

**RESPONSE TO PUBLIC ADVOCATE'S INTERROGATORIES AND REQUESTS FOR
PRODUCTION OF DOCUMENTS**

- PA-EXE-149. Reference Exhibit BV-E1, Table W-3 and Financial Planning Model Assumptions-37. The referenced documents indicate the use of a 4.0% inflation rate. However, when the actual calculation is tested on Table W-3, it indicates the actual rate is 3.5%.
- a. Please indicate which rate is the appropriate rate for use for the projected CIP.
 - b. Please identify and provide a copy of the source documents for the inflation rate.
 - c. Please confirm that the 2015 amounts are the actual amount.

Response:

- a. Refer to PWD Exhibit-6: Black & Veatch Corporation Cost of Service Work Papers, FINPLAN15.XLS, Capital Projects - Scen 4 - 1B and Capital Projects - Scen 4 - 2B. The inflation factor of 4.0% is used for all CIP budget line items with the exception of Engineering and Administration. The Engineering and Administration costs reflected in the CIP budget includes an allowance for inflation and is therefore not inflated in the financial planning and cost of service analysis.
- b. Refer to the previously provided response to PA-EXE-36 regarding the source documents for the CIP inflation rate.
- c. The 2015 amounts of the CIP Budget reflect the Water Fund's adopted budget for FY 2015.

Response Provided By: Ann Bui, Prabha Kumar and David Jagt, Black & Veatch:

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PA-EXE-150. Reference Exhibit BV-E1, Table W-4.

- a. Please provide supporting documentation showing the derivation of the 1.5% issuance costs.
- b. Please explain how the Capital Account Deposit, Grants and Assessments on Line 8 was projected for FY 2016 through 2018 and provide supporting documentation.
- c. Please provide supporting documentation showing the derivation of the interest income on the Construction Fund as presented on Line 11 of Exhibit BV-E1 and as presented in the Financial Planning Model Fund 2 (PDF page 341).

Response:

- a. As presented on Line 3 of Table W-4, the 1.5% issuance costs in Fiscal Year 2017 to FY 2021 are derived by multiplying the Total Issue (Line 5 of Table W-4) by 1.5%. For example in FY 2017, the \$1,742,000 of issuance costs is derived as 1.5% of the total issue of \$116,100,000.

$$\text{FY 2017 Issuance Costs} = \$116,100,000 \times 0.015 = \$1,742,000$$

Refer to the previously provided response to PA-EXE-147 regarding the 1.5% issuance cost.

- b. The Capital Account Deposit, Grants, and Assessments projected FY 2016 Capital Account Deposit for the Water Fund (\$21,215,000) is based on the FY 2016 Budget. The Water Fund is allocated 41.06% of the Capital Account Deposit based on the distribution of the Water Fund plant investment. The FY 2016 Water Fund Capital Account Deposit is inflated based on 2.5% per year. The increase in FY 2017 is due to the anticipated receipt of \$2.6 million of retainage associated with the water utility related Pennvest Loans (Series 2009B and Series 2009C).
- c. The projected Construction Fund interest is calculated based on the average of the projected beginning fund balance and projected ending fund balance excluding the interest earnings for each fiscal year and the estimated interest earnings rate of 0.36%. For example, as presented in PWD Exhibit-6: Black & Veatch Corporation Cost of Service Work Papers, FINPLAN15, FUNDS-2, the FY 2016 projected Construction Fund interest for the water utility of \$498,737 is calculated based on the average of the Construction Fund FY 2016 Beginning Balance of \$175,122,569 and the Construction Fund FY 2016 Ending Balance (Excluding Interest) of \$101,953,618 and the projected interest earnings rate of 0.36%.

$$\text{FY 2016 Interest} = [(\$175,122,569 + \$101,953,618) / 2] \times 0.0036 = \$498,737$$

Response Provided By: Ann Bui, Prabha Kumar and David Jagt, Black & Veatch

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PA-EXE-151. Reference Exhibit BV-E1, Table W-5.

