

PHILADELPHIA WATER DEPARTMENT
PUBLIC ADVOCATE ADVANCED DISCOVERY SET #I

RESPONSE TO
PUBLIC ADVOCATE'S ADVANCED INTERROGATORIES
AND
REQUESTS FOR PRODUCTION OF DOCUMENTS
QUESTIONS 1 - 14

Dated: January 2021

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

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5 **PA-ADV-1.** PROVIDE THE FOLLOWING INFORMATION BY NINE-DIGIT ZIP CODE:

- 6 A. THE NUMBER OF HOUSEHOLDS ENROLLED IN SERVICE AS OF MARCH
7 1, 2019, SEPTEMBER 1, 2019, MARCH 1, 2020, AND SEPTEMBER 1, 2020;
8 B. THE NUMBER OF HOUSEHOLDS IN ARREARS AS OF MARCH 1, 2019,
9 SEPTEMBER 1, 2019, MARCH 1, 2020, AND SEPTEMBER 1, 2020;
10 C. THE NUMBER OF HOUSEHOLDS WHOSE SERVICE HAS BEEN
11 TERMINATED AS OF MARCH 1, 2019, SEPTEMBER 1, 2019, MARCH 1,
12 2020, AND SEPTEMBER 1, 2020; AND
13 D. THE NUMBER OF HOUSEHOLDS RECEIVING ASSISTANCE AS OF
14 MARCH 1, 2019, SEPTEMBER 1, 2019, MARCH 1, 2020, AND SEPTEMBER
15 1, 2020.

16
17 **RESPONSE:**

18 Please note that much of the data and reports provided in response to the enclosed interrogatories
19 were not used directly in the Cost of Service analysis. The requested data and reports were
20 developed in response to questions asked by the Public Advocate. Rate Proceeding Participants
21 should refer to PWD Statements 6, 7A, and 7B for information regarding the data used as the basis
22 for or in support of the development of the Water Department’s proposed rates and charges and
23 related matters.

- 24 A. Attachment PA-ADV-1_Attachment_A includes a count of households enrolled in service
25 for each 5-digit zip code. Nine-digit zip code data were unavailable. Households enrolled
26 in service are defined as general service residential (including TAP) and senior citizen
27 discount water accounts which were billed for service in the preceding month. That is,
28 accounts are only counted as enrolled in service as of March 1, 2019 if they received a bill

1 during February 2019. The methodology aligns with the way accounts are counted in other
2 cost of service reports. The following data (in B, C, and D below) are also limited to
3 households enrolled in service as defined here. Attachment PA-ADV-1_Attachment_A
4 includes four tabs, one for each date of interest.

5
6 B. Attachment PA-ADV-1_Attachment_B includes a count of households in arrears for each
7 5-digit zip code. To address this question, a count of households in arrears was determined
8 by subtracting the amount of the most recent month's bill from each account's overall
9 balance as of each of the dates in question and counting accounts with a resulting balance
10 greater than zero. This represents debt that is past due, aside from slight impact of February
11 being a shorter than typical month. The accounts counted may have debt in payment
12 agreements, bankruptcy, or other protected statuses. An account with any positive balance,
13 including a small balance, in any status, is counted in these figures. Attachment PA-ADV-
14 1_Attachment_B includes four tabs, one for each date of interest.

15
16 C. Attachment PA-ADV-1_Attachment_C includes a count of households whose service has
17 been terminated for each 5-digit zip code. As of September 2020, PWD had made several
18 attempts to restore all accounts, so service remaining terminated as of this time for some
19 customers was in part the result of lack of access to the meter. Attachment PA-ADV-
20 1_Attachment_C includes four tabs, one for each date of interest.

21
22 D. Attachment PA-ADV-1_Attachment_D includes a count of households receiving assistance
23 through TAP, senior citizen discount, WRBCC, or a payment agreement. This designation
24 was developed by reconstructing the discount applied to the account in the month preceding
25 each date of interest, as well as the customer's designation in historical basis2 data as of the
26 date of interest. Note that assistance program participation may have been impacted by the
27 lack of enforcement activities during 2020. Attachment PA-ADV-1_Attachment_D
28 includes four tabs, one for each date of interest.

