

**BEFORE THE PHILADELPHIA WATER, SEWER AND STORM WATER  
RATE BOARD**

**In the Matter of a Proposed Rate Increase in** :  
**Water, Sewer and Storm Water Rates** : **FY 2021-2022 Rates**

**Public Advocate's Interrogatories & Requests for Production of Documents**

**SET V**

- PA-V-1. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab. Please provide the supporting documentation showing the derivation of the values presented in Assumption - 1.
- PA-V-2. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab. Please provide the supporting documentation showing the derivation of the values presented in Assumption - 2.
- PA-V-3. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab. Please provide the supporting documentation showing the derivation of the values presented in Assumption - 3.
- a. Please explain why the percentages for Interest Income and Debt Service Reserve Interest Income for FY 2020 and beyond are projected to be lower than 2019.
  - b. Please explain what "FY 2019 SCOOP" is.
- PA-V-4. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Excel line 48.
- a. Please explain the nature of the "Other" category.
  - b. Assuming the "Other" category is composed several revenue categories, please provide a breakdown which identifies the major components of these revenues and the respective annual amounts for 2016 through 2019.
- PA-V-5. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Excel line 50.
- a. Please explain the cause of the decrease for the projected annual amounts for "Permits Issued by L&I."
  - b. According to the data presented in the Other Revenue Tab, these revenues have increased annually from 2014 to 2019, why is PWD projecting a decrease for this account beginning in 2020?
  - c. Please explain what "Permits Issued by L&I" revenue is.

- PA-V-6. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Excel line 52. Please explain what “City & UESF Grants” are and provide the basis of the annual projection amount.
- PA-V-7. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab.
- a. Please provide the formula for the Compression Factor or show the calculation of the factor.
  - b. Please explain why there is a significant drop in the collection factor from May to June as shown on Excel lines 201 and 202.
  - c. Please confirm that Column B, Excel lines 191 to 202 are projections.
- PA-V-8. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Excel line 293. Please explain the increase in the Aqua PA Lump Sum Payment beginning in 2020 and explain why the annual amount remains constant going into the future.
- PA-V-9. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Excel lines 318 to 330.
- a. Please explain the annual change in the volumetric rate beginning in 2020.
  - b. Please explain the annual decrease in the capacity rate.
  - c. Please explain the annual change in the SS rate.
  - d. Please explain the annual change in the BOD rate.
  - e. Please explain the decrease in the Lump Sum Payment beginning in 2021.
  - f. Please explain the basis for the decrease in the volume beginning in 2020 and show the derivation of the amount.
  - g. Please explain the basis for the increase in the SS billing units beginning in 2020 and show the derivation of the amount.
  - h. Please explain the basis for the decrease in the BOD billing units beginning in 2020 and show the derivation of the amount.
- PA-V-10. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Excel lines 334 to 345.
- a. Please explain the annual change in the volumetric rate beginning in 2020.
  - b. Please explain the annual decrease in the capacity rate.
  - c. Please explain the annual change in the SS rate.
  - d. Please explain the annual change in the BOD rate.
  - e. Please explain the decrease in the Lump Sum Payment beginning in 2020.
  - f. Please explain the basis for the decrease in the volume beginning in 2020 and show the derivation of the amount.
  - g. Please explain the basis for the increase in the SS billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.

- h. Please explain the basis for the increase in the BOD billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.

PA-V-11. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Excel lines 349 to 360.

- a. Please explain the annual change in the volumetric rate beginning in 2020.
- b. Please explain the annual decrease in the capacity rate.
- c. Please explain the annual change in the SS rate.
- d. Please explain the annual change in the BOD rate.
- e. Please explain the decrease in the Lump Sum Payment beginning in 2020.
- f. Please explain the basis for the decrease in the volume beginning in 2020 and show the derivation of the amount.
- g. Please explain the basis for the increase in the SS billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.
- h. Please explain the basis for the increase in the BOD billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.

PA-V-12. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Excel lines 379 to 390.

- a. Please explain the annual change in the volumetric rate beginning in 2020.
- b. Please explain the annual decrease in the capacity rate.
- c. Please explain the annual change in the SS rate.
- d. Please explain the annual change in the BOD rate.
- e. Please explain the decrease in the Lump Sum Payment beginning in 2021.
- f. Please explain the basis for the decrease in the volume beginning in 2020 and show the derivation of the amount.
- g. Please explain the basis for the decrease in the SS billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.
- h. Please explain the basis for the decrease in the BOD billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.

PA-V-13. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Excel lines 394 to 405.

- a. Please explain the annual change in the volumetric rate beginning in 2020.
- b. Please explain the annual decrease in the capacity rate.
- c. Please explain the annual change in the SS rate.
- d. Please explain the annual change in the BOD rate.
- e. Please explain the increase in the Lump Sum Payment beginning in 2020.

- f. Please explain the basis for the decrease in the volume beginning in 2020 and show the derivation of the amount.
- g. Please explain the basis for the decrease in the SS billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.
- h. Please explain the basis for the increase in the BOD billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.

