

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

CITY OF PHILADELPHIA  
PHILADELPHIA WATER DEPARTMENT PRESENTATION  
RATE BOARD HEARING  
Monday, February 22, 2016  
MINUTES of FORMAL HEARING

- - -

LOCATION: 1515 Arch Street, 18th Floor  
Philadelphia, Pennsylvania

REPORTED BY: ANGELA M. KING, RPR  
Registered Professional Reporter

- - -

HELD BEFORE:

NANCY BROCKWAY - HEARING OFFICER  
BERNARD BRUNWASSER - CHAIR  
FOLASADE A. OLANIPEKUN-LEWIS, BOARD MEMBER  
SONNY POPOWSKY, BOARD MEMBER  
MICHAEL CHAPMAN, BOARD MEMBER  
LEE HUANG, BOARD MEMBER

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

Page 2	Page 4
<p>1                   - - -</p> <p>2           HEARING OFFICER BROCKWAY: Good morning.</p> <p>3   My name is Nancy Brockway, Hearing Officer for</p> <p>4   the Hearing Board. This is, as you know, a</p> <p>5   presentation by the company -- excuse me, by the</p> <p>6   Department of its quest for rate increase. And</p> <p>7   primarily, an opportunity for the Board to ask,</p> <p>8   inquire about things which may not be clear from</p> <p>9   what they read or from what is said.</p> <p>10   And after the Board has had it's</p> <p>11   opportunity, the active participants will also</p> <p>12   have their opportunity. We are going to go until</p> <p>13   5:00. I will be here until 5:00. I'm not sure</p> <p>14   that everybody has to be here until 5:00. I</p> <p>15   think the first thing we might want to do is just</p> <p>16   go around the room, go around the table, anyway</p> <p>17   and have folks just say who they are and where</p> <p>18   they are from.</p> <p>19   MS. BECKLEY: I'm Frances Beckley. I</p> <p>20   work for the City of Philadelphia Law Department.</p> <p>21   And I'm counsel to the Board.</p> <p>22   MR. BAKARE: My name is Ade Bakare. I'm</p> <p>23   a lawyer working in Harrisburg. I represent the</p> <p>24   Philadelphia Large Users Group of Industrial</p>	<p>1           MS. KUMAR: I'm Prabha Kumar from Black</p> <p>2   &amp; Veatch.</p> <p>3           MR. JAGT: Dave Jagt with Black and</p> <p>4   Veatch.</p> <p>5           MS. McCARTY: Debra McCarty, Water</p> <p>6   Commissioner.</p> <p>7           MS. BUI: Ann Bui, Black &amp; Veatch.</p> <p>8           MR. DASENT: Andre Dasant, outside</p> <p>9   counsel Philadelphia Water Department.</p> <p>10          MS. ALLEN: Valarie Allen from Ballard</p> <p>11   Spahr.</p> <p>12          HEARING OFFICER BROCKWAY: Can everybody</p> <p>13   speak up a little bit?</p> <p>14          MR. HARVEY: Mark Harvey, Director of</p> <p>15   Operations for the Revenue Bureau.</p> <p>16          MS. BETHEL: Michelle Bethel, Deputy</p> <p>17   Revenue Commissioner for the Water Revenue.</p> <p>18          MS. CROSBY: Susan Crosby, Law</p> <p>19   Department, counsel to the Water Revenue</p> <p>20   Department.</p> <p>21          MS. LABUDA: Melissa LaBuda, Deputy</p> <p>22   Water Commissioner.</p> <p>23          MR. SCHWARZ: Scott Schwarz, Law</p> <p>24   Department. Counsel for the Water Department.</p>
Page 3	Page 5
<p>1   Customers and the Large Department Service</p> <p>2   Territory.</p> <p>3           MS. OLANIPEKUN-LEWIS: I'm Folasade</p> <p>4   Olanipekun-Lewis, Board Member.</p> <p>5           MR. POPOWSKY: I'm Sonny Popowsky. I'm</p> <p>6   a Member of the Board.</p> <p>7           MR. CHAPMAN: Michael Chapman.</p> <p>8           MR. BRUNWASSER: Bernie Brunwasser,</p> <p>9   Member of the Board, former Water Commission.</p> <p>10          HEARING OFFICER BROCKWAY: Chairman of</p> <p>11   the Board.</p> <p>12          MR. BRUNWASSER: Chairman.</p> <p>13          MR. HUANG: Lee Huang, Econsult</p> <p>14   Solutions.</p> <p>15          MS. PICKENS: Good morning, everyone.</p> <p>16   I'm Josie Pickens. I'm an attorney with</p> <p>17   Community Legal Services here on behalf of the</p> <p>18   Public Advocate.</p> <p>19          MR. GOULD: George Gould, also Community</p> <p>20   Legal Services, Public Advocate.</p> <p>21          MS. TRAN: Good morning. Thu Tran, CLS,</p> <p>22   the Public Advocate.</p> <p>23          MR. BALLENGER: Good morning. Robert</p> <p>24   Ballenger, CLS for the Public Advocate.</p>	<p>1           MS. DAHME: I'm Joanne Dahme, Public</p> <p>2   Affairs Manager, Water.</p> <p>3           (Dan from PECO/Exelon also present. Couldn't</p> <p>4   hear full name.)</p> <p>5           MS. CLUPPER: Kathy Clupper, Public</p> <p>6   Financial Management.</p> <p>7          HEARING OFFICER BROCKWAY: I think it</p> <p>8   would be helpful for people who are going to</p> <p>9   talk, even ask questions, would give their</p> <p>10   business card or write out that information for</p> <p>11   our court reporter.</p> <p>12          Anybody else want to --</p> <p>13          MR. HELBING: Mike Helbing. I represent</p> <p>14   PennFuture.</p> <p>15          MR. DAVIS: Jon Davis with Raftelis</p> <p>16   Financial Consultants working with the Water</p> <p>17   Department.</p> <p>18          MS. LOCKLEAR: Henrietta Locklear, also</p> <p>19   with Raftelis.</p> <p>20          MR. KREPS: Bart Kreps with Raftelis.</p> <p>21          MR. MARKUS: Ed Markus, Amawalk</p> <p>22   Consultant.</p> <p>23          MR. PALLADIN: James Palladin.</p> <p>24          HEARING OFFICER BROCKWAY: Anybody else?</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 6</p> <p>1 You don't have to. 2 (No further introductions made.) 3 HEARING OFFICER BROCKWAY: Thank you. 4 The Water Rate Board Ordinance provides 5 for this day to consist of an opportunity for the 6 Department to present its case in general terms 7 and to respond to questions. The way we are 8 going to do this is we're going to let the 9 Department start off. I have already told 10 Mr. Dasent that the Board is going to be -- feel 11 free and do feel free to say wait, please, can 12 you go over that again or here is this question I 13 have related to that. So what might have been an 14 hour or so of the presentation is going to go on 15 somewhat longer. But my own view is that if you 16 try remember what your question was from 45 17 minutes ago, you have forgotten it. 18 So, we will try that and see how it 19 goes, but the Board should feel free. This is -- 20 at this point which is the presentation by the 21 Department and the chance for the Board to ask 22 questions. We are going to have a break in the 23 morning. We're going to have a lunch break and a 24 break in the afternoon. If anybody needs any</p>	<p style="text-align: right;">Page 8</p> <p>1 HEARING OFFICER BROCKWAY: Do we need to 2 turn down the lights? 3 MR. BALLENGER: Let me see if I can 4 figure that out. 5 HEARING OFFICER BROCKWAY: Rob is our 6 technical consultant. 7 (Lights dimmed as presentation begins.) 8 MS. McCARTY: Good morning. Again, my 9 name is Debra McCarty. And want to tell you a 10 little bit about the Department. 11 So stepping right in, who we are, going 12 over our mission, core services, regulatory 13 requirements. And am I supposed to be switching 14 this? Sorry. 15 (Referring to slides) 16 Cost of service, some of the building 17 blocks for the rate setting, overview of our rate 18 concepts. Study results, some of our key 19 assumptions, objectives, cost of service results, 20 and then the proposed rates and the bills. And 21 then our proposed rates, so the impact on the 22 bills, rate comparison, customer assistance. 23 So who are we? 24 We provide the City with integrated</p>
<p style="text-align: right;">Page 7</p> <p>1 other consideration, please let me know. 2 So I think we are ready. Without 3 further ado, Mr. Dasent, would you present your 4 Department. 5 MR. DASENT: Thank you, Madam Hearing 6 Officer. We have a PowerPoint presentation here 7 today. It we will lead with Commissioner 8 McCarty. We will present various segments of our 9 presentation by different members of our team. 10 HEARING OFFICER BROCKWAY: You should 11 talk directly to the Board. 12 MR. DASENT: As a consequence -- I'm 13 sorry. 14 HEARING OFFICER BROCKWAY: That's okay. 15 Pay no attention to the Hearing Officer. 16 (Laughter) 17 MR. DASENT: Just so you're aware, we 18 have various participants on the panel. We will 19 at various sections switch the panel so that in 20 our limited seating arrangement, we might make 21 the best presentation for you. 22 Debra McCarty will start our 23 conversation today with a slide concerning our 24 mission.</p>	<p style="text-align: right;">Page 9</p> <p>1 water and wastewater services. We are the 2 City's -- one of the City's ten operating 3 departments. And we serve under a dedicated 4 water fund established pursuant to the City 5 Charter. We operate, maintain, repair and 6 improve the water and wastewater systems 7 throughout the City. We are fully funded by our 8 customers, again, as per charter and not any 9 taxes. Our rates are fixed by a Rate Board, you 10 all. As you know, we are funded by the Mayor and 11 City Council. 12 So what does Philadelphia Water do? 13 As I mentioned, we are integrated water, 14 stormwater and wastewater system. And we treat 15 and deliver, collect and treat. And there is 16 some storage and management throughout the City. 17 So who do we serve? 18 Predominantly, the City of Philadelphia. 19 Then we do have some wholesale customers outside 20 of the City. The drinking water, our retail is 21 1.6 million people, and then we have one 22 wholesale customer. 23 HEARING OFFICER BROCKWAY: May I -- 24 sorry to interrupt. When you say people, I</p>

3 (Pages 6 to 9)