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RESPONSE PROVIDED BY: Raftelis Financial Consultants, Inc.

1 *Questions PA-ADV-2 through PA-ADV-14 pertain to the document dated December 22, 2020,*
2 *titled “FINANCIAL PLAN: REVENUE & REVENUE REQUIREMENTS ASSUMPTIONS*
3 *SCHEDULE BV-6: WP-1”*

4
5 **GENERAL RESPONSE:**

6 Please note that the document dated December 22, 2020, titled “FINANCIAL PLAN: REVENUE
7 & REVENUE REQUIREMENTS ASSUMPTIONS SCHEDULE BV-6: WP-1,” was provided to
8 prior participants in draft form. All responses concerning this document are in the context of the
9 version and submitted to the Philadelphia Water, Sewer and Storm Water Rate Board on January
10 15, 2021.

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13 **PA-ADV-2.** REFERENCE REVENUE PROJECTIONS, ITEM 1(D). PLEASE EXPLAIN
14 HOW THE COMMONWEALTH OF PENNSYLVANIA’S EXTENDED SHUT
15 OFF MORATORIUM AFFECTS PWD’S USAGE PER ACCOUNT AND
16 PROVIDE SUPPORTING DOCUMENTATION.

17
18 **RESPONSE:**

19 As discussed in PWD Statement No. 7A – Direct Testimony of Black & Veatch
20 Management Consulting, Pennsylvania Public Utility Commission (PUC) orders
21 suspended shut-off and enforcement practices for PUC regulated utilities in March
22 2020. The Water Department and the Water Revenue Bureau followed suit and
23 restored service to most customers that had been shut-off for non-payment. As
24 noted in response to PA-ADV-1, PWD had made several attempts to restore all
25 accounts, so service remaining terminated as of this time for some customers was
26 in part the result of lack of access to the meter.

1 The usage per account observed in the Water Department’s monthly billing data
2 begin to reflect these conditions, among other factors, as early as April 2020.
3 Black & Veatch adjusted the usage per account used in the analysis to reflect
4 recent experience, as further explained in the subject document. Overall usage
5 reflects more current conditions, the shut-off moratorium and associated
6 collections practices.

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8 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC

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- 1 **PA-ADV-3.** FOR EACH CUSTOMER TYPE SHOWN IN REVENUE PROJECTIONS, ITEM
2 1(D), TABLE 1, EXCLUDING TAP PARTICIPANTS, PROVIDE:
3 A. THE AVERAGE DELINQUENT BALANCE OWED AS OF DECEMBER 2019.
4 B. THE AVERAGE DELINQUENT BALANCE OWED AS OF DECEMBER 2020.
5 C. THE TOTAL DELINQUENT BALANCE AS OF DECEMBER 2019.
6 D. THE TOTAL DELINQUENT BALANCE AS OF DECEMBER 2020.
7 E. THE PERCENTAGE OF TOTAL DELINQUENT BALANCE ON A PAYMENT
8 AGREEMENT AS OF DECEMBER 2019.
9 F. THE PERCENTAGE OF TOTAL DELINQUENT BALANCE ON A PAYMENT
10 AGREEMENT AS OF DECEMBER 2020
11

12 **RESPONSE:** Preparation of this response is in progress and will be provided in the future.
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14 **RESPONSE PROVIDED BY:** Raftelis Financial Consultants, Inc.
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PA-ADV-4. ACCORDING TO THE REVENUE PROJECTIONS, ITEM 1(D), THE COVID-19 PANDEMIC AND THE RELATED ECONOMIC DOWNTURN HAVE INFLUENCED CUSTOMER DEMAND IN THE MONTHS SINCE PENNSYLVANIA’S INITIAL SHUT-DOWN IN MARCH 2020. PLEASE PROVIDE THE ANALYSES OR SUPPORTING DATA THAT QUANTIFIES THE EFFECT OF THE DOWNTURN ON THE CUSTOMER DEMAND.