PA-V-14. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Excel lines 409 to 420.

- a. Please explain the annual change in the volumetric rate beginning in 2020.
- b. Please explain the annual decrease in the capacity rate.
- c. Please explain the annual change in the SS rate.
- d. Please explain the annual change in the BOD rate.
- e. Please explain the increase in the Lump Sum Payment beginning in 2020.
- f. Please explain the basis for the decrease in the volume beginning in 2020 and show the derivation of the amount.
- g. Please explain the basis for the decrease in the SS billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.
- h. Please explain the basis for the decrease in the BOD billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.

PA-V-15. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Excel lines 423 to 435.

- a. Please explain the annual change in the volumetric rate beginning in 2020.
- b. Please explain the annual decrease in the capacity rate.
- c. Please explain the annual change in the SS rate.
- d. Please explain the annual change in the BOD rate.
- e. Please explain the decrease in the Lump Sum Payment beginning in 2020.
- f. Please explain the basis for the decrease in the volume beginning in 2020 and show the derivation of the amount.
- g. Please explain the basis for the decrease in the SS billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.
- h. Please explain the basis for the decrease in the BOD billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.

PA-V-16. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Excel lines 438 to 450.

- a. Please explain the annual change in the volumetric rate beginning in 2020.

- b. Please explain the annual change in the capacity rate.
- c. Please explain the annual change in the SS rate.
- d. Please explain the annual change in the BOD rate.
- e. Please explain the decrease in the Lump Sum Payment beginning in 2020.
- f. Please explain the basis for the increase in the volume beginning in 2020 and show the derivation of the amount.
- g. Please explain the basis for the decrease in the SS billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.
- h. Please explain the basis for the decrease in the BOD billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.

PA-V-17. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Excel lines 454 to 465.

- a. Please explain the annual change in the volumetric rate beginning in 2020.
- b. Please explain the annual change in the capacity rate.
- c. Please explain the annual change in the SS rate.
- d. Please explain the annual change in the BOD rate.
- e. Please explain the decrease in the Lump Sum Payment beginning in 2020.
- f. Please explain the basis for the decrease in the volume beginning in 2020 and show the derivation of the amount.
- g. Please explain the basis for the decrease in the SS billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.
- h. Please explain the basis for the decrease in the BOD billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.

PA-V-18. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Excel lines 469 to 480.

- a. Please explain the annual change in the volumetric rate beginning in 2020.
- b. Please explain the annual change in the capacity rate.
- c. Please explain the annual change in the SS rate.
- d. Please explain the annual change in the BOD rate.
- e. Please explain the decrease in the Lump Sum Payment beginning in 2020.
- f. Please explain the basis for the decrease in the volume beginning in 2020 and show the derivation of the amount.
- g. Please explain the basis for the decrease in the SS billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.

- h. Please explain the basis for the decrease in the BOD billing units beginning in 2020 and show the derivation of the amount. Include an explanation of why the amount remains unchanged in 2021.

PA-V-19. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Assumptions – 15. Please provide the supporting workpapers or calculations showing the derivation of the escalation factor for the following.

- a. Other Benefits
- b. Pensions
- c. General
- d. Property Leases
- e. Other 200
- f. Other 300
- g. Other 400
- h. Chemicals
- i. Transfers

PA-V-20. Reference the response to PA-I-16, Model File (FINPLAN19\_21.XLS), Assumption #s Tab, Assumptions – 15.

- a. Please explain the derivation of the affordability scale and provided the supporting calculations showing the derivation of the Red (2.00%) and Yellow (1.50%). Please explain what these percentage represent and what are the significance of these amounts.
- b. Please identify the source of the median household income.
- c. Please identify the source of the 3.0% inflation factor.

PA-V-21. Reference O&M Adjustment 1.

- a. Please provide the supporting calculation showing the derivation of the salary and wages amounts (\$442,000 – FY 2021, \$897,000 - FY 2022). In your response, provide the number of employees and the annual salary for each of the employees, and the benefits included for each position.
- b. Please provide the documentation submitted for management approval showing the justification and purpose for each position included in the adjustment.
- c. For each position, please provide the salary range and, if not previously provided, indicate what salary level was included in the cost of service for each position.
- d. Please explain why an increase in GSI Maintenance Staffing is needed.
- e. Please explain whether PWD has begun recruitment for the positions discussed above. If yes, please provide copies of the job descriptions and job posting advertisements. If no, when does PWD plan to hire the employees.