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 10</p> <p>1 always get confused. Do you mean meters or 2 individual customers with bills? 3 MS. McCARTY: People 4 MR. BRUNWASSER: Population. 5 MS. McCARTY: The total population of 6 Philadelphia is about 1.6 million people. 7 HEARING OFFICER BROCKWAY: Okay. Thank 8 you. 9 MS. McCARTY: It's people. 10 HEARING OFFICER BROCKWAY: Thank you. 11 MS. McCARTY: Wastewater, again, it's 12 1.6 million people. But we also have ten 13 wholesale customers. 14 So the drinking water, 58 percent of the 15 water comes from the Delaware River; and the 16 balance, 42 percent, is supplied by the 17 Schuylkill River. We have about 3,000 miles of 18 water mains, a lot of pumping stations, valves, 19 25,000 fire hydrants. And we have three large 20 drinking water plants. You can see them on the 21 map there. Some of our larger facilities, 22 pumping stations, storage is also by the dots. 23 So we supply in Fiscal 15, 236 million 24 gallons per day to our customers. The wastewater</p>	<p style="text-align: right;">Page 12</p> <p>1 compliance with their discharge permits. The 2 Gold Award is 100 percent compliance. And 3 actually, this coming year for 2015 we will be 4 receiving five platinum awards. So, each 5 facility will receive a platinum award. We are 6 very proud of that. Of course, we comply with 7 local and state and federal standards. So, that 8 we believe is a big achievement. 9 Regulatory compliance, we are subject to 10 the Clean Water Act and have a consent Water 11 Agreement for our combined overflows, the Clean 12 Water Air Act and the Safe Drinking Water Act. 13 And we can't do that without skilled workforce, 14 advanced technologies and effective programs and 15 financial plans. 16 And I will turn it over to -- 17 MS. BUI: Thank you. Good morning, 18 Members of the Board, visitors going through. 19 What I would like to do -- 20 HEARING OFFICER BROCKWAY: Excuse me, 21 I'm sorry. For those of us who are not familiar, 22 could you repeat your names before you start? 23 MS. BUI: Sure. My name is Ann Bui, 24 that's B-u-i. I am the Managing Director for the</p>
<p style="text-align: right;">Page 11</p> <p>1 side, we have 3,700 miles of sewers that deliver 2 the wastewater to our treatment plants. We also 3 have a centralized biosolids recycling center 4 also known as Sludge. And we have three large 5 wastewater treatment plants. Again, they are on 6 this map. You can see the drainage sheds for 7 those facilities. The average daily wastewater 8 treated was 397 million gallons per day in Fiscal 9 15. 10 We do have award winning facilities 11 drinking water. We are very proud of the fact 12 that we have 15 Year Directors Award for the 13 Partnership for Safe Water. We have received the 14 Governor's Award for Environmental Excellence. 15 And our drinking water quality which is why -- 16 one of our -- top notch. We need or do better 17 than the Safe Drinking Water Act requires us to 18 do. 19 On the wastewater side, again, we are 20 award winning. And we have received the NACWA, 21 National Association for Clean Water Agencies 22 peak performance awards. Two of our facilities 23 we received platinum awards, meaning that five 24 years or greater they've achieved 100 percent</p>	<p style="text-align: right;">Page 13</p> <p>1 Water Industry. We are the rate consultants for 2 the Department. What we have always found, as 3 you can tell from Debra's presentation, is that 4 the Department manages a very, very complex 5 systems, both the water and wastewater. What I 6 am going to present now is an overview of how we 7 use that information to conduct a cost of 8 service. 9 If we can go to the next slide, basic 10 building blocks of when you conduct such a study 11 consist of three elements. We want to start from 12 the bottom and move our ways up to the top. The 13 first part is essentially financial planning. 14 That's where we take a look at our revenue 15 requirements. So, that composes -- consists of 16 your operating costs, your capital costs, your 17 reserve costs. In addition to, on the other side 18 as you've got expenses, is our rate revenues. 19 Where does our revenue come from and 20 miscellaneous revenues. 21 I like to think of that bottom element 22 kind of like balancing your budget at home. I 23 have income coming in. I have expenses going 24 out. We have got to balance that. That's the</p>

4 (Pages 10 to 13)

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 14</p> <p>1 purpose of that bottom element. 2 HEARING OFFICER BROCKWAY: May I 3 interrupt you again? I'm sorry. This an issue 4 that may come up. I'm not shy about 5 interrupting. 6 MS. BUI: Yes. 7 HEARING OFFICER BROCKWAY: Can you 8 explain to us the financial planning arrangement? 9 I see that here, who drafts the plan? 10 Who looks at the plan? What is the effect of the 11 plan? 12 MS. BUI: Yeah. What ends up happening 13 is that we sit down with everybody. And what you 14 are looking at are all the expenses that 15 utilities has to look at. 16 HEARING OFFICER BROCKWAY: I'm not 17 actually asking that question. 18 MS. BUI: For Philadelphia it would be 19 the Finance Department. 20 HEARING OFFICER BROCKWAY: I'm sorry to 21 interrupt, but I'm not being very clear about my 22 question. The finance plans lays out a plan. 23 MS. BUI: Correct. 24 HEARING OFFICER BROCKWAY: Who approves</p>	<p style="text-align: right;">Page 16</p> <p>1 have a vague picture of various components, but 2 I'm trying to get it all clear in my mind. 3 So to get an estimate for debt service, 4 you not only take care -- you not only look at 5 what bonds and the other encumbrances you have 6 outstanding, but you project the capital 7 requirements? 8 MS. LABUDA: Well, I'm not sure. When I 9 speak to debt service, I don't speak of an 10 encumbrance. I speak of actual, physically 11 issued debt, actually that 1.9 million of debt 12 outstanding predominantly issued under our water 13 and wastewater bond ordinance. 14 Then you add to that PENNVEST. That's 15 our actual debt service to date. Then from there 16 you are going to add projected debt service, 17 which is additional borrowing we would need to 18 fund renewal and replacement and ongoing 19 improvements to the system, the water and 20 wastewater system. 21 HEARING OFFICER BROCKWAY: So, you would 22 do that kind of planning of capital investment 23 and use the results of that to inform the amount 24 of debt service you are going to have to make?</p>
<p style="text-align: right;">Page 15</p> <p>1 that in the City, if anybody? And what effect 2 does it have on the obligations of the 3 Department? 4 MS. BUI: That I will refer to -- 5 MS. LABUDA: What it is -- 6 HEARING OFFICER BROCKWAY: Sorry, we 7 can't hear you. 8 MS. LABUDA: Melissa LaBuda, I'm with 9 the City of Philadelphia. So, it depends which 10 plan you are speaking to. As you know, most of 11 our assumptions came from the City of 12 Philadelphia's -- City of Philadelphia's Five 13 Year Plan which we submit to PICA, which is a 14 state-approved plan. That was the basis of many 15 of our assumptions. 16 From there, we then had to look at what 17 additional items or expenses might not be 18 captured in that plan. Which would be debt 19 service, what is our borrowing plans, how much do 20 we have to borrow to fund our infrastructure, 21 regulatory requirements and any additional hiring 22 that we might have to do. 23 HEARING OFFICER BROCKWAY: May I inquire 24 on the debt service? I'm trying to get a -- I</p>	<p style="text-align: right;">Page 17</p> <p>1 MS. LABUDA: Correct. In the financial 2 planning, the various tables in the proceeding 3 you will see existing debt service, which is from 4 our currently outstanding 1.9 million of debt 5 plus projected issuance over the planning period. 6 HEARING OFFICER BROCKWAY: And for 7 that -- for the things that drive the costs of 8 those, that debt service and projected debt 9 service, do you have a plan or a budget for those 10 items? And if you do, does anybody approve it 11 besides -- within the Department? 12 MS. LABUDA: So, of course there is a 13 capital plan which our chief engineer in the room 14 Steve Bertoc, which is submitted every year and 15 is approved and is presented to City Council, 16 approved by City Council. So yes, it is approved 17 outside of the Department. 18 HEARING OFFICER BROCKWAY: In other 19 words, by outside do you mean the City Council 20 approves it? 21 MS. LABUDA: Correct. 22 MR. BRUNWASSER: Also, the City Planning 23 Commission. 24 HEARING OFFICER BROCKWAY: Are you bound</p>

5 (Pages 14 to 17)

