## PG&E HEARING EXHIBIT PGE-60

A.20-04-023

## PG&E'S SECURITIZATION 2020

The Utility Reform Network's Response to PG&E Data Request 6, Questions 1.b, 1.c, 2

### PACIFIC GAS AND ELECTRIC COMPANY Application 20-04-023 (Securitization)

#### TURN Response to PG&E Data Requests Set 6

PG&E Data Request No.:	PGE_TURN006		
PG&E File Name: Securitization2020_DR_PGE_TURN006			
Date Requested:	November 20, 2020		
Date of Response	November 25, 2020		

Q 1:	With respect to Tble DR2-Q4-1 in TURN response to PG&E Data Request Set 2, and the average set forth in Line 3 of Table 1, and set forth in Line 8 of Table 2 of the revised Ellis Testimony dated November 10, 2020:					
	b.	If TURN disagrees with any number in the table in part a, describe any mistake or error or disagreement, and provide what TURN believes is the median of the investment returns by asset class.				
		There appears to be an error in the calculations. The average appears to be included among the data in the median calculation. The correct asset				

class medians and differences from average are:

	Broad US equity	Non-US equity	US fixed income
Average	5.97%	6.73%	2.62%
Median	6.09%	6.94%	2.81%
Median – average	0.12%	0.21%	0.19%

# c. What is the return on the 80/20 portfolio in line 8 of Table 2 in the revised Ellis Testimony dated November 10, 2020 using the medians instead of the averages for each asset class.

The portfolio return is not equal to the weighted average of the geometric returns of the constituent assets. Rather, the corresponding arithmetic returns, which *can* be weighted and summed, are used, and a portfolio standard deviation is calculated from the standard deviation of each asset and the correlations between them. The portfolio arithmetic mean and standard deviation are then converted back into a geometric mean. In calculating the median portfolio, the median standard deviation and correlations are also used. Results are presented below. Using median instead of mean changes the portfolio average return from 5.75% to 5.89% (16 bp or +2.4%), which does not materially change any of TURN's conclusions.

	Median geometric average return	Median standard deviation	Median arithmetic average return
Broad US equity	6.09%	15.74%	7.23%
Non-US equity	6.94%	17.47%	8.32%
US fixed income	2.81%	4.04%	2.89%
Portfolio total	5.89%	12.56%	6.62%

Q 2: Please provide an excel file, in the format contained in DR2-Q5 Attachment 1.xlsx provided in response to PG&E Data Request Set 2, with the output from all 10,380 runs from the model used by Mr. Ellis that are used in the revised Ellis Testimony dated November 10, 2020 (as referenced at revised Ellis Testimony p.18, n. 22).

See attached Excel file, "PG&E DR6-Q2 TURN model output.xlsx."