- a. Please explain why there is no amount for debt service for 2015.
- b. Please how the "Pennvest Loan-Parity Pennvest" program works. Include an explanation of how an entity qualifies for Pennvest. Also, compare and contrast Pennvest loans to revenue bonds.

Response:

- a. Table 5 of PWD St.-9A: Direct Testimony and Exhibits of Black & Veatch Corporation presents no amount for 2015, as presented on Lines 5 and 9, based on the actual debt service schedule for the Series 2015A Water and Wastewater Revenue Bonds and Series 2015B Water and Wastewater Revenue Refunding Bonds. Refer to Table 1 on page 7 of Attachment "SI-31 Official Statement April 1, 2015" provided in response to Standard Interrogatory 31.
- b. The Pennsylvania Infrastructure Investment Authority (PENNVEST) is a state authority that provides loans for design, engineering and construction of publicly and privately owned drinking water distribution and treatment facilities, storm water conveyance and wastewater treatment and collection systems.

Uses of Proceeds: Design, engineering and construction costs associated with publicly and privately owned drinking water distribution and treatment facilities, storm water conveyance and wastewater collection, conveyance, treatment facilities and Brownfield site remediation.

Funding Limits: Funding packages up to \$11 million per project for one municipality; Up to \$20 million for more than one municipality; Up to \$2 million for upfront (5 year loan) design and engineering; Up to 100% of the eligible project costs; Average project size is \$1.5 million.

Terms: 1% to 5% interest rate, depending upon the county/area to be served by the project and the resulting residential user rate; Length of repayment is usually 20 years; Disbursement made monthly based upon submitted invoicing and reimbursable expenses. (Source: Pennsylvania Department of Community & Economic Development)

In 2009, EPA distributed funds from the American Recovery and Reinvestment Act of 2009 (Recovery Act) as loans or grants to states and Puerto Rico to capitalize their State Revolving Fund (SRF) programs, from which assistance was provided to finance eligible high priority water infrastructure projects. (Source Pennvest.pa.gov)

As part of the Recovery Act funds, the City of Philadelphia Water Department received approval from PENNVEST for a series of loans with a total maximum loan amount of \$214.9 million in 2009 and 2010. For Individual loan information please see testimony exhibit, ML-7 titled "Financial Statements", Note 14, Debt Payable, page number 31.

Response Provided By: Ann Bui, Prabha Kumar and David Jagt, Black & Veatch

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PA-EXE-152. Reference Exhibit BV-E1, Table W-6.

- a. Under the caption “Additional Service Revenue Required”, are those percentages and amounts for 2019, 2020, and 2021 assumed rate increases?

Response:

The percentages and amounts for fiscal years 2019, 2020 and 2021 are the projected revenue adjustments needed to meet all of the obligations of the water utility as developed in the projected financial plan.

Response Provided By: Ann Bui, Prabha Kumar and David Jagt, Black & Veatch

**RESPONSE TO PUBLIC ADVOCATE'S INTERROGATORIES AND REQUESTS FOR
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PA-EXE-153. Please provide a copy of the FY 2015 financial statements. Please indicate if the financial statements provided are audited.

Response:

The requested material is not available at this time and will be provided in the future.

Response Provided By: Melissa LaBuda, Philadelphia Water Department

**RESPONSE TO PUBLIC ADVOCATE’S INTERROGATORIES AND REQUESTS FOR
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PA-EXE-154. Please provide the source documents (not references) which were utilized for obtaining all FY2015 data (revenues, expenses, etc.) included in the filing.

Response:

Information about “revenues, expenses, etc.” related to the Water fund can be found in the City’s financial reports. All financial reports can be found on the Office of the Director of Finance's website, under financial reports, <http://www.phila.gov/finance/>.