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 18</p> <p>1 by that? In other words, this is your plan and 2 you've got to stick to it? 3 MS. LABUDA: There is probably 4 incredible risks if we don't do what we said we'd 5 do to repair our infrastructure or renew our 6 infrastructure. It is a plan that is based on 7 engineering studies and needs of the system. So, 8 I would think there would be risks to the system 9 if we don't improve and renew the system, of 10 course. 11 HEARING OFFICER BROCKWAY: Thank you 12 very much. 13 MR. BALLENGER: Madam Hearing Officer, I 14 just heard from folks on the phone that they're 15 having really hard time hearing? Are these 16 microphones decorative or -- 17 MS. LABUDA: This is my mistake. If 18 everyone -- while there is a green button, you 19 actually have to hit to be heard. Again, I'm 20 sorry about that. 21 MR. BALLENGER: Going forward it -- it 22 would be helpful. I know we have three or four 23 people on the phone with us today. 24 MS. LABUDA: I think the other part of</p>	<p style="text-align: right;">Page 20</p> <p>1 what does it cost to provide service to our 2 different customers? That's the way we want to 3 take a look at it whether they are wholesale or 4 retail. And we typically look at testers. We 5 are going to go into more detail for that later 6 on. 7 But simply put, if you want to take a 8 look at one year at a time to determine what does 9 your cost of service look like. How are your 10 costs that are incurred by the Department 11 allocated out, okay? From there we go into rate 12 design. And that is, as you all know, is how 13 exactly are we going to recover those costs from 14 our customers. You know, what mechanism are we 15 going to use? And that simply put is the rate 16 setting process. 17 It is something of an industry standard 18 that we use going forward. Let's talk a little 19 bit about what those industry standards are. Our 20 guidance documents out there which pretty much 21 every rate consultant follows. The American 22 Water Association, that is the predominant one. 23 It's called the M1 Manual. You will hear that 24 many, many a time. Then on the wastewater side,</p>
<p style="text-align: right;">Page 19</p> <p>1 the financial plan, we touched on expenses 2 predominantly driven by PICA, the City's Five 3 Year Plan. We have talked about debt service. 4 Of course, the other part of the plan is, you 5 know, how are we going to use our reserves? And 6 if you look at the proceeding, you will see that 7 we are using reserves to bridge FY16 without a 8 rate increase and to mitigate rate increases in 9 '17 and '18. 10 Also, the other part of it is the 11 expense projection, revenue projection, debt 12 services projection and also how we are utilizing 13 current reserves to limit the impact in '17 and 14 '18 and, of course, the fact that we didn't have 15 a rate increase in '16. 16 HEARING OFFICER BROCKWAY: Thank you. I 17 apologize for the interruption. We probably will 18 come back to that topic later. 19 MS. LABUDA: I'm happy to answer 20 questions. 21 MS. BUI: So after we established our 22 revenue requirements, what we want to do is take 23 a look at cost of service, which is the second 24 element. Oftentimes, the way I look at that is</p>	<p style="text-align: right;">Page 21</p> <p>1 we have the Water Environmental Federation, WEF. 2 They also have a guideline for that. And then 3 finally, there is new one that's out with respect 4 to guidelines on stormwater and how you want to 5 allocate those costs and design rates and some of 6 those rates and policies. Those are some of the 7 predominant standards we use within the industry. 8 Our next slide here goes a little bit 9 more into financial planning, which I'm not sure 10 exactly that we need to spend a lot of time on 11 because we answered some of those questions. 12 Fundamentally, anybody doing a cost of service 13 study, when we take a look at financial planning, 14 what you are trying to do here is based upon 15 reasonable assumptions, take a year, look at a 16 multi-year plan, okay? 17 So, you want to build financial 18 solvency. You need financial stability. 19 Everybody I think would agree with that. Even 20 personally financial stability will be great. We 21 need to be able to provide the bond capacity. 22 You have a very, very large system here. It's 23 very complex. It needs to be worked upon. There 24 needs to be investments made to make sure it's</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 22</p> <p>1 going to renewal as well as additional capital 2 investment. In order to do that, we need to take 3 a look at potentially issuing debt to meet that. 4 When you borrow money, as we all know, 5 there are requirements that are placed upon that. 6 Those are known as the bond and insurance 7 covenants. We have to meet those requirements. 8 That's not an if. We must meet those 9 requirements because it does affect the credit 10 rating of the City. 11 And then finally -- 12 HEARING OFFICER BROCKWAY: May I 13 interrupt you here? 14 MS. BUI: Yes. 15 HEARING OFFICER BROCKWAY: Credit rating 16 of the City. In other words, the credit rating 17 of the Department has an impact on the credit 18 rating of the City? 19 MS. BUI: Yes. 20 MR. BRUNWASSER: And vice versa. 21 HEARING OFFICER BROCKWAY: Thank you. 22 MS. BUI: You're very welcome. And then 23 the other thing we want to take a look at is we 24 want to make sure that if we need to have revenue</p>	<p style="text-align: right;">Page 24</p> <p>1 because we don't have end-of-year data. We have 2 to go through 15/16 all the way through 20/21. 3 HEARING OFFICER BROCKWAY: Thank you. 4 MS. BUI: And the reason why we do that 5 for a number of variety of reasons, one of which 6 is you don't -- for utilities or for agencies for 7 companies, you want to take a look at what that 8 overall plan is so that you can make adjustments 9 also to make sure that if revenue adjustments are 10 needed, they are not going up and down. You can 11 levelize things. If you take a very short view, 12 it's very difficult then to make sure that you 13 can mitigate that impact to your customers. 14 Questions? 15 Okay. Very good. 16 MR. BALLENGER: I heard, Mr. Jagt say 17 that you -- 18 HEARING OFFICER BROCKWAY: I'm sorry. 19 We are going to hold questions from anybody but 20 the Board. 21 MR. BALLENGER: Oh, I'm sorry. My 22 apologies. 23 MS. BUI: The requirements on -- we know 24 what we need from an expense side. Our total</p>
<p style="text-align: right;">Page 23</p> <p>1 adjustments, that we try to levelize those out. 2 And I think all of us can understand that. When 3 you're looking at your own bills at home, the 4 last thing you want are bills going up and down 5 in pricing. You want to be able to mitigate 6 that. That is really important for our 7 customers. 8 So having gone through that, let's take 9 a look at those particular elements in a little 10 bit more detail. What we have done for the 11 Department is a six-year studies period. And 12 this -- what this flow chart does is it shows 13 what the different elements are that we take a 14 look at, the operation and the maintenance 15 expense, the capital expenditures, our debt 16 service. 17 And from those three large elements, we 18 come up with what our total revenue requirements 19 are. 20 HEARING OFFICER BROCKWAY: What are the 21 six years we are looking at in this case? 22 MS. BUI: It starts from Fiscal 15, I 23 believe. 24 MR. JAGT: We have to project for FY15</p>	<p style="text-align: right;">Page 25</p> <p>1 Revenue Department side, right? We sort of know 2 what our revenues are already because we have 3 revenues under our current rate plus we have some 4 miscellaneous revenues that the Department can 5 generate. We know what our money is coming in 6 the door. That gives us year-by-year what our 7 financial planning is going to be. 8 Now on top of that, once you established 9 that, you still have to take into consideration 10 those other requirements that I mentioned before: 11 The general bond ordinance, the insurance 12 covenants, and the Rate Board requirements. So, 13 that's the final element going through. 14 Now, we always get this question. What 15 exactly is the cost of service? 16 Cost of service is what you are trying 17 to do here is take the total system revenue 18 requirements and allocate them to the users of 19 the system in proportion to how they -- the 20 services they receive, okay? That's a very 21 simple way of putting it, but it's a lot of work 22 that goes into that. 23 So, what kind of costs do you allocate? 24 Well, the costs or -- let me put it this way.</p>

7 (Pages 22 to 25)

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 26</p> <p>1 Why do we want to allocate those costs? 2 First off, different customers have 3 different characteristics. They use the system 4 in a different fashion. If you think about it, a 5 residential customer uses water and wastewater in 6 one way compared to a commercial customer or an 7 industrial customer. There is different usage 8 patterns there and characteristics, and that's 9 what we try to reflect. There needs to be a 10 reasonable nexus between the fee that you charge 11 and the cost or the service that's being 12 provided. It needs to make sense. It needs to 13 be fair. 14 We have to meet our regulatory 15 requirements. And when I say that, it's like, 16 for example, there are federal grants that the 17 Department has been very lucky to receive. But 18 there's also requirements on those grants that we 19 must comply with that, as well. Again, what you 20 try to do is establish fair and reasonable basis 21 so that you can defend your rates. 22 This particular graph or picture 23 illustrates how we go about allocating the costs 24 of developing the actual cost of service, okay?</p>	<p style="text-align: right;">Page 28</p> <p>1 what's the fair way of allocated rates. 2 How does the Department do it? I get 3 the feeling that you use historic costs or 4 embedded costs. In other words, you don't look 5 to see what the incremental costs would be in the 6 future. You take a picture of what the costs 7 have been or are today, and you figure out what 8 those costs are used for and that's how you 9 allocate. You allocate the costs to those who 10 use it for the purpose that is used -- that is. 11 MS. BUI: That is why you need to 12 allocate the way you do. We are looking at 13 future years as a basis for the projection of 14 those costs and patterns. Certain things it is 15 adjusted. 16 HEARING OFFICER BROCKWAY: It's an 17 adjusted -- 18 MS. BUI: This is forward looking. 19 HEARING OFFICER BROCKWAY: How far 20 forward do you go for this one year? 21 MS. BUI: Well, it's each year. So, we 22 had to make estimates for Fiscal 15. As Dave 23 pointed out, it's not final yet. So, there are 24 estimates involved in there. And then you</p>
<p style="text-align: right;">Page 27</p> <p>1 We start with our revenue requirements and we 2 take it one year at a time. We start with our 3 revenue requirements. And for the Department, we 4 have water system costs and we have wastewater 5 system costs, all right? You have to separate 6 them out because they serve different customers 7 at times, but they also have different cost 8 drivers. And then within those two categories 9 you also have your retail and your wholesale 10 again. Both sides. 11 Then what you do on the water side is 12 you look at the different customer types. You 13 allocate those various costs out to the different 14 customer types after you've established the 15 different functional components, and then you 16 drive the user rate charges. 17 HEARING OFFICER BROCKWAY: I looked 18 ahead to see if you had more on this. 19 MS. BUI: You're not supposed to do 20 that. Yes. 21 HEARING OFFICER BROCKWAY: As you know, 22 rate design -- cost allocation and rate design 23 are, some people call it an art rather than 24 science. It's driven by assumptions made about</p>	<p style="text-align: right;">Page 29</p> <p>1 project to the ensuing years. 2 MR. JAGT: Just to clarify. We have the 3 preliminary audited numbers for FY15. And we 4 have used the Department's financial statements, 5 the unaudited financial statements for developing 6 FY15. There will be significant adjustments from 7 that for the audit, but until the audit's 8 complete, we won't really know. But they are 9 like 99 percent. 10 HEARING OFFICER BROCKWAY: Looking 11 through, I'm not seeing that you come back to 12 this. Am I correct that this is our discussion 13 of cost allocation? 14 MS. BUI: No, no, no, no. There will be 15 more. 16 MS. LABUDA: Can I just make a 17 clarifying statement? Just so you know, the City 18 has not released it's Fiscal 15 certified 19 financial report. We are one tax ID. We are one 20 entity. We are called the City of Philadelphia. 21 Our component unit or our Department will release 22 its set of statements when the City releases. We 23 don't have the audit yet. We anticipate the 24 statements will be released. All the numbers</p>

8 (Pages 26 to 29)



Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 30</p> <p>1 utilized by Black &amp; Veatch represent unaudited 2 numbers because the audit is not yet complete. 3 MS. BECKLEY: I'm sorry. Didn't 4 understand. Sounded to me, you said -- sounded 5 to me like the numbers are 99 percent but they 6 are going to change significantly. I'm trying to 7 understand. Are we close or we not close? 8 MS. LABUDA: It's not -- what we are 9 speaking of is Black &amp; Veatch sets -- the Water 10 Department's rates and charges are set on a 11 budgetary or legal basis. Those statements were 12 released in some time in October. The City also 13 released it's Quarterly City Manager's Report 14 last week which also had budgetary or the legal 15 statements in those. Those numbers are on the 16 PICA website and Director of Finance's website. 17 The statements that are currently under 18 audit and the audits not received are the GAAP 19 financial statements. We do not set rates and 20 charges on the GAAP basis. Our bond works on a 21 cash basis. 22 HEARING OFFICER BROCKWAY: Generally 23 Accepted Accounting Principles. 24 MS. LABUDA: Thank you. I'm sorry. Not</p>	<p style="text-align: right;">Page 32</p> <p>1 figure out our flow of accounts through our 2 General Bond Ordinance because there are a very 3 specific set of accounts that we have. The two 4 reserves that our General Bond Ordinance allows 5 us to have are the Rate Stabilization Fund and 6 the Residual Fund. 7 It's the Rate Stabilization Fund that 8 allow us to withdraw revenues from this account 9 to bridge any deficiencies between expenses and 10 revenues. The Residual Fund is the bond and 11 bucket. It's the last place monies go. And we 12 cannot use anything in that account to bridge a 13 structural deficit. We can make a payment out of 14 it, but we can't use those funds to meet one of 15 our coverage or compliance matters. 16 MR. HUANG: Is it fair to call them a 17 buffer in a sense then? 18 MS. LABUDA: Absolutely. The Rate 19 Stabilization Fund is really the key fund to how 20 we can -- how we can have funds set aside for 21 unforeseen or unexpected emergencies that aren't 22 covered by rates and charges. 23 MR. HUANG: Do industry standards give 24 you some guidance on how much the reserves should</p>
<p style="text-align: right;">Page 31</p> <p>1 trying to speak in code. 2 I do not anticipate material shifts. 3 But until we have an audit letter, I can't opine 4 in either direction if there will or will not be 5 changes between my sitting in the room at this 6 table and Wednesday when they release. But on a 7 budgetary basis, on a cash basis, those 8 statements were released in October for an audit. 9 And they are 99 percent complete. 10 MR. HUANG: I had a few questions about 11 the reserves that Ms. LaBuda mentioned. Where 12 does that -- you mentioned that the existence of 13 the reserves allowed the Water Department to not 14 increase rates in '16 and to minimize the 15 increase imposed in '17. Series of questions 16 about the reserves. 17 Where do they come from? And what is 18 the purpose of their existence besides what -- 19 besides that use, or is that the only purpose? 20 MS. LABUDA: We will touch on this later 21 in the presentation. But the reserves are a flow 22 of funds or the accounts that we have are very 23 clearly defined in our General Bond Ordinance. 24 So oftentimes, I advise most individuals to</p>	<p style="text-align: right;">Page 33</p> <p>1 be held back versus essentially giving back to 2 the rate -- 3 MS. LABUDA: The rating agency -- and I 4 know Kathy Clupper from PFM will also speak to 5 this. I don't want to misstep here. 6 But yes, of course. The rating agency 7 provides significance guidance on the days cash 8 on hand, the amounts of cash we should have to 9 help balance the budget or mitigate or manage 10 unforeseen emergencies. That numbers, most of 11 our peers are anywhere from -- please, I am going 12 to have to fact check on this -- 250 days to 400 13 days cash on hand. 14 MR. HUANG: Last question. Does that -- 15 the size of that buffer, can that be smaller if 16 this rate process happens more often? 17 MS. LABUDA: If you look through the 18 proceeding, we are talking about taking our rate 19 stabilization fund down to \$110 million. I don't 20 believe the Department could manage with anything 21 less than that. And that is due to the level of 22 our budget that rates and charges cover. 23 MR. HUANG: Thank you. 24 MR. POPOWSKY: Excuse me. Are you going</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 34</p> <p>1 to address the questions that we ask to be 2 forwarded or -- 3 MR. DASENT: The plan was to answer as 4 much as we can today as a part of the 5 presentation. We have written responses are also 6 possible. The Board directs us, we will -- 7 MR. POPOWSKY: I'm just not sure. I 8 just can't tell if you are going to specifically 9 answer those questions. 10 MR. DASENT: Yes, we are. 11 MR. POPOWSKY: For example, I think we 12 asked about the Rate Stabilization -- the Rate 13 Stabilization Fund grew, didn't it, over the last 14 few years? 15 MS. LABUDA: The Department made 16 deposits into the Rate Stabilization Fund. Based 17 on the last rate proceeding, we managed a very 18 specific metric when revenues differed from the 19 financial plan as submitted at the last rate 20 proceeding, it drove deposits to be made to the 21 Rate Stabilization Fund in FY14 and FY15. 22 However, if you were to step into what the City's 23 projections are, the Black &amp; Veatch projections, 24 you will see that we are taking money out in</p>	<p style="text-align: right;">Page 36</p> <p>1 gave a list of questions. I didn't know if they 2 were all going to be covered in this. I don't 3 want to interrupt every five minutes if you are 4 going to get to it. 5 MR. BRUNWASSER: I think what you are 6 showing here are very summary documents and 7 graphs. And obviously, there's a tremendous 8 amount of detail behind them. And I'm sure you 9 will clarify much of this as you go along. 10 MS. BUI: After my section, which is 11 pretty much the end of the sort of overview and 12 the general principles. Because I believe that 13 you are fairly knowledgeable already about the 14 cost of service studies, in general, but there 15 are others who are not including those in the 16 public. That is really the purpose of this. 17 And then we are going to go into a 18 little bit more detail with respect to study 19 results, the assumptions that are used which I 20 believe will also address a number of the 21 questions that the Board provided. 22 MR. POPOWSKY: Thank you. 23 MS. OLANIPEKUN-LEWIS: In what instances 24 would you have the ability to draw down the</p>
<p style="text-align: right;">Page 35</p> <p>1 FY16. 2 And just to answer your question, the 3 presentation does address most of the questions. 4 It might be helpful if we maybe reference the 5 page numbers as we're stepping through them and 6 which question it addresses. 7 MR. POPOWSKY: Thank you. 8 MR. DASENT: At the end, those questions 9 that are not directly addressed can be captured 10 in our Q and A at the end. 11 MS. BECKLEY: But I would remind the 12 Board that this presentation really is for you. 13 So to the extent that there's anything that you 14 want -- you should not hesitate to interrupt and 15 to ask questions. Because the whole point of 16 this is for the five of you to get what you need 17 as a basis for going forward in the proceeding. 18 HEARING OFFICER BROCKWAY: Before -- 19 excuse me. Mr. Popowsky, I'm not clear what you 20 were looking for. Is the transcript of today 21 sufficient, or are you saying any time there's a 22 question from the Board they ought to take it 23 down and they ought to memorialize the answer? 24 MR. POPOWSKY: No. I just wanted -- we</p>	<p style="text-align: right;">Page 37</p> <p>1 residual fund? 2 MS. LABUDA: There is -- I'm going to 3 just have to read the very explicit provisions. 4 The Residual Fund is to maintain revenues after 5 all items have been paid through the water. What 6 technically goes through Residual Fund is we pay 7 the City the interest earnings on our Debt 8 Service Reserve Fund. It's called the Scoop. 9 It's capped at \$4.9 million. 10 At the end of the year, there is 11 evaluation done on the Debt Services Reserve 12 Fund. It moves of the Debt Service Reserve Fund, 13 flows to residual, then comes out of residual and 14 goes to the City Con Cash Account. 15 Another amount of monies that will flow 16 through, through the terms of the General Bond 17 Ordinance through the residual account will be 18 the additional payments we make to our capital 19 trust. There is two components of the capital 20 trust. There is the bond proceeds account and 21 then there is a self-generated capital. We have 22 a required transfer and discretionary transfer. 23 Discretionary transfer per the terms of 24 the General Bond Ordinance will flow from Water</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 38</p> <p>1 Revenue Account to the Residual from the Residual 2 back up to the Capital Trust. 3 The other use of the Residual Fund was 4 related to something that predates me, so I will 5 which have to double check myself on all of the 6 specifics. There was an ordinance passed 7 sometime in 2007 or 2008 that set up a subaccount 8 of the residual account called a special 9 infrastructure. It was to do improvement at the 10 Naval Yard. It was to pay for capital rate of 11 expenditures at the Naval Yard. 12 MS. OLANIPEKUN-LEWIS: Thank you. 13 MR. BRUNWASSER: There was -- there is 14 one other thing that historically, obviously, 15 predates Ms. LaBuda. The Water Department gave 16 fees of approximately \$20 million of old debt, 17 picked off the high coupons and we fees out the 18 20 million with the Residual Fund. And that was 19 approved by bond counsel Ballard Spahr. 20 MS. BUI: If we move to the next slide, 21 which is the last slide on my section, it is the 22 purpose of rate design. Really, I think it's 23 important here that we look at what we're trying 24 to do is, again, recover the cost providing</p>	<p style="text-align: right;">Page 40</p> <p>1 analysis. And we will do a quick review of the 2 objectives, a review of the key assumptions for 3 the financial plan, and a brief review of the 4 cost of service results. 5 So, this question's been brought up a 6 number of times. We will go through it very 7 briefly on Slide 21. One of the big assumptions 8 you have to make is what is our study period for 9 the study? 10 The main focus of the study was the 11 first two years that we looked at the rates for 12 which were FY 2017 and 2018 for which we are 13 making the rate requests. However, as we know 14 based on Ann's discussion, we need to do a 15 projection of the longer term impact of the 16 financial plan and look at the impact of the 17 rates and the longer term outlook for the 18 utility. You don't want to make an assumption of 19 very low revenue increases now only to have rate 20 shock on the customers later on. So, it's a good 21 practice and the best practice in the industry to 22 do a longer term outlook. And that's why we did 23 the six-year financial plan, which corresponds to 24 the time frame for the Capital Improvement</p>