RESPONSE: Please refer to response attachment PA-ADV-4.xlsx for further information.

RESPONSE PROVIDED BY: Black & Veatch Management Consulting, LLC

1 **PA-ADV-5.** ACCORDING TO THE REVENUE PROJECTIONS, ITEM 1(D)(II), THE FY
2 2021 USAGES PER ACCOUNT WERE ADJUSTED TO REFLECT CURRENT
3 CUSTOMER DEMANDS BASED ON RECENT MONTHLY REPORTING
4 DATA. PLEASE PROVIDE DOCUMENTATION AND SUPPORTING
5 WORKPAPERS, IN ELECTRONIC FORMAT WITH THE FORMULAE
6 INTACT, SHOWING THE ORIGINAL CUSTOMER DEMAND AMOUNTS
7 AND THE DERIVATION OF THE AMOUNTS.
8

9 **RESPONSE:** Please refer to response attachment PA-ADV-4.xlsx.

10
11 Black & Veatch utilized monthly reporting data provided by Raftelis to
12 compare customer usage before and during the pandemic. To develop
13 the usage per account adjustment factors, Black & Veatch estimated the
14 FY 2021 usage by customer type, utilizing the actual fiscal year 2021
15 usage for July through October and utilizing the average monthly usage
16 during COVID (i.e. April to October) to estimate the remaining eight
17 months of the year. The escalation factors in the Cost of Service
18 Analysis, as presented in Table 1 of Schedule BV-6:WP-1, were
19 adjusted so that the resulting projected overall usage by customer type
20 for FY 2021 (which uses FY 2018-2019 average usage per account as
21 the projection basis) would approximate the estimated FY 2021 usage
22 included in the response attachment.
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24 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC
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PA-ADV-6. REFERENCE THE REVENUE PROJECTIONS, ITEM 1(D)(II)(2), PLEASE EXPLAIN WHETHER THE OVERALL ANNUAL PROGRAM BUDGET OF \$15 MILLION IN FY 2021 TO \$25 MILLION WAS DETERMINED BEFORE OR AFTER THE COVID PANDEMIC.

RESPONSE: This adjustment was determined after March 2020.

RESPONSE PROVIDED BY: The Philadelphia Water Department

1 **PA-ADV-7.** REFERENCE THE REVENUE PROJECTIONS, ITEM 1(F) TABLE 3 –
2 INITIAL COLLECTION FACTORS PRIOR TO ADJUSTMENT.

3 A. PLEASE CONFIRM WHETHER THE DATA PRESENTED ON TABLE 3
4 REFLECT THE ADJUSTMENTS TO THE COLLECTION FACTORS
5 DISCUSSED BELOW THE TABLE.

6 B. PLEASE PROVIDE THE SUPPORTING WORKPAPERS AND
7 DOCUMENTATION DEMONSTRATING THE BASIS OF FY 2021 BILLING
8 YEAR COLLECTION FACTORS – REDUCED BY 8%, FY 2022 BILLING
9 YEAR COLLECTION FACTORS – REDUCED BY 4% AND FY 2023
10 BILLING YEAR COLLECTION FACTORS – REDUCED BY 2%.

11 C. PLEASE PROVIDE THE DATA TO SUPPORT THE STATEMENT THAT
12 “CURRENT MONTHLY COLLECTION DATA IMPLY THAT COLLECTION
13 RATES ARE LOWER BY 10% COMPARED TO THE AVERAGE
14 HISTORICAL DATA.”

15
16 **RESPONSE:**

17 A. The data presented in Table 3 reflects the collection factors prior to the
18 adjustments discussed below the table. Please refer to Figure 3-2 on page 3-7 of
19 Schedule BV-5 (included in PWD Statement No. 7A – Direct Testimony of
20 Black & Veatch) for a description of how to apply the collection factor
21 adjustment in determining the projections of receipts.