Response Provided By: Melissa LaBuda, Philadelphia Water Department

**RESPONSE TO PUBLIC ADVOCATE'S INTERROGATORIES AND REQUESTS FOR
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PA-EXE-155. Reference Black & Veatch Supplemental Direct Testimony, Page 3, Conveyance Capital Cost Allocation. It is stated that the sewer mains capacity capital cost is allocated 64% to stormwater and 36% to sanitary sewage based on a weighted pipe capacity analysis which were affirmed in the 2012 rate proceeding.

- a. When was the weighted capacity analysis, that was affirmed in the 2012 rate proceeding, performed?
- b. If a weighted capacity analysis that is more recent than the 2012 capacity analysis has been performed, please provide it?

Response:

- a. The weighted capacity analysis was performed in October of 2011.
- b. A more recent analysis has not been performed since the 2012 proceeding. During the development of the cost of service analysis for the current rate proceeding, Black & Veatch reviewed the October 2011 analysis with PWD staff and reaffirmed that validity of 64%/36% allocation factor.

Response Provided By: Ann Bui, Prabha Kumar and David Jagt, Black & Veatch

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PA-EXE-156. Reference Black & Veatch Supplemental Direct Testimony, Page 3, discussion on the proposed O&M costs that impact the level of sanitary and sewer revenue requirements.

- a. What does “the Water Department has experienced positive response from private properties for the incentive programs” mean? How is positive response measured? Please provide the analysis that quantifies the positive response.
- b. Please provide evidence that the cost of private greened acre achieved through the incentive program is 1/3 less than public greened acre projects.

Response:

- a. PWD measures the positive response for the SMIP/GARP program based upon the amount budgeted for the program versus the amount of payments made for SMIP/GARP Projects. Refer to the following table:

Philadelphia Water Department
SMIP/GARP Budget versus Payments Tracking

Fiscal Year (FY)	SMIP/GARP Budget	SMIP/GARP Payments	Payment to Budget
FY 2013	\$ 5,175,000	\$ 4,671,556	90.3%
FY 2014	\$ 5,200,000	\$ 4,208,221	80.9%
FY 2015	\$ 10,250,000	\$ 13,598,000	132.7%
Total: Budget vs Payments	\$ 20,625,000	\$ 22,477,777	109.0%

- b. Based upon PWD internal analysis, the cost for private SMIP/GARP projects is approximately \$90,000 per greened acre. This cost is based upon awarded and/or completed SMIP/GARP projects to date. The public project cost is approximately \$300,000 per greened acre and is based upon PWD construction/design contracts to date. Capital costs due to PWD inspection and PWD project management are excluded in the public project cost per greened acre.

Response Provided By: Erin Williams, Philadelphia Water Department and Prabha Kumar, Black & Veatch

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

PA-EXE-157. Reference Black & Veatch Supplemental Direct Testimony, pages 8 & 9, discussion on the revenue impact of the CAP program. It is stated that the projections assume CAP enrollees will decrease annually as number of parcels cease to meet eligibility requirements.

- a. What are the eligibility requirements?
- b. What is the basis for the assumption that the number of parcels meeting eligibility will decrease?
- c. Please provide evidence that CAP revenue impact has decreased for FY 14 through most recent date.

Response:

- a. The CAP program eligibility requirements are defined in the Philadelphia Water Department Regulations, Chapter 2 § 204.0 (B).
- b. The CAP program enrollment period ended on September 30, 2013. As the enrollment is closed, no additional customers can enter the program. Customers already enrolled will remain in the program until they no longer meet the assistance requirements as defined in Philadelphia Water Department Regulations, Chapter 2 § 204.0 (F).
- c. The table below presents the following evidence:
 - Decline in the number of parcels that have remained in the CAP program since FY 2014; and
 - Decline in the revenue impact, as of year ending FY 2014, FY 2015 and as of the end of first quarter of FY 2016:

	FY 2014 (Year-end)	FY 2015 (Year-end)	FY 2016 (End of Q1)*
Number of Parcels	636	593	520
Annual Revenue Impact	\$4,614,777	\$4,164,072	\$880,082

*The year-end revenue impact projection for FY 2016, based on annualizing the FY 2016-Q1 revenue impact, is \$3,520,327.