<p style="text-align: right;">Page 39</p> <p>1 service to our different customers in that 2 fashion. And that's how we design our rates. 3 Thank you very much. 4 Now before we move onto our next session 5 which is going to address a number of the 6 questions that the Board has sent us, the study 7 results, we are going to make a change out in 8 personnel so we can bring speakers for those 9 particular sections up here. 10 HEARING OFFICER BROCKWAY: Go off the 11 record. 12 - - - 13 (At this time, a brief break was taken.) 14 - - - 15 HEARING OFFICER BROCKWAY: We will go 16 back. And now additional people are going to 17 present? 18 MR. DASENT: Yes. David Jagt from Black 19 &amp; Veatch will be our next presenter. 20 MR. JAGT: At this point, after having 21 an overview of the cost of service in the 22 financial plan and the process that we followed 23 in doing such, we are going to go over some of 24 the study results of the cost to service</p>	<p style="text-align: right;">Page 41</p> <p>1 Program Budget. 2 (Continues to refer to slides) 3 Take a brief look at the Study 4 Objectives. One of the key objectives is to 5 continue to provide safe and service to the 6 customers. Want to be able to continue to 7 provide safe drinking water and wastewater 8 services to our customers. And we also want to 9 make sure we cover -- meet the financial 10 investment or the bond holder's requirements. We 11 want to meet the Rate Board's requirements and 12 also the utility in general, what the revenue 13 requirements of the utilities are. 14 We have a complete list of the 15 requirements off to the right, but the main ones 16 I want to point out for today is we go ahead and 17 identify what the General Bond Ordinance minimum 18 requirements are in this slide where we identify 19 that senior debt service coverage per the bond 20 ordinance needs to be at least 1.2. And the 21 total debt service coverage needs to be 1.0. 22 HEARING OFFICER BROCKWAY: I'm sorry to 23 interrupt. But can you very, very briefly 24 discuss how you calculate the coverage ratio?</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 42</p> <p>1 MR. JAGT: Okay. For the coverage ratio 2 for the bonds, we look at the projection of 3 revenues. And that's all the incoming revenues 4 into the fund that's identified acceptable in the 5 general ordinance as acceptable project revenues. 6 We net from that the operating, the O&amp;M expense 7 to come up with the net project revenues. 8 Net project revenues are compared to the 9 senior debt service to develop the senior debt 10 coverage. You want to make sure that you have 11 enough -- after -- the revenues that come in the 12 door in the year after adjusting for rate 13 stabilization as well, you want to make sure you 14 have at least 1.2 times the debt service. And 15 you have to otherwise you are in technical 16 default and a big issue with the financial 17 agencies and the bonds. 18 You also need to make sure you meet a 19 1.0 coverage on the total revenue requirement, so 20 that means that your net revenues, your revenues 21 coming in plus rate stabilization minus O&amp;M has 22 to be enough money to cover all your revenue 23 requirements going out. So, that has to meet 24 your O&amp;M and your capital account deposit. That</p>	<p style="text-align: right;">Page 44</p> <p>1 analysis, we have to do the analysis in terms of 2 receipts as -- revenues as receipts. Revenues 3 are not reflected as bills going out the door, 4 but as revenues that we receive and collect from 5 the customers. 6 HEARING OFFICER BROCKWAY: You're not on 7 a cash basis, though? 8 MR. JAGT: We are on a cash basis. 9 That's correct. And it's based on revenues that 10 we receive are collected from our customers. 11 MR. BRUNWASSER: Mr. Jagt, isn't there 12 another requirement on the Rate Stabilization 13 Fund as far as the maximum that could be pulled 14 out? 15 MR. JAGT: That's right. We do cover 16 that later in the presentation. But I will go 17 ahead and cover this now. 18 In addition to the General Board 19 Ordinance[sic], throughout the years the Water 20 Department had established or provided insurance 21 on some of the bonds. And with the insurance 22 companies, we have an agreement or a covenant 23 that the water fund will meet 90 percent of debt 24 service from current revenues. So basically,</p>
<p style="text-align: right;">Page 43</p> <p>1 has to be at 1.0. 2 We also have some requirements that were 3 in the ordinance that created the Rate Board. We 4 will cover those, as well. The key ordinance, 5 the key requirement we looked at was that total 6 revenues can't exceed total appropriations. 7 Do you have any questions? Want to make 8 sure before we go on. 9 MR. POPOWSKY: The Rate Stabilization 10 Fund is included in the numerator in both of the 11 coverages; is that right? 12 MR. JAGT: It is included in the 13 numerator in both of the coverages because 14 revenues have to -- you can adjust the revenues 15 by what you put in or take out of the rate 16 stabilization form. And that money can be used 17 towards coverage again. Revenues can only be 18 used one time and the rate stabilization is a 19 rainy day fund or a fund that if money is put 20 aside in the rate stabilization, it was not used 21 for coverage. But when it's strong back in, it 22 can be used for coverage in that year. 23 Another key principle of the General 24 Bond Ordinance is the fact that when we do our</p>	<p style="text-align: right;">Page 45</p> <p>1 this rule or the insurance covenant puts a limit 2 on how much money we can withdraw from the Rate 3 Stabilization Fund in a specific year. So, we 4 can't suppress rates so low that we have to pull 5 more than -- we are not recovering 90 percent of 6 revenue or debt service from the current 7 revenues. 8 On the next slide, there is a brief 9 review of all the water fund accounts in the 10 funds. We went over this briefly. Missy went 11 through the funds, the key funds. The Revenue 12 Fund is the main driver for the utility. The 13 revenues come into the Revenue Fund. And debt, 14 O&amp;M debt services paid out of -- funds are -- 15 payments are made to other funds out of the 16 Revenue Fund. 17 The Rate Stabilization represents a fund 18 off to the side. It's a reserve or a rainy day 19 fund. That any year if we determine or the water 20 fund determines that it can defer some of its 21 revenue in that year to a future year, or it 22 requires a withdrawal from the Rate Stabilization 23 to meet its annual requirements, it can do so. 24 The Construction Fund is where all our</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 46</p> <p>1 capital costs are met. It's where the bond 2 proceeds are put and capital costs are funded 3 from. The Debt Service Fund covers the debt 4 service. And there's also the debt service 5 reserve that provides for one-year maximum 6 principal and interest to make sure we have 7 reserve to meet debt service payment if we ever 8 have to. 9 We also have the residual fund which is 10 the -- after making all the payments to the other 11 funds, the net revenues comes out into the 12 residual fund. And the residual fund can be used 13 to make deposits into debt service reserve or 14 meet capital requirements. This reviews the 15 requirements or the possible uses of the residual 16 fund. 17 Take a brief look at our financial plan. 18 Basically, this slide is presenting the fact that 19 in order to meet the projected revenue 20 requirements for the utility, we have to do a mix 21 of withdrawals from rate stabilization and 22 revenue increases. These are our planned revenue 23 increases in the bulleted list or cumulative 24 revenue increases that we projected through the</p>	<p style="text-align: right;">Page 48</p> <p>1 other impacts involved with the projection and 2 the changes. 3 HEARING OFFICER BROCKWAY: But in that 4 sense, these are cumulative. You don't add -- in 5 other words, the 179.6 -- is 179.6 relative to 6 the base that you started with? 7 MR. JAGT: Right. The best way to look 8 at that line item is the amount over -- it's the 9 additional revenues above the revenues under 10 existing rates. We do a projection of revenues 11 under existing rates or FY16 rates. And these 12 are the additional revenues we need above the 13 FY16 revenues. 14 MR. BALLENGER: Annual? 15 MR. JAGT: Correct. Along with these 16 planned increases from rates they are from the 17 revenues, we also have planned withdrawals from 18 the rate stabilization to help meet the projected 19 revenue department. We will review this in 20 detail in some of the graphs coming up. 21 As Ann reviewed, in Slide 17 you will 22 recall we did -- our approach is we are going to 23 take a projection of the revenue under existing 24 rates and then we are going to look to compare</p>
<p style="text-align: right;">Page 47</p> <p>1 financial plan from FY 2017 to 2021 to meet the 2 revenue requirements of the system. During our 3 rate period and in the initial year for FY17, we 4 projected a 34.7 million increase in revenues. 5 And in FY18 from the increases in '17 and '18, we 6 are proposing to increase revenues by 70.9 7 million. 8 HEARING OFFICER BROCKWAY: First, you 9 said cumulative. And now it sounds like these 10 are year-to-year increases. 11 MR. JAGT: It's cumulative. So what 12 we've present as FY18 is the result of the 13 increased revenues as proposed in '17 and '18. 14 HEARING OFFICER BROCKWAY: Okay. So 15 Fiscal 17, 34.7 million. 16 MR. JAGT: Correct. 17 HEARING OFFICER BROCKWAY: And then I 18 can't do the math, but -- 19 MR. JAGT: A portion of the 70.9 is an 20 increase from the FY17 increase. 21 HEARING OFFICER BROCKWAY: Okay. So the 22 other -- you can figure out what the increase in 23 2018 is by subtracting 34.7 from 70.9? 24 MR. JAGT: Yeah. Because there is some</p>	<p style="text-align: right;">Page 49</p> <p>1 that to the projection of revenue requirements 2 with the -- and we developed the revenue 3 requirements based on the components that were 4 outlined in Slide 17. Each of these slides that 5 we go through, we are going to review some of the 6 key assumptions that we used in those steps as we 7 work through the process presented in Slide 17. 8 So the first step we are going to look 9 at is the projection of revenue requirements or 10 revenues. The main source for the projection of 11 revenues is the historical billing data we do. 12 We have to look at the record of historical 13 billing data which we got from the new reports 14 that were developed from RFC which provide us 15 with the projected number of accounts or the 16 historical number of accounts and historical 17 water sales volumes and sewer billed revenue as 18 well as the stormwater we got from the stormwater 19 database. 20 HEARING OFFICER BROCKWAY: Can you -- I 21 apologize. Can you sound out what RFC stands 22 for. 23 MR. JAGT: Raftelis Financial 24 Consultants.</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 50</p> <p>1 HEARING OFFICER BROCKWAY: Thanks. 2 MR. JAGT: We do a projection of 3 revenues under existing rates for FY 2016 through 4 2021. Again, the revenues are projected based on 5 receipts as per the General Bond Ordinance, so 6 reflects the amount of the revenues -- basically, 7 the collections from the customer. As the 8 customers pay the bill, we recognize them as 9 receipts or revenues in the door. 10 For each year in order to do that, we 11 have an assumed collection factor or a series of 12 collection factors. The cumulative effect of 13 collection factors are that in each fiscal year, 14 we will receive 96 percent of the billings. For 15 the City, we assume we are going to collect 100 16 percent of the billings. The City billings 17 reflects the general serve of the water, sewer 18 and stormwater service provided to the general 19 fund which includes all the City Departments as 20 well as the Aviation Fund. 21 MS. OLANIPEKUN-LEWIS: I have a 22 question. When you said 96 percent of using the 23 total retail, is that based on all the billings 24 on the -- those that you assume are collectibles?</p>	<p style="text-align: right;">Page 52</p> <p>1 to terminate the contract with the City, and we 2 had to reflect that in the financial plan. 3 MR. POPOWSKY: Do you know where they 4 went? 5 MR. HARVEY: They built their own 6 transmission system. (Rest of response trails 7 off.) 8 MS. BROCKWAY: He's saying they built 9 their own water transmission system. I think 10 it's out of the Chalfont. 11 MS. OLANIPEKUN-LEWIS: What's that 12 revenue loss? 13 MR. JAGT: That's 7 or 8 million per 14 year. 15 HEARING OFFICER BROCKWAY: Did you have 16 something else? 17 Did the Department try to negotiate with 18 Bucks County to keep them? 19 MS. McCARTY: Bucks County essentially 20 gave us notice. And given the relationship that 21 really wasn't -- we would have wanted to keep 22 them, of course, because they helped us in the 23 fixed costs. They were pretty definitive. 24 Certain that they just wanted to stop using our</p>
