

**RESPONSE TO**  
**PUBLIC ADVOCATE’S INTERROGATORIES**  
**AND**  
**REQUESTS FOR PRODUCTION OF DOCUMENTS**  
**QUESTION 1**

**Dated: May 2025**

1 **PA-XVI-1.** PLEASE PROVIDE THE SUPPORTING CALCULATIONS USED TO DERIVE  
2 THE DATA POINTS SHOWN ON THE GRAPHS ON PAGE 11 OF PWD  
3 REBUTTAL STATEMENT 1R.  
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6 **RESPONSE:**

7 Please refer to response attachment PA-XVI.  
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9 As stated in PA St. 1, the Public Advocate's proposed approach to projecting billed  
10 volume per account projection would utilize the three-year average usage per account and  
11 the three-year average annual growth rate. The graphs, as presented on page 11 of Rebuttal  
12 Statement 1R, compare the application of the Public Advocate's methodology with actual  
13 results.  
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15 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC  
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Response PA-XVI-1 Attachment

Purpose:

Based on historical data provide a comparison of the Public Advocate proposed water sales per account projection methodology (Historical three-year average projected based on three-year average annual growth rate) with actual results.

Line	Description	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
General Service - Residential												
Water - Billed Volume (Mcf)												
1	5/8" Meter	2,864,109	2,794,005	2,773,962	2,740,574	2,656,052	2,643,962	2,691,813	2,658,509	2,624,958	2,619,148	Source: PWD_FinPlan25_26_Ver1.xlsm - Customer Tab (PWD Exhibit 6 page 114)
2	> 5/8" Meter	356,604	352,830	361,200	358,904	358,036	365,628	388,632	394,841	402,629	391,607	Source: PWD_FinPlan25_26_Ver1.xlsm - Customer Tab (PWD Exhibit 6 page 114)
3	Total General Service (Residential)	3,220,713	3,146,835	3,135,162	3,099,478	3,014,087	3,009,590	3,080,445	3,053,350	3,027,588	3,010,755	(1) + (2)
Accounts												
4	5/8" Meter	403,992	410,847	411,896	418,816	413,482	411,877	420,516	422,630	418,466	421,790	Source: PWD_FinPlan25_26_Ver1.xlsm - Customer Tab (PWD Exhibit 6 page 99)
5	> 5/8" Meter	4,827	5,524	6,670	7,688	8,885	9,851	10,962	12,542	13,802	15,183	Source: PWD_FinPlan25_26_Ver1.xlsm - Customer Tab (PWD Exhibit 6 page 99)
6	Total General Service (Residential)	408,819	416,371	418,566	426,504	422,367	421,728	431,478	435,172	432,268	436,973	(4) + (5)
Average Usage per Account (Mcf/Account)												
7	5/8" Meter	7.09	6.80	6.73	6.54	6.42	6.42	6.40	6.29	6.27	6.21	(1) / /(4)
8	> 5/8" Meter	73.88	63.87	54.15	46.68	40.30	37.12	35.45	31.48	29.17	25.79	(2) / / (5)
9	Total General Service (Residential)	7.88	7.56	7.49	7.27	7.14	7.14	7.14	7.02	7.00	6.89	(3) / (6)
TOTAL RETAIL												
10	Water - Billed Volume (Mcf)	6,214,832	6,139,002	6,094,673	5,956,039	5,904,975	5,833,763	5,681,907	5,820,175	5,826,662	5,671,351	Source: PWD_FinPlan25_26_Ver1.xlsm - Customer Tab (PWD Exhibit 6 page 114)
11	Accounts	479,091	487,410	491,817	500,583	498,048	496,034	505,996	510,960	507,709	512,937	Source: PWD_FinPlan25_26_Ver1.xlsm - Customer Tab (PWD Exhibit 6 page 99)
12	Average Usage per Account (Mcf/Account)	12.97	12.60	12.39	11.90	11.86	11.76	11.23	11.39	11.48	11.06	(10) / (11)
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Total Residential Usage per Account												
13	Actual	7.88	7.56	7.49	7.27	7.14	7.14	7.14	7.02	7.00	6.89	(9)
14	Data Based on Public Advocate Proposed Projection Method				7.41	7.26	7.18	7.14	7.10	7.05	6.97	(Actual Average of prior 3 years (row 13)) x (1 + row 19)
Total Usage per Account												
15	Actual	12.97	12.60	12.39	11.90	11.86	11.76	11.23	11.39	11.48	11.06	(12)
16	Data Based on Public Advocate Proposed Projection Method				12.15	12.03	11.84	11.61	11.46	11.37	11.31	(Average of prior 3 years (row 15)) x (1 + row 22)
Growth Factor Calculations												
Residential Usage												
17	BV formula - 3 Year Average Growth				-2.65%	-1.90%	-1.60%	-0.59%	-0.56%	-0.62%	-1.18%	(row 13 cuurent year / row 13 current year - 3)^(1/3)-1
18	Annual % Change				-2.98%	-1.80%	0.00%	0.04%	-1.72%	-0.18%	-1.63%	((row 13 current year - row 13 prior year) / row 13 prior year)
19	3 year Average of Annual % change				-2.98%	-2.39%	-1.59%	-0.59%	-0.56%	-0.62%	-1.18%	(average of row 18 for the current year and the past 2 years)
Total Usage												
20	BV formula - 3 Year Average Growth				-2.84%	-2.00%	-1.73%	-1.91%	-1.33%	-0.81%	-0.51%	(row 15 current year / row 15 current year - 3)^(1/3)-1
21	Annual % Change				-3.99%	-0.35%	-0.80%	-4.52%	1.44%	0.75%	-3.66%	((row 15 current year - row 15 prior year) / row 13 prior year)
22	3 year Average of Annual % change				-3.99%	-2.17%	-1.71%	-1.89%	-1.30%	-0.78%	-0.49%	(average of row 21 for the current year and the past 2 years)