- PA-V-22. Reference O&M Adjustment 3.
- a. Please provide the supporting documentation showing how the amounts for Construction and Engineering Salaries & Wages for 2020 to 2022 were derived.
  - b. Please provide the supporting documentation showing how the amounts for Planning and Environmental Services Salaries & Wages for 2020 to 2022 were derived.
- PA-V-23. Reference O&M Adjustment 4. Please provide the supporting documentation showing how the amounts for Fire Dept Charges (Functional Hydrant Testing) for 2020 to 2022 were derived.
- PA-V-24. On Table 6 (Additional Adjustments for Projected Operating Expenses) of Schedule BV-6: WP-1, Page 6, PWD indicates that in 2020 an adjustment was made for \$3.2 Million to include the cost of various AMI related matters. However, in the Model File (FINPLAN19\_21.XLS), O&M Adjustment Tab, O&M Adjustment 5, no amount is presented in the “2020” column.
- a. Please explain how the \$3.2 million is reflected in the cost of service.
  - b. Please explain, specifically, what is involved in the DOT Various AMI related matters.
  - c. Please provide the supporting documentation showing the derivation of the \$3.2 million.
- PA-V-25. Regarding Other Department O&M, O&M Adj 1, please provide the supporting documentation showing the derivation of the amounts presented on Excel line 964 to 966 of the O&M Adjustments tab of Model File (FINPLAN19\_21.XLS).
- PA-V-26. On Schedule BV-6: WP-1, Page 8, it is stated the “projected capital program is based on the Department’s adopted FY 2020 capital program and proposed FY 2021 to FY 2026 capital program.” Please provide the Department’s adopted FY 2020 capital program budget and proposed budget for FY 2021 to FY 2026.
- PA-V-27. Please provide an analysis that shows a side by side comparison of the Black and Veatch adjusted Department CIP Budget for FY 2021 to FY 2026 and the Department’s adopted budget for FY 2021 to FY 2026.
- PA-V-28. If not previously provided, please provide workpapers and supporting documentation showing:
- a. The effect of the shift in positions from the Capital Fund to the O&M Fund on the capital budget;
  - b. The effect of the annual inflation of 3.0 percent based on industry construction cost indices on the capital budget;
  - c. The effect of the estimated cashflows for the Drinking Water Master Plan improvements on the capital budget;

- d. The effect of the anticipated program level project durations, for improvements without detailed cashflow estimates, as follows:
  - i. Water Conveyance;
  - ii. Sewer Collection;
  - iii. Facilities Improvements; and
- e. Removal of contingency, by applying an estimated 90 percent spend factor.

PA-V-29. Please provide an actual versus budget comparison of the capital program budget for FY 2017 to 2019 using the categories presented on Table 7 as presented on Schedule BV-6: WP-1, Page 8.

PA-V-30. Reference the response to PA-I-4 and PA-I-6:

- a. Is all land in the City included in the PWD's gross and impervious area calculations (e.g., street, City parks)? If no, identify the land that is excluded;
- b. If the response to subpart (a) is no, please provide an estimate of the excluded gross and impervious area; and
- c. If the response to subpart (a) is no, is it correct that the credits identified in PA-I-6 reduce the amounts paid by customers receiving credits for excluded gross and impervious areas?

PA-V-31. Reference the response to PA-I-23. Please provide a copy of the capacity factor analysis performed by Black & Veatch.

PA-V-32. Reference the Excel file WC0S19\_21\_rates, tab "LagRate," row 1008. Please explain why the PWD has not proposed rates for handbilled customers which are closer to the indicated cost of service.

PA-V-33. Reference the response to PA-I-10. Please identify the services provided to the PWD by the Division of Technology, Fleet Management, and Revenue, and explain how the amounts assigned to the PWD are determined.

PA-V-34. Reference the response to PA-I-31. Please provide the requested information with respect to the provision of potable water. Is the frequency of water quality testing generally based on quantities produced or peak day/hour demands?

PA-V-35. Reference PWD Statement No. 2, page 30, lines 15-18. Please explain when this charge is assessed.

PA-V-36. Reference the response to PA-I-25. Please provide an estimate of the costs associated with addressing the billing system limitations concerning customer types and verifying all customer types.

PA-V-37. Please provide an estimate of the annual costs incurred by the PWD to manage and implement the stormwater management credit program by type, including costs for construction of facilities for FY 2017 – FY 2019. Separately identify



amounts for which the PWD was directly responsible and amounts offset or funded by other sources.

- PA-V-38. Please identify the amounts included in the stormwater revenue requirement for FY 2021 for the stormwater management credit program by type, and indicate where those costs are included in the stormwater cost of service study. Separately identify amounts for which the PWD will be directly responsible and amounts offset or funded by other sources.
- PA-V-39. Please provide an estimate of the annual costs associated with the Green Acres Retrofit Program by type for FY 2017 – FY 2019. Separately identify amounts for which the PWD was directly responsible and amounts offset or funded by other sources.
- PA-V-40. Please identify the amounts included in the stormwater revenue requirement for FY 2021 for the Green Acres Retrofit Program by type, and indicate when those costs are included in the stormwater cost of service study. Separately identify amounts for which the PWD will be directly responsible and amounts offset or funded by other sources.
- PA-V-41. Please provide an estimate of the annual costs associated with Green City Clean Waters by type for FY 2017 – FY 2019. Separately identify amounts for which the PWD was directly responsible and amounts offset or funded by other sources.
- PA-V-42. Please identify the amounts included in the stormwater revenue requirement for FY 2021 for Green City Clean Waters by type, and indicate where those costs are included in the stormwater cost of service study. Separately identify amounts for which the PWD will be directly responsible and amounts offset or funded by other sources.