wider footprint standard, PG&E goes through the process to increase the right of way appropriately.

**PACIFIC GAS AND ELECTRIC COMPANY
Wildfire Mitigation and Catastrophic Events
Application 20-09-019
Data Response**

PG&E Data Request No.:	TURN_022-Q03		
PG&E File Name:	2020WMCE_DR_TURN_022-Q03		
Request Date:	May 20, 2021	Requester DR No.:	022 (SH)
Date Sent:	June 8, 2021	Requesting Party:	The Utility Reform Network
PG&E Witness:	Sandra Cullings	Requester:	Marcel Hawiger

SUBJECT: OVERHEAD SYSTEM HARDENING

QUESTION 03

Re the additional \$300,000/mile PG&E spent on vegetation management for the system hardening program discussed in PG&E's rebuttal at page 2-28, lines 5-12:

- a. Please explain why PG&E must use "higher standards" than SCE if a primary purpose of covered conductor is to prevent ignitions from vegetation.
- b. Please explain why PG&E spent more on vegetation management per mile (\$300,000) for the covered conductor vegetation management than for the EVM program (\$178,000). Please provide all supporting documentation and assumptions.
- c. Please explain whether PG&E capitalized these costs as part of the capital costs of system hardening. If yes, please explain why it is appropriate to capitalize these costs.

ANSWER 03

- a. PG&E has more vegetation than SCE and therefore must incur higher costs than SCE to remove the vegetation. The "higher standards" refers to the more intensive vegetation clearance activity PG&E must perform due to the volume of trees in the service territory.
- b. For System Hardening, the vegetation management work is primarily composed of two types of work. First, the initial clearance to allow vehicles and equipment access to the location and perform the construction work. Second, due to the current wider footprint standard, additional vegetation clearance is required to remove and / or trim trees.

This vegetation clearance is generally more intensive (and therefore expensive) than the supplementary vegetation clearance that the EVM program is conducting.
- c. Yes, per PG&E accounting rules these costs are capitalized as part of any capital construction projects.