<p style="text-align: right;">Page 51</p> <p>1 I know that when you're looking at 2 accounts receivable, the assumptions are you're 3 going to get a hundred percent, but the percent 4 is pretty solid. That 96 percent of that amount 5 you receive to be collectible or the total 6 billing that you get? 7 MR. JAGT: It's 96 percent of the total 8 billings. So, it reflects a 4 percent is 9 uncollected. 10 MS. OLANIPEKUN-LEWIS: Okay. 11 MR. JAGT: This addresses some of the 12 questions we had from Council or the Board the 13 next few bulleted items. In our projections we 14 have an assumption there is reduction to water 15 revenues from the wholesale customers. 16 In the recent year 2015 Bucks County had 17 provided notice that they were no longer 18 continuing their water rate contract or water 19 service contract with the Department. We are 20 not -- you know, I know the Board's question 21 asked in detail what the drivers were. 22 Unfortunately, we -- not being on Bucks County 23 Board or not really knowing the -- what their key 24 drivers were, but we know that they just desired</p>	<p style="text-align: right;">Page 53</p> <p>1 water. We still believe that we are the best 2 deal and provide excellent quality. By the way, 3 the rates have gone up in Bucks County. 4 HEARING OFFICER BROCKWAY: Thank you 5 very much. 6 MR. JAGT: Then in addition to the 7 reductions from Bucks County, we also reflect a 8 recent reduction from Aqua PA. We also think 9 Aqua PA has been cutting back -- their initial 10 contract was set up for drought use, and they 11 continued to use the water that way. And they 12 have cut back their recent demands to a lower 13 level. And we reflect the lower level in the 14 financial plan. 15 Our projection also reflects a reduction 16 to the retail cost projections. The annual 17 decrease of 0.6 percent per year is reflected in 18 the projected volumes for retail. That's 19 primarily driven by the reduction in the demand 20 from the 5/8" customers. That's an industry wide 21 issue that other utilities have seen and, you 22 know, water utilities are dealing with 23 nationally. 24 HEARING OFFICER BROCKWAY: You don't</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 54</p> <p>1 have water efficiency programs? You don't try to 2 encourage your customers to cut down? 3 MS. McCARTY: We have conservation 4 programs for low income. But you know without -- 5 but yeah. 6 HEARING OFFICER BROCKWAY: I'm not 7 trying to make a point. I am just trying to 8 clarify. 9 MS. McCARTY: You know, it's the -- you 10 see this over the years because of low flow 11 fixtures of the toilets, low flow shower heads, 12 things like that. You see this reduction through 13 the years. As Dave said, the industry's fixing 14 this. 15 MR. JAGT: Done with that slide. 16 MR. DASENT: Jon Davis will speak next 17 on the new -- 18 MR. JAGT: Jon is going to give details 19 later on in the presentation. We are going to go 20 ahead and at this point just give a brief 21 overview in the cost and the revenue requirement 22 impact to the new affordability program. 23 The Affordability Program was mandated 24 by Council. And the Water Department has</p>	<p style="text-align: right;">Page 56</p> <p>1 the support and implementation of the program 2 which includes personnel costs, which will 3 increase from 1.6 to 2.4 million. And that's 4 driven by the need for additional -- the addition 5 of 22 staffing positions to manage and implement 6 the program. That's a 9 percent overall increase 7 to the Water Revenue Bureau staffing. And it 8 includes the pension-to-pension obligations and 9 the benefits associated with that. 10 We also have some services costs 11 associated with it. And that includes the 12 improvements to basis2 or of the billing system 13 that handled the program, and also the office 14 space to support the additional staffing. And 15 that 1.3 million increase in FY 2017 as we 16 prepare for the startup of the program. And an 17 additional 0.7 to 0.8 beginning for FY18 to 2021. 18 Moving onto other key assumptions within 19 the program or the projected financial plan. For 20 O&amp;M, we have looked at the key driver, the 21 Department organizer or the fund has their 22 program, the cost by personnel services, power 23 and chemicals and transfers to other departments. 24 The personnel costs are presented on Slide 27.</p>
<p style="text-align: right;">Page 55</p> <p>1 investigated setting up the Affordability Program 2 in accordance with the bill that was passed by 3 Council. And these are the revenue and revenue 4 requirement impacts associated with this. It's 5 supported from Jon's analysis of the setting up 6 and establishing what the program and costs are 7 involved. 8 Again, we are following the slide or 9 review as per Slide 17. We will look at the 10 revenue requirement or the revenues first. When 11 we project that based on the level of discounts 12 provided in our customer base, we are going to 13 provide a projected amount of discounts 14 equivalent to 16.1 million to 18.6 million from 15 FY 2018 at the introduction of the program to FY 16 2021. So, that's 16.1 in FY18 and 18.6 in FY 17 2021. 18 That revenue impact will be offset by 19 the discontinuation of the WRAP Program which 20 will decrease -- we will see a decrease in grant 21 costs of 2.7 million per year. The net revenue 22 impact for FY18 is 13.4 million. In addition to 23 the revenue impact for the projection of 24 discounts, we also have the increased costs for</p>	<p style="text-align: right;">Page 57</p> <p>1 And we have a projection of the additional 2 staffing as we need for the increase to programs 3 and to meet the regulatory requirements. There 4 is a projection of additional staffing of 21 5 staff between FY17 and FY 2021. 6 HEARING OFFICER BROCKWAY: So this -- I 7 apologize. This is in addition to the additional 8 22 from the Affordability Program? 9 MR. JAGT: Yes, it is. This reflects 10 the additional staff in the Water Department 11 itself. 12 HEARING OFFICER BROCKWAY: And is -- 13 MS. McCARTY: Water Revenue. The 14 affordability staffing increases -- the 15 affordability staffing increases are under Water 16 Revenue. 17 HEARING OFFICER BROCKWAY: This is for 18 some -- 19 MS. McCARTY: This is within the Water 20 Department. 21 HEARING OFFICER BROCKWAY: It's for some 22 of the bills? 23 MS. McCARTY: Right. 24 MR. JAGT: The additional -- again, it</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 58</p> <p>1 includes any increase to staffing. We have to 2 reflect the increase to pension, pension 3 obligation and benefits. It increases as well 4 there. We have the annual increase of salary of 5 3 percent, and also the average increase of 6 fringes and benefits increase 3 percent per year. 7 Again, the primary driver for the 8 increase in the fringes and the benefits were 9 from the City's Five Year Plan which was 10 recognized by PICA and approved. 11 HEARING OFFICER BROCKWAY: Was 12 recognized by what? 13 MR. JAGT: The PICA. They are submitted 14 to the State. 15 The projected financial plan also 16 reflects additional cost for services or Class 17 200 in the budget. The additional funding is 18 driven by regulatory compliance. We have the 19 increase in the grant programs of 3.5 million per 20 year, and that's for the Smith and Guard programs 21 for stormwater. And the regulatory compliance 22 for O&amp;M were 0.6 million to 1.12 million for FY17 23 to FY 2021. 24 There is also some additional support</p>	<p style="text-align: right;">Page 60</p> <p>1 reflect the changes in volume as well as the 2 annual purchase cost, so inflation and the 3 volume. 4 MR. HUANG: That was my other question. 5 It is anticipated that volume will increase? 6 MR. JAGT: Well, actually the volume is 7 decreasing. It's a slight decrease over time, so 8 0.6. 9 MR. HUANG: Okay. 10 MR. POPOWSKY: Do you have contracts for 11 purchasing electricity? I mean, 5 percent seems 12 pretty high. 13 MS. LABUDA: So, we are part of the 14 City. And we utilize the Office of 15 Sustainability for our energy purchases. For 16 FY17, the answer is yes. Approximately, 17 80 percent of our power costs have been purchased 18 forward where the price has been looked in. The 19 remaining 20 percent in laymens term how you pay 20 your electrician. 21 The FY18 purchases have not yet 22 occurred, but I can't speak to the timing of when 23 the City will enter into the market and hedge our 24 FY18 power purchases. So, this is an</p>
<p style="text-align: right;">Page 59</p> <p>1 for an increased infrastructure renewal, the mark 2 out of the utilities out in the field that will 3 drift increase costs from 0.6 million to 0.7 4 million per year from FY17 to FY 2021. 5 Another key assumption or driver for the 6 Water Department is the power and chemicals. The 7 power costs with the purchases that the 8 Department has planned, advanced power purchases 9 it makes through its like energy plan. We were 10 able to not have any increase for power cost in 11 FY17. However, we need to recognize the fact 12 that that can't continue to go on based on longer 13 term experience. We anticipate a 5 percent 14 annual increase in '18. 15 Chemical costs are projected based on 16 3.3 percent annual increase. 17 HEARING OFFICER BROCKWAY: Is that 18 inflation and chemical costs or -- go ahead. 19 MR. HUANG: That's my question. The 20 power costs and the chemical costs, how much of 21 that is inflation and how much of that is volume? 22 MR. JAGT: It reflects the overall 23 increase for the Department's cost over the past 24 several years. So it would increase -- it would</p>	<p style="text-align: right;">Page 61</p> <p>1 inflationary assumption at this point. 2 (Barking heard over the phone connection.) 3 HEARING OFFICER BROCKWAY: Sounds like 4 there is somebody on the phone trying to make a 5 comment. 6 (Laughter) 7 MR. JAGT: Continuing on with Slide 28. 8 The department also has in the budget transfers 9 to other departments, they're interfund 10 transfers. And then they -- basically, it's 11 services provided by other departments that's 12 paid for by transfers in the finance and admin 13 portion of the budget. And that's projected to 14 increase from Fiscal -- it also includes in the 15 projection an increase that's going to -- that's 16 in the projection reflects some additional 17 upfront payments that have to be made to the 18 general fund to reimburse them for the 19 construction of a combined sewer outflow. 20 So the projection includes 1.8 million 21 in FY 2017 and 3.5 million in FY 2018. The 22 portion of the projection of interfund transfers 23 that reflects the services provided by other City 24 Departments reflects the annual increase or</p>



Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 62</p> <p>1 inflationary increase of 3 percent per year. 2 Again, that reflects the services provided from 3 other departments. And they're primarily driven 4 by City personnel costs. 5 MR. CHAPMAN: Just a question. On page 6 27, the 21 additional staff members, you told us 7 on 26 what it was for the 22 and the 8 Affordability Program. But you didn't detail out 9 what it was going to be -- increased costs was 10 going to be in operations and maintenance. 11 MR. JAGT: I can -- we can pull that out 12 and provide that -- I don't happen to have it 13 right on my sheet right here. I can provide an 14 answer to that in a response. 15 MR. BRUNWASSER: Ms. LaBuda, would that 16 be in the operation budget for -- well, that's 17 right. It's year end flex. 18 MS. LABUDA: Right. We haven't yet -- 19 the City hasn't released it's Fiscal 17 operating 20 budget yet. The specific details that would show 21 where the positions would occur that we are 22 hiring FY17 hasn't yet been released. The 22 23 positions that Dave is speaking of are over the 24 planning horizon and not just in year Fiscal 17.</p>	<p style="text-align: right;">Page 64</p> <p>1 completed a review of the O&amp;M requirements. And 2 going to shift over to the capital requirements 3 in the system. 4 This graph is a presentation of the 5 projected capital budget costs for the program. 6 And it also presents the funding plan of how 7 those revenue require the capital programs being 8 met. Now for each year, there is a green bar of 9 how -- or green and grey bar. And the blue bar 10 represents the projected expenses. 11 The green and grey bar represent how 12 those expenditures are being met from the funding 13 plan or the mix of bond issuance and cash funded 14 capital. The grey represents cash funded 15 capital. And the green represents projected bond 16 issues. 17 Now that FY16 looks a little funny 18 because it has all expenses and very little on 19 the funding side. The reason why that is, is 20 because in FY15 we had a bond issue that is 21 providing the funding to make it through FY16 in 22 the capital fund. So, all the revenue 23 requirements presented in '16 are being met from 24 the bond issuance plus the cash funding that's</p>
<p style="text-align: right;">Page 63</p> <p>1 I think -- I am working from memory 2 here, so please forgive me if I'm wrong. Very 3 few of those are in Fiscal 17. 4 MR. JAGT: That's correct. 5 MS. LABUDA: We will get back to you 6 with that amount. 7 MR. JAGT: Just to go over, what we 8 presented is an overview. Within the documents 9 for the rate filing, you had within the 10 supplemental papers to the B&amp;V's testimony, I 11 think it's PWD Statement 9B, there is an 12 assumptions document that includes in more detail 13 or a lot more detail for each of the assumptions 14 presented. And there is a table, Figure 6 15 provides a projection of the additional staffing 16 costs by department and gives the overall or more 17 details as far as the backup for those numbers. 18 MR. CHAPMAN: Thank you. 19 MR. JAGT: It's within PWD's Statement 20 9B, which is the Black &amp; Veatch supplemental 21 testimony. The BV-S1 is the supplemental 22 document one after the testimony. Has all the 23 assumptions for financial planning. 24 Following again Slide 17, we have</p>	<p style="text-align: right;">Page 65</p> <p>1 being provided from the residual and the capital 2 account deposit. 3 So the plan, as you can see, it 4 increases the grey bar or the cash funded capital 5 over the planning period as we increase from 20 6 to 25 percent to try and increase the amount of 7 cash funding that we are doing in the -- for the 8 water fund. And that's to move the water fund to 9 best, you know, improve the position of the 10 utility and improve liquidity in the system and 11 meet the industry-wide best practices. 12 I think this addresses one of the 13 questions from the Board of how the residual fund 14 is used. It's reflected in the transfers and the 15 funding of the capital spending there. As we 16 stated, the other -- within the financial plan we 17 reflect the O&amp;M, the capital requirements which 18 includes fund transfers. The cash funded 19 capital, which we are already mentioned, were 20 moving from 20 to 25 percent to increase the cash 21 funding in the department to improve liquidity 22 which will happen in a long period of time. To 23 move them, the Department needs to make to 24 improve its position and improve it's bond</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 66</p> <p>1 ratings. 2 The additional transfer from residual 3 fund to construction fund is necessary to achieve 4 that goal. It also includes -- there is two 5 portions of the capital fund transfer, capital 6 fund. One is the required capital account 7 deposit. The General Bond Ordinance in addition 8 to the bond coverages that we've already reviewed 9 in the required debt service coverage, it 10 requires a transfer of 1 percent of net asset 11 value or original cost less depreciation of the 12 system's assets be transferred from the residual 13 fund to the capital account each year. So, 1 14 percent of the net value of assets is transferred 15 there, and that's required by the bond ordinance. 16 In addition to that, the Department 17 makes an elective amount of funding from the 18 residual fund. So, it's the combined cash 19 funding of the capital account deposit plus the 20 residual fund transfer that represents the cash 21 funded capital from the capital. 22 MS. OLANIPEKUN-LEWIS: What drives the 23 elected contributions from the residual account? 24 MR. JAGT: It's basically the amount</p>	<p style="text-align: right;">Page 68</p> <p>1 account deposits and the transfers. On the right 2 side, we have the projection of the revenues 3 including the service revenues, the miscellaneous 4 revenues and the withdrawals from the rate 5 stabilization. 6 So, this graph answers the question from 7 the Board of how are you planning to use the rate 8 stabilization fund. You can see that with our 9 projection of revenue increases in addition to 10 the increased revenues that we have requested, we 11 also need to draw from the rate stabilization to 12 meet the annual revenue requirements in the 13 system. And that's 19 million is drawn in FY17 14 in addition to the revenue increase requested. 15 And 39 million is withdrawn in FY18 in addition 16 to the revenue increase that's been requested. 17 MR. HUANG: What will the balance be at 18 the end of '18? 19 MR. JAGT: The balance at that point at 20 end of '18 will be 111 million, which is the 21 targeted 110 million minimum balance for the 22 fund. 23 One key thing to point out here is this 24 projection reflects our projection of cost on the</p>
<p style="text-align: right;">Page 67</p> <p>1 available to meet the 20 to 25 percent. But we 2 basically been the financial plan presented, we 3 presented a minimum balance that we wanted to 4 maintain in the fund of 15 million a year. And 5 we transferred as much out as we could based on 6 the projected financial plan maintaining that 7 15 million per year. And it did meet the target 8 of moving it from 20 to 25 percent over the 9 five-year period. 10 As we spoke before several times, three 11 is also the rate stabilization transfer. That 12 provides additional funding necessary. We will 13 review that in a slide coming up of how it helps 14 meet the revenue requirements for each of the 15 fiscal years projected. 16 Again, as we presented in Slide 17, we 17 do a projection of revenues and revenue 18 requirements. And we look at the additional 19 needs of the system. And this graph, it presents 20 that projection of flow of funds that we looked 21 at. So on the left side with the blue and the 22 greys, this is your revenue into the system -- 23 that's your revenue requirements into the system 24 reflecting O&amp;M, the debt service and the capital</p>	<p style="text-align: right;">Page 69</p> <p>1 system. So, O&amp;M reflects our projection of 2 actuals. During the process or each annual 3 budget review, the Department also has to be able 4 to meet the coverage and projections based on 5 actual spending, which is why we need -- we would 6 need even more money from rate stabilization. 7 And that's one of the reasons or the drivers for 8 having the 110 million in the Rate Stabilization 9 Fund, sorry. Needed to take a breath. 10 Because the revenue requirement side 11 would be higher based on 100 percent of budget, 12 so we would have to increase the revenue side to 13 meet that which comes from available balances for 14 budgeting purposes in the Rate Stabilization 15 Fund. 16 Continuing a projection for FY19 through 17 '21, we already cheated and jumped ahead. At FY 18 2018 we are at minimum of 111 million or just 19 above the 110 million, so we can't continue to 20 withdraw from the Rate Stabilization Fund. Here 21 the revenues are increased to meet the revenue 22 requirements in each year and provide the 23 deposit-to-rate stabilization to rebuild the fund 24 or maintain the minimum balance.</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 70</p> <p>1 On Slide 33, we have got a projection 2 which we've already reviewed of the rate 3 stabilization and the residual fund balances. 4 This addresses the Board's question which was how 5 we are utilizing the funds and the projected 6 balances as a result of the proposed plan. As we 7 have already reviewed, that with the planned 8 increases from the rate increased, proposed rate 9 increases. We are going to be at a drawdown 10 to -- from the beginning balance of FY14 at 11 185 million. 12 During FY15, we project we are going to 13 see an increase to 206 million, but then 14 subsequently be drawn down in '16, '17 and '18 15 down to 111 million. Which is just of the -- 16 MS. OLANIPEKUN-LEWIS: This is with no 17 action taken? 18 MR. JAGT: This is with action taken. 19 MS. OLANIPEKUN-LEWIS: With action? 20 MR. JAGT: Yes, ma'am. 21 MS. LABUDA: Dave, can I step in? 22 MR. JAGT: Yes. 23 MS. LABUDA: That's an excellent 24 question. Really based on review of the General</p>	<p style="text-align: right;">Page 72</p> <p>1 on the table with the combined Residual Fund and 2 the Rate Stabilization Fund essentially reflects 3 the operating reserves of the utility. 4 Moving on, sort of the what's the net 5 impact? One of the weighs of measuring or 6 definitely the financial -- the financial 7 industry looks at our projection and seeing how 8 we meet our performance. And one of the drivers 9 is meeting the bond ordinance requirements. So, 10 we will look at the projected debt service 11 coverage senior and total debt service coverage 12 final from the financial plan. 13 You will see the plan as proposed by the 14 policies of the Department increases the senior 15 debt service coverage from 1.24 in '16 to 1.25 in 16 '17, 1.26 in '18 and 1.35 coverage from there 17 after and 2019 and beyond. And the overall total 18 debt service coverage ranges from 1.13 and 19 increases to 1.22 over the period. 20 MS. OLANIPEKUN-LEWIS: Why did they jump 21 in coverage between '18 and '19? 22 MS. LABUDA: Really, the only way we can 23 begin to de-leverage the utility, if you read our 24 financial statements, we have 1.9 billion of debt</p>