22 B. Please refer to the response attachment PA-ADV-7.xlsx. The reduction in Billing
23 Year collection factors uses a comparison of monthly collections during the
24 pandemic in FY 2020 (i.e. April through June) and the corresponding month’s
25 average during prior years (i.e., FY 2019 to FY 2012). Please refer to Section
26 1.3.2 on page 1-4 of Schedule BV-5 (as included in PWD Statement No. 7A –
27 Direct Testimony of Black & Veatch) for additional discussion regarding the
28 collection factor adjustments. The Cost of Service analysis assumes collections

1 will partially recover in FY 2022 and FY 2023, returning to historical average
2 levels by FY 2024.

3 C. Please refer to the response attachment PA-ADV-7.xlsx. See row 17 of the tab
4 entitled "Summary" for April, May, and June. Both May and June data indicate
5 that billing year collections are 10% lower in FY 2020 compared to the
6 corresponding month's average during the prior years.

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8 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC

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PA-ADV-8. REFERENCE REVENUE PROJECTIONS, ITEM 1(H) TABLE 4 – PROJECTED MISCELLANEOUS AND CONTRA REVENUES. PLEASE EXPLAIN THE NATURE OF THE DEBT SERVICE RELEASE CATEGORY.

RESPONSE: The General Water and Wastewater Revenue Bond Ordinance of 1989, Section 4.09, Debt Service Account, details that any money in the Debt Reserve Account in excess of the Debt Reserve Requirement shall be transferred to the Revenue Fund at the written direction of the City. In Fiscal Years 2021, the Debt Reserve Account is projected to have funds in excess of the Debt Reserve Requirement; as such, the City is projecting a transfer of funds to the Revenue Fund.

RESPONSE PROVIDED BY: Black & Veatch Management Consulting, LLC

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PA-ADV-9. REFERENCE OPERATING EXPENSES, ITEM 2(E) TABLE 7 – ADDITIONAL
ADJUSTMENTS FOR PROJECTED OPERATING EXPENSES. PLEASE
EXPLAIN THE CAUSE OF THE DECREASE IN MAINTENANCE IN
OPERATIONS, CLASS 200.

RESPONSE: The Department has reviewed their maintenance requirements for
Fiscal Year 2022 and has decided to slow down certain items.

RESPONSE PROVIDED BY: The Philadelphia Water Department

1 **PA-ADV-10.** REGARDING DEBT SERVICE (ITEM 3), PLEASE PROVIDE A
2 WORKPAPER SHOWING ALL NEW DEBT ISSUANCES, DEBT
3 RETIREMENTS AND DEBT REFINANCING FOR FY 2018 THROUGH FY
4 2021. IN YOUR RESPONSE, PLEASE IDENTIFY THE INTEREST RATES
5 AND ISSUANCE COSTS OF EACH TRANSACTION.
6

7 **RESPONSE:** Preparation of this response is in progress and will be provided in the
8 future.
9

10 **RESPONSE PROVIDED BY:** Katherine Clupper, Public Financial Management and Peter
11 Nissen, Acacia Financial Group
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1 **PA-ADV-11.** REGARDING THE CAPITAL PROGRAM (ITEM 5), THE DOCUMENT
2 STATES THAT IN RESPONSE TO A CHANGE IN HOW THE CITY FUNDS
3 CAPITAL PROGRAMS, THE WATER DEPARTMENT WILL ONLY
4 CONTRACT FULLY FUNDED CIP PROJECTS. PLEASE EXPLAIN
5 WHETHER THE COST OF SERVICE REFLECTS ONLY FUNDED CIP
6 PROJECTS.

7
8 **RESPONSE:** As discussed in PWD Statement No. 7A – Direct Testimony of Black &
9 Veatch, the Cost of Service analysis reflects the financing required to
10 support the projected CIP encumbrances over the Study Period of
11 FY 2021 to FY 2026.

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13 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC
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1 **PA-ADV-12.** REGARDING THE CAPITAL PROGRAM (ITEM 5), THE DOCUMENT
2 STATES “TO EVALUATE CIP PROGRAM FUNDING, BLACK & VEATCH
3 ESTIMATED THE EXPECTED PROJECT COMMITMENTS FOR EACH
4 FISCAL YEAR OF THE STUDY PERIOD, BASED UPON THE WATER
5 DEPARTMENT’S CIP BUDGET AND ADJUSTED TO REFLECT THE
6 FOLLOWING...”