Response Provided By: Erin Williams, Philadelphia Water Department and Prabha Kumar, Black & Veatch.

RESPONSE TO PUBLIC ADVOCATE'S INTERROGATORIES AND REQUESTS FOR PRODUCTION OF DOCUMENTS

PA-EXE-158. Reference Black & Veatch Supplemental Direct Testimony, page 14, discussion on the expected impact of the Stormwater Credit.

- a. Provide supporting calculations for the FY17 and FY 18 expected IA and GA square footage.
- b. Provide supporting documentation for the stormwater credit of \$11.45 million in FY 16, \$15.11 million in FY 17 and \$17.26 million in FY 18.
- c. Please explain why stormwater SMIP and GARP credits decreased in FY 16 to \$11.45 million from \$13.60 in FY 15.
- d. Please explain why WRAP city grants decreased in FY 18 to 1.27 million from \$4.0 million in FY 17.

Response:

- a. Refer to PWD Statement 9-A: Direct Testimony of Black & Veatch Corporation, Tables SW-5 for details related to the projected IA and GA credits square footage . Also refer to BV-S4, provided in PWD Statement 9-B: Supplemental Direct Testimony and Exhibits of Black & Veatch Corporation, for a detailed discussion of the billable IA and GA square footage projections.
- b. Refer to the tables provided in Response Attachment PA-EXE-158. The Contra Revenue (revenue reduction impact) is calculated by applying the effective GA and IA rates for the given fiscal year to the projected GA and IA credits for each of those years.

Note - The estimated stormwater credit impact in FY 16 is \$13.79 million. The \$11.45 million referenced in PA-EXE-158 (b) is the FY 16 budget for the SMIP/GARP Program.

- c. The Water Department's actual expense for the SMIP/GARP Program in FY 15 was \$13.60 million due to the nature of the SMIP/GARP project funding requests that were received. As noted in PWD Statement 4: Direct Testimony of Joanne Dahme and Erin Williams, Exhibit JD-2, additional funding was available for the SMIP/GARP program due an influx of one-time Act 13 grant funding.

The Water Department defines a SMIP/GARP budget for each fiscal year and expects to award funding only up to 100% of that budget. For FY 2016, the SMIP/GARP amount that the Water Department has budgeted is set only at \$11.45 million.

- d. WRAP / UESF City Grants decreased from \$4.0 million in FY 17 to \$1.27 million in FY 18, as the WRAP City Grants are anticipated to be discontinued with the implementation of the new customer assistance program in FY 18. Refer to BV-S1 Appendix 6, provided in PWD Statement 9-A: Direct Testimony of Black & Veatch Corporation.

Response Provided By: Ann Bui, Prabha Kumar and David Jagt, Black & Veatch

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PA-EXE-159. Reference BV-S3 Pages 1- 3 SMIP/GARP Cost Amortization.

- a. Please explain what PIDC is and describe the functions or services it provides relative to SMIP and GARP.
- b. Please provide supporting documentation showing the derivation of the annual greened acres for FY 2016, 2017 and 2018.
- c. Please provide supporting documentation showing the derivation of the completed project values for FY 2016, 2017 and 2018.
- d. Please provide the source document for the 1.5% service fee.
- e. Please provide documentation for the \$75,000 annual administrative fee.
- f. Please explain why wholesale customers will be billed retroactively for FY 2013-2016 costs, and when retroactive billing will occur.
- g. Provide documentation showing the derivation of the annual amortization of \$653,622 and \$2,959,412.