<p style="text-align: right;">Page 71</p> <p>1 Bond Ordinance, of course these withdrawals all 2 factor in revenue increase. Without the revenue 3 increase we requested, the withdrawals are much 4 higher which would lower the balance. 5 MS. OLANIPEKUN-LEWIS: Sure. 6 MR. POPOWSKY: Excuse me. I'm sorry. 7 The 110 million self-imposed target or is that 8 one of the mandatory -- 9 MS. LABUDA: Well, there is two parts. 10 The General Bond Ordinance was written in 1989 11 and took effect in 1993. And in that document 12 was a required amount in the RSF to cover any 13 unforeseen emergencies. And that General Bond 14 Ordinance provides for \$45 million. 15 Here we are in 2016. I have nearly an 16 \$800 million operating budget, \$45 million is 17 woefully light. We don't separate charges to 18 cover a hundred percent of the budget. So when 19 you think of rates don't cover budget and the 20 minimum balance, the 110 is both trying to 21 balance our original budget and to cover any 22 unforeseen emergencies plus meet the minimum 23 requirement. 24 MR. JAGT: The projection on the graph</p>	<p style="text-align: right;">Page 73</p> <p>1 and the value of our assets after depreciation is 2 2 billion. We are nearly a hundred percent 3 leveraged. The only way we can begin to 4 de-leverage the utility and reduce the debt 5 burden on the account per customer is by growing 6 coverage and beginning to do more pay-as-you-go 7 capital, which would be inline with best industry 8 industry practices with our peers but it also 9 benefit our base. 10 MR. JAGT: As Board Member Bernie 11 Brunwasser pointed out, there is also insurance 12 covenant requirement, which is that 90 percent of 13 the debt service is funded from current revenues. 14 So, that is where we are providing the insurance 15 coverage test. And you can see each year -- the 16 closest year where we have the largest draw from 17 rate stabilization, we are at 107 percent of debt 18 service. And the rest of the years we are 19 improved coverage from above that. We are 20 meeting the insurance covenant requirement. 21 Rate Board Ordinance included a coverage 22 requirement that the revenues not exceed total 23 appropriations of the Water Fund. And we did a 24 projection based on our financial plan. And we</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 74</p> <p>1 see that based on the proposed financial plan 2 with the proposed rate increases, that we 3 continued to meet the Board Ordinance 4 requirement. 5 So far, we reviewed the projected 6 assumptions and the financial plan results. At 7 this point, we are going to shift our review from 8 the review of the financial plan to the results 9 of the cost of service study. 10 So as Ann pointed out in her review, we 11 go through numerous allocations of the costs to 12 the total Water Department or water fund costs 13 from total water fund to to the costs of 14 providing water service. Wastewater service 15 included the total combined total of sanitary and 16 stormwater service. 17 Those costs are allocated through the 18 industry accepted principles from AWWA for the 19 water utility. Then the net result of the cost 20 distribution is the residential customer classes 21 being allocated 156 million of revenue 22 requirement. The non-residential class being 23 allocated 83 million. The PHA stands for the 24 Philadelphia Housing Authority. Allocated 6.3</p>	<p style="text-align: right;">Page 76</p> <p>1 sanitary, sewer and the stormwater cost to 2 service. It's the same breakdown between 3 residential and non-residential of Philadelphia 4 Housing Authority, the City services, so services 5 provided to the general fund and the aviation 6 fund. And the fire includes fire and public 7 fires. So that's -- there is no public fire in 8 the sewer because that's all under the water 9 service. 10 Total wastewater distribution cost is 11 216.2 million for FY17. The distribution is 12 presented between customer classes. And the 13 rates are subsequently designed to cover these 14 costs. Stormwater is projected to be 15 157.2 million. Again, the primary breakdown, the 16 distribution is between residential and 17 non-residential or residential picks up 18 46 percent of stormwater. And non-residential 19 picks up 46 in equal part. The City picking up 20 7 percent and 1 percent for PHA. 21 Just a brief review of the cost drivers. 22 That the key components that were driving the 23 cost increases for the Department. Some of the 24 challenges we had were including the declining</p>
<p style="text-align: right;">Page 75</p> <p>1 million. City services, water services provided 2 to the City is 8 million. And total fire 3 including private fire and public fire protection 4 is 10.9 million. Total of 264.2 million for 5 FY17. 6 HEARING OFFICER BROCKWAY: Do you 7 provide in your filing the same type of breakout 8 for earlier and later fiscal years? 9 MR. JAGT: Yeah. Within our department 10 and within our filing, we do provide the 11 distribution of the existing revenues by class, 12 so you can compare the distribution under the 13 existing rate and what the resulting distribution 14 of service or the proposed rates are. 15 HEARING OFFICER BROCKWAY: Is this, the 16 Fiscal 17, maybe it doesn't make any difference. 17 Are you going -- are you assuming -- you can 18 assume anything with respect to the breakout for 19 Fiscal '18 and '19? 20 MR. JAGT: We only did a projection for 21 FY17 and '18. And the work papers provide the 22 distribution for FY17. 23 Next slide we do a presentation of the 24 wastewater cost of service allocation between the</p>	<p style="text-align: right;">Page 77</p> <p>1 water usage. As we said, we lost Bucks County. 2 And we are also seeing in the projection base of 3 the water fund, a decrease in sales to 5/8" 4 meters. And as presented in the assumptions, 5 that reflects a 0.6 percent decrease in the water 6 sales over the steady period. 7 HEARING OFFICER BROCKWAY: Before we 8 move on from this, do you project that there is a 9 point at which the extent of the deficiency 10 implemented by customers levels off, or do you 11 project -- what do you project going forward as 12 far as the change, if any, in water? 13 MR. JAGT: Within the projection period 14 that we have, we project that the decrease to 15 continued through the study period. We have -- 16 with each update we have done this. And for a 17 longer term projection, we do show a trailing off 18 or not continuing. But for the five-year or 19 six-year projected outlook, we continue to 20 reflect a reduction. 21 HEARING OFFICER BROCKWAY: Does the 22 filing include details on the derivation of the 23 assumptions with regard to impact of various 24 features like this on the consumption?</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 78</p> <p>1 MR. JAGT: Not a breakdown at this 2 level. It mean, it gives the basis of what 3 the -- what the decrease was for the 5/8". It 4 does give a projection by class of the 5 consumption for each customer type. 6 HEARING OFFICER BROCKWAY: Do you have 7 that information handy, or is that something you 8 have to do a study for? 9 MR. JAGT: No. We can pull it up and 10 put a summary together. I will give you work 11 paper references where we can find that. 12 HEARING OFFICER BROCKWAY: Yeah. That 13 would be great. 14 MR. JAGT: I know for sure it's in the 15 customer portion of the financial plan, but I 16 have to look up and see what page number it would 17 be. 18 HEARING OFFICER BROCKWAY: Thank you. 19 MR. JAGT: We pointed this out before, 20 but the declining usage is projected as customer 21 basis uses more efficient appliances and 22 fixtures, and also conservation awareness and 23 ongoing efforts to decrease the water demand in 24 the system.</p>	<p style="text-align: right;">Page 80</p> <p>1 the discounts and grants programs that we 2 currently have in place and the introduction of 3 the new Affordability Program to meet the 4 mandates of the bill recently passed by City 5 Council. You also have the environmental -- the 6 environmental regulations put on utility by the 7 safe -- by the State and Federal requirements 8 such as the Safe Drinking Water Act, the Clean 9 Air Act and the Clean Water Act. 10 We also have the driving policy or the 11 increase in personnel calls which, in addition to 12 being the inflationary increases that we have, 13 it's the new positions required to meet all the 14 other bulleted items on this list. In order to 15 meet the regulatory requirements and provide the 16 increase in customer service and meet the 17 requirements of aging infrastructure, we have to 18 increase the staff costs. 19 Again, this slide addresses one of the 20 Board's questions about the key drivers for the 21 cost increases. 22 MR. HUANG: I have a question. I am 23 surprised you didn't include some of the things 24 that were stated earlier about making sure that</p>
<p style="text-align: right;">Page 79</p> <p>1 MR. POPOWSKY: Excuse me. What about 2 the number of customers? Isn't the City growing 3 again, I guess? 4 MR. JAGT: Over the recent three years, 5 we haven't seen very -- a strong enough increase 6 in the accounts to suggest continuing to increase 7 the number of accounts. In fact, it's relatively 8 stable. The one difficult thing is in one of the 9 test years or in three years ago at the 10 introduction of stormwater, some of the increase 11 in the accounts is believed to be the 12 introduction of the stormwater only accounts and 13 conversion to that. So, the tracking of the 14 accounts is believed that it's remained stable. 15 But the increase in the accounts is actually the 16 reflect the increase in accounts for stormwater 17 only. 18 Some of the other cost drivers we have 19 is the increasing efforts for the Department to 20 address the aging infrastructure needs with 21 increasing the capital reinvestment in the 22 system. Customer assistance programs are 23 continuing to be expanded to provide services or 24 continued excellent service to the customers for</p>	<p style="text-align: right;">Page 81</p> <p>1 the utility is fiscally sound. Can someone talk 2 about how close we are to a downgrade per these 3 ratios and what would the costs be of the 4 downgrade? 5 MS. CLUPPER: What was the question 6 again? 7 MR. HUANG: We were looking at some 8 ratios on page 34, and we were trying to have 9 them go in the right direction. So if they go in 10 the wrong direction, at some point the rating 11 agencies punish you. So, what does that look 12 like? And what is the cost consequence in terms 13 of cost of capital. 14 MS. CLUPPER: My name is Kathy Clupper 15 from Public Financial Management. There is not a 16 real specific actual answer. You understand that 17 there is trends. So currently, if you look at 18 the credit spreads between A, AA and BBB the 19 current Water Department is in the main category. 20 Between just looking in recent -- I have to make 21 my presentation on the slide and see my 22 information. 23 If you want to compare the AA rate at 24 20-year revenue spread to the A rated, it's about</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 82</p> <p>1 35 basis points. If you look between -- that's 2 if you look between the AA and BBB, it's about 40 3 basis points. And this, of course, changes when 4 credit spreads change. A year or so ago between 5 the A and AA, it was 44 basis points. There is a 6 cost. 7 In addition, there is also a cost to the 8 Department would like to do their bonds or have 9 other types of structure, the cost to the 10 liquidity facility also significantly increases 11 as the ratings go down. 12 MR. HUANG: And 35 basis points off 13 of -- what's the -- what am I multiplying that 14 to? 15 MS. LABUDA: Sure. Kathy is speaking 16 to -- 17 MS. CLUPPER: Sorry. 0.35 percent. 18 MR. HUANG: Right. 19 MR. CHAPMAN: Off of what base? 20 MS. LABUDA: We issue tax exempt debt. 21 And so, it would not be the U.S. Treasury curve. 22 It would be the U.S. Treasury curve less some 23 factor, 0.6/0.7. It's called the municipal 24 market index, MMD. And I'm not sure. When Kathy</p>	<p style="text-align: right;">Page 84</p> <p>1 than credit and you need to have certain amount 2 of liquidity and financial stability