7 A. PLEASE EXPLAIN WHAT THE PHRASE “PROJECT COMMITMENT”
8 ENTAILS.

9 B. WHAT DOES THE PHRASE “ADJUSTED TO REFLECT” MEAN FOR EACH
10 BULLET POINT? FOR EXAMPLE “THE ROLL-FORWARD OF REMAINING
11 FY 2020 BUDGET APPROPRIATIONS”, DOES THAT MEAN COSTS WERE
12 INCLUDED OR REMOVED?

13
14 **RESPONSE:**

15 A. “Project commitment” refers to total contract projections as well as salaries and
16 vehicle purchases of the Philadelphia Water Department. In the context of the
17 Capital Program, this means that the Water Department anticipates committing
18 monies toward projects in a given fiscal year. Please note that this phrase was
19 changed to encumbrances in the final version of BV-6 WP-1.

20 B. Each bullet point is explained as follows:

21 a. “The rollforward of remaining FY 2020 budget appropriations
22 associated with vehicle purchases” means that the Water Department
23 did not use the full FY 2020 approved budget appropriation during FY
24 2020, and the remaining appropriation (along with the associated
25 expense) will be utilized toward the purchase of vehicles in FY 2021.

26 b. “The rollforward of remaining FY 2021 budget appropriation due to
27 bidding and project-related delays, as provided by the Water
28 Department” means the portions of the FY 2021 budget appropriation

1 costs were not utilized in FY 2021, and the Water Department
2 anticipates using these funds in FY 2022.

- 3 c. "The shift in positions from the Capital budget to the O&M budget"
4 means the salary costs currently budgeted as a capital expense are
5 shifted to the O&M Budget beginning in FY 2022, and the associated
6 Capital Program costs related to salaries funded during the study period
7 are reduced accordingly.
- 8 d. "Annual inflation of 3.0% based on industry construction cost indices
9 for FY 2023 to FY 2026 capital program costs" means the Capital
10 Program costs are adjusted to reflect inflation beginning in FY 2023.
- 11 e. "Removal of contingencies by applying an adjustment factor of 85% to
12 planned improvements, excluding Engineering and Administration and
13 Vehicles" means Capital Program costs are reduced based upon the
14 specified adjustment factor during the Study Period.

15
16 The above steps are delineated in the response attachment to PA-ADV-13.

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18 **RESPONSE PROVIDED BY:** Black & Veatch Management Consulting, LLC
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PA-ADV-13. ACCORDING TO THE DOCUMENT (CAPITAL PROGRAM, ITEM 5, AT PAGE 11), TO ASSESS THE OVERALL DRAWDOWN OF AVAILABLE CIP FUNDING, BLACK & VEATCH ESTIMATED THE WATER DEPARTMENT’S CIP FUNDS' DRAWDOWN BASED UPON A PROJECTION OF OVERALL SPENDING OVER THE STUDY PERIOD. PLEASE PROVIDE THIS ANALYSIS IN ELECTRONIC FORMAT WITH THE FORMULAE INTACT.

RESPONSE: Please refer to response attachment PA-ADV-13.xlsx.

RESPONSE PROVIDED BY: Black & Veatch Management Consulting, LLC

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PA-ADV-14. REFERENCE CAPITAL PROGRAM, ITEM 5, TABLE 8 – PROJECTED CAPITAL PROGRAM BUDGET AND ANNUAL EXPENDITURES. PLEASE PROVIDE THIS TABLE REFLECTING THE ORIGINAL VALUES (BEFORE REFLECTING ANY ADJUSTMENTS).

RESPONSE: Please refer to response attachment PA-ADV-13.xlsx. Rows 5 through 10 of the tab entitled “PWD CIP” reflect the original values as provided by the Water Department. As noted in the subject document, these original values are based on the adopted FY 2021 capital program budget and proposed FY 2022 to FY 2027 capital program budget.

RESPONSE PROVIDED BY: Black & Veatch Management Consulting, LLC