Response:

- a. The PIDC, as referred to in BV-S3, is an abbreviation for PIDC-Local Development Corporation (PIDC-LDC), which is a non-profit corporation organized under the laws of the Commonwealth of Pennsylvania. It administers the SMIP and GARP grant programs pursuant to a Grant Agreement as amended between the City of Philadelphia and the Pennsylvania Authority for Industrial Development (PAID) and an Assignment of Grant Agreement between PAID and PIDC-LDC.
- b. Refer to the Response Attachment PA-EXE-159A.
- c. Refer to the Response Attachment PA-EXE-159 A.
- d. The 1.5% service fee is outlined in the Response Attachment PA-EXE-159B.
- e. The \$75,000 administration fee is outlined in the Response Attachment PA-EXE-159B.
- f. The LTCP amortization is based on costs incurred on SMIP/GARP projects that are ‘completed and verified’. The construction of the first series of SMIP/GARP projects was completed and verified during FY 2013 through FY 2015. Hence, the wholesale customers are being retroactively billed for those costs. Retroactive billing will occur in FY 2017.
- g. Refer to the Response Attachment PA-EXE-159A.

Response Provided By: Erin Williams, Philadelphia Water Department and Prabha Kumar and David Jagt, Black & Veatch.

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PA-EXE-160. Please provide a schedule (not references) in the format shown on Table C-1 for the Residual Fund for each fiscal year FY2008-FY2015.

Response:

See response to PA-EXE-57 for ending balances for FY2013, FY2014 and FY2015. Information for previous years can be found in the Water Department's Official Statement. All Official Statements can be found on the City Treasurer website, under investor information, <http://www.phila.gov/investor/index.html>.

Response Provided By: Melissa LaBuda, Philadelphia Water Department

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PA-EXE-161. Reference the Response to PA-EXE-3. Please provide documentation showing the derivation of 1.5% decrease in usage, not a reference.

Response:

The 1.5% annual decrease in average usage per account for 5/8” meter General Service Customers (including Senior Citizens) for FY 2016 through 2019 is based on the historical annual average decrease in usage per account.

As presented in PWD Exhibit-6: Black & Veatch Corporation Cost of Service Work Papers, Finplan2015, Customer-4, the Average Annual Billed Volume per Account for 5/8” Meter General Service (including Senior Citizens) accounts has decreased from 7.89 Mcf in FY 2010 to 7.31 Mcf in FY 2015. This decrease represents an average annual decrease of 1.52% from FY 2010 to FY 2015.

$$\text{Average Annual Decrease} = \left\{ \left(\frac{7.31 \text{ Mcf}}{7.89 \text{ Mcf}} \right)^{1 / (2015 - 2010)} - 1 \right\} \times 100 = 1.52\%$$

Note that the response to PA-EXE-3 presented the average annual decrease in the average billed volume per account for 5/8” meter General Service (excluding Senior Citizens) accounts. The average annual decrease for these accounts was 1.57%, which was based on a decrease from 7.99 Mcf in FY 2010 to 7.38 Mcf in FY 2015.

Response Provided By: Ann Bui, Prabha Kumar and David Jagt, Black & Veatch

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PA-EXE-162. Reference the Financial Plan Assumptions document (BV-S1), please provide the following data for 5/8" meter general service customers in electronic format with the formulas intact.

- a. Customer-3 number of accounts for each month for FY 2015 and FY 2016 through the most recent date available.
- b. Customer-3 billed usage for each month for FY 2015 and FY 2016 through the most recent date available.
- c. Customer-4 average usage per account for each month for FY 2015 and FY 2016 through the most recent date available.

Response:

- a. Refer to item a. of the previously provided response to PA-EXE-39 regarding FY 2015 number of accounts by month for the 5/8" General Service (Including Senior Citizens) customers. The year to date monthly data for FY 2016 is not readily available.
- b. Refer to Attachment Response to PA-EXE-162B.xls regarding FY 2015 billed usage by month for the 5/8" General Service (Including Senior Citizens) customers. The year to date monthly data for FY 2016 is not readily available.
- c. The responses to items a. and b can be utilized to develop the FY 2015 average billed usage per account by month for the 5/8" General Service (Including Senior Citizens) customers. The year to date monthly data for FY 2016 is not readily available.

Response Provided By: Ann Bui, Prabha Kumar and David Jagt, Black & Veatch