RESPONSE TO HEARING OFFICER INFORMATION REQUESTS AND FOR PRODUCTION OF DOCUMENTS

HO-I-1. IN RESPONSE TO QUESTION 24 IN PWD STATEMENT 2, MS. LABUDA RECITES A NUMBER OF STATEMENTS MADE BY BOND RATING AGENCIES REGARDING EVENTS THAT COULD LEAD TO A DOWNGRADE. FOR EACH STATEMENT, PLEASE IDENTIFY THE DOCUMENT FROM WHICH THESE STATEMENTS ARE DRAWN. IF THEY HAVE BEEN SUPPLIED AS ATTACHMENTS OR OTHER ELEMENTS OF THE ADVANCE NOTICE, PLEASED IDENTIFY THE DOCUMENT AND LOCATION WITHIN THE DOCUMENT. IF NOT SUPPLIED IN THE FILING, PLEASE PROVIDE A COPY.

RESPONSE:

Rating agency reports are part of PWD Statement No. 2, Direct Testimony and Schedules of Melissa LaBuda, Schedule ML-4, starting at pdf page 102 of 158. Specific references are provided below for each statement listed at PWD Statement No.2 page 16.

Fitch stated that difficulty in achieving timely and sufficient rate recovery would likely prompt negative rating action. It also noted that coverage is below Fitch's median for that rating category. Please see PWD Statement No. 2, pdf page 103 of 158.

Moody's Investor Service identified a relatively untested rate board as a credit challenge, and listed failure to increase rates commensurate with coverage requirements, material reductions

in debt service coverage requirements, and notable deterioration in cash and liquidity as factors that could lead to a downgrade. Please see PWD Statement No. 2, pdf page 112 of 158, Credit Challenges section and page 113 of 158, Factors that Could Lead to Downgrade section. Moody's also made note that the COA and aging infrastructure necessitate a significant capital improvement program and resulting in increased debt issuance. Please see PWD Statement No. 2, pdf page 112 of 158, Credit Challenges section. Standard & Poor's Rating Service viewed the sizeable capital improvement plan combined with the high debt-to capitalization ratio as credit weaknesses and stated that it could lower its rating or revise the outlook to negative if financial metrics deteriorate or if a significant amount of additional capital spending is added to the capital improvement plan. Standard & Poor's also made clear that there is a fairly remote chance that ratings will improve given credit challenges. Please see, PWD Statement No. 2, pdf page 120 of 158 and pdf page 123 of 158. **RESPONSE PROVIDED BY:** Melissa LaBuda, Philadelphia Water Department

HO-I-2. FOOTNOTE 4 ON PAGE 17 OF PWD STATEMENT 2 STATES THAT

POTENTIAL STATE AND FEDERAL GRANTS ARE IMMATERIAL TO THE

DISCUSSION. PLEASE EXPLAIN WHY.

RESPONSE:

The Department receives very minimal amounts of grant funding during a fiscal year. As of Fiscal Years 2016 and 2017, the Department received approximately \$ 1 million per year in grants. In fact, federal funding for water and wastewater utilities has declined dramatically since the 1980s. Moreover, the majority of federal funding in 1970s and 1980s were provided as grants, while the majority of funds since that time have primarily been loans. These grants and loans are typically provided by the EPA.

The Department has four loans from the Commonwealth of Pennsylvania's State Revolving Fund Loan, the Pennsylvania Infrastructure Investment Authority or PennVest; two of the four loans are supported by the American Recovery Reinvestment Act. As of June 30, 2017, the loans totaled approximately \$134 million.

The City and its Financial Advisors are monitoring the Water Infrastructure Finance and Innovation Act "WIFIA", a federal credit program administered by EPA for eligible water and wastewater infrastructure projects. The program is another loan program. The first round of submissions are in the project and credit review process and to date only one loan has been successfully finalized. Both the PennVest and WIFIA Loan programs are fully amortizing loans with interest due, similar to bond financings.

RESPONSE PROVIDED BY: Melissa LaBuda, Philadelphia Water Department

ON IN RESPONSE TO QUESTION 31 IN PWD STATEMENT 2, MS. LABUDA STATES THAT IF THE DEPARTMENT'S REVENUES EXCEED PROJECTIONS, "THE DEPARTMENT SHOULD USE THE EXCESS REVENUES TO GROW COVERAGE BEYOND THE STATED MINIMUMS TO IMPROVE THE CASH FUNDING AND THE BOARD'S DECISION SHOULD ENABLE THE DEPARTMENT TO GROW COVERAGE IF THIS OCCURS. THE BOARD'S DECISION ALSO SHOULD NOT LIMIT THE DEPARTMENT'S ABILITY TO USE POTENTIAL RELEASES FROM THE DEBT SERVICE RESERVE ACCOUNT TO REDUCE FUTURE BORROWING COSTS."

A. DID THE BOARD'S DECISION IN THE 2016 RATE CASE NOT ENABLE THE DEPARTMENT TO GROW COVERAGE AS DESCRIBED OR LIMIT THE DEPARTMENT'S USE OF POTENTIAL RELEASES FROM THE DEBT SERVICE RESERVE ACCOUNT AS DESCRIBED?

B. WHAT PROVISIONS WOULD BE NECESSARY IN THE BOARD'S DECISION TO ENABLE THE DEPARTMENT TO GROW COVERAGE OR USE DEBT SERVICE RELEASES TO REDUCE FUTURE BORROWING COSTS? WHAT PROVISIONS WOULD CONSTITUTE A DECISION NOT TO SO ENABLE THE DEPARTMENT?

RESPONSE:

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A) The Board's decision did not prevent the Department from growing coverage and / or limit the use of potential releases from the debt service reserve account.

| 1 | B) The Board's decision should not set a ceiling or a cap on the senior debt service |
|----|--------------------------------------------------------------------------------------|
| 2 | coverage ratio. Conversely, setting a ceiling or a cap on the senior debt service |
| 3 | coverage ratio would prevent the Department from using debt service reserve fund |
| 4 | releases to reduce future borrowing costs. |
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| 12 | RESPONSE PROVIDED BY: Melissa LaBuda, Philadelphia Water Department |
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HO-I-4.

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RESPONSE:

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In September 1997, the Water Department and the Water Revenue Bureau began the implementation of the Automatic Meter Reading Program (the "AMR Program") involving the replacement of all residential water meters with new meters equipped with radio transmitter endpoint reading devices ("ERT"). Installation commenced on schedule on September 11, 1997. By June 30, 2012, more than 482,841 new meters had been

PER THE NEW ISSUE REPORT REGARDING THE ISSUANCE OF

APPROXIMATELY \$293,000,000 WATER AND WASTEWATER REVENUE

BOND (SERIES 2017, SCHEDULED TO SELL THE WEEK OF APRIL 3,

2017)., CONTAINED IN MLB-4, FITCH IS QUOTED AS STATING THAT

BUT THAT, LOW INCOME LEVELS AND HIGH UNACCOUNTED-FOR

WATER PERSIST, "CONTRIBUTING TO HISTORICALLY BELOW-

THAT "IMPLEMENTATION OF AUTOMATIC METERS AND OTHER

PAST FEW YEARS." LATER, FITCH IS QUOTED AS SAYING THAT

IMPLEMENTATION OF AN AUTOMATIC METER READING SYSTEM"

AUTOMATIC METER READING SYSTEM REFERENCED BY FITCH,

INCLUDING THE TECHNOLOGY USED TO RECORD, COMMUNICATE

AND GATHER WATER USAGE DATA, THE MANNER IN WHICH THAT

DATA IS USED TO ASSIST IN WATER LOSS REDUCTION, THE ANNUAL

INVESTMENT TO CREATE THE SYSTEM, AND THE ONGOING COSTS TO

ONGOING EFFORTS TO REDUCE WATER LOSS INCLUDE "THE

AMONG OTHER PROGRAMS. PLEASE DESCRIBE FULLY THE

OPERATE AND MAINTAIN THE SYSTEM.

THE CUSTOMER BASE ECONOMIC CHARACTERISTICS REMAIN MIXED

AVERAGE COLLECTION RATES." FITCH GOES ON TO SAY, HOWEVER,

PROGRAMS HAVE LED TO IMPROVEMENT IN BOTH AREAS OVER THE

installed. From 2011 through 2013, as required in the long-term meter reading contract, the service provider (ITRON) conducted battery replacement of the majority of customer ERTs. The installation of the AMR system increased the reliability of the monthly meter readings since it was no longer necessary to gain access to 480,000+ accounts every month. This, in turn, allowed for more accurate billing. The switch to AMR also assisted in water loss reduction by providing actual usage readings at an increased interval. A key variable in understanding non-revenue water is accurate and timely metered consumption data. Prior to AMR it was difficult to accurately quantify Non-Revenue water due to the number of estimated metered accounts and the limited frequency of manual meter readings.

The capital investment for the installation of the AMR system was approximately \$65 million dollars in fiscal years 1998 through 2001. The annual capital investment for AMR is budgeted at approximately \$2.0 million dollars for the purchase of meters for commercial and industrial properties and to replace residential meters lost due to theft, damage, and or the purchase of residential fire sprinkler system (RFSS) meters. The annual operating cost is budgeted at \$2.2 million dollars for meter reading.

RESPONSE PROVIDED BY: Debra McCarty, Philadelphia Water Department

HO-I-5.

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DOES THE DEPARTMENT HAVE ANY INTENTION OF INSTALLING OR BEGINNING TO INSTALL A NEW AUTOMATIC METER READING AND METER DATA MANAGEMENT SYSTEM WITHIN THE RATE PERIOD COVERED IN THIS DOCKET? IF SO, PLEASE DESCRIBE FULLY THE BUSINESS PLAN FOR SUCH AN INVESTMENT, INCLUDING THE TECHNOLOGY TO BE USED TO RECORD, COMMUNICATE AND GATHER WATER USAGE DATA, THE MANNER IN WHICH THAT DATA WILL USED TO ASSIST IN FUNCTIONS OF THE DEPARTMENT, THE ANNUAL INVESTMENT TO CREATE THE SYSTEM, AND THE ONGOING COSTS TO OPERATE AND MAINTAIN THE SYSTEM

RESPONSE:

The AMR system technology is reaching the end of its useful life. To prepare for this, the Department performed an analysis of the existing meters and determined that they would not need to be replaced when the AMR technology is replaced. An RFP was then issued to replace the AMR system with Advanced Metering Infrastructure (AMI). The Department is currently in the final stages of negotiations with the vendor selected to implement the new AMI technology. If the Department can successfully negotiate a contract, then City Council must approve the ordinances allowing this long term contract to proceed. It is currently budgeted at \$60-90M for the life of the project with significant upfront costs for the installation of the devices. Attached is a summary sheet on AMI and below is a summary of the stated business drivers:

Cost Effective Customer Billing and Collections

- New system, meter data transmitters and receivers will work with existing highly accurate water meters
- Compatibility with existing WRB billing software

- Flexibility to program the system to elicit the highest functionality possible from each device; water meter, meter data transmitter, and data receiver
- Flexibility to add new meters to the system as needed in order to maintain high accuracy readings from both residential and commercial customers

Enhance Customer Service

- Online access, new system will record water usage in hourly intervals, and the data will be made available to customers through a web interface
- Proactive notifications, new system will be programmed to analyze hourly data for probable leaks, and customers may opt-in to be notified via telephone, email or text if the system detects a probable leak
- Reduce billing disputes, providing data to customers will expand understanding of conservation and consumption, and how much water was used throughout the month

Streamline PWD Operational Processes

- Read all meters remotely, reducing time spent by PWD visiting properties to investigate questionable meter readings and allowing a greater focus on a more targeted set of meters
- Integrated theft detection and meter failure notification functionality, so that PWD may fix or replace meters and rapidly return such accounts to a billable status

RESPONSE PROVIDED BY: Debra McCarty, Philadelphia Water Department

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NEW YORK CITY APPEARS TO BE AN OUTLIER IN THE CITIES COMPARED IN THE PEER REVIEW. PLEASE RECALCULATE THE RANKINGS AND OTHER RESULTS WITHOUT INCLUDING THE NEW YORK CITY DATA. ALSO, PLEASE EXPLAIN WHY NEW YORK CITY SHOULD BE INCLUDED DESPITE THE LARGE DIFFERENCES IN ITS METRICS FROM ALL THE OTHER PEER REVIEW CITIES

RESPONSE:

HO-I-6.

The peer systems were developed with the PWD Finance staff and the financial advisors. While each system has its own characteristics, they were selected because they were either similar in size or service areas, include industrial urban centers and are located largely in the Mid-Atlantic and Midwestern regions. NYC, while a large utility, is considered a peer system because of the urban service area and location in the northeastern/mid-atlantic region of the country.

The medians used in the charts and ranking materials are provided by Moody's Investor Service and are compiled internally using a basket of utilities rated by Moody's. It is not possible to adjust the medians with or without specific systems since the ratios are not calculated by the PWD or the financial advisors.

RESPONSE PROVIDED BY: Melissa LaBuda, Philadelphia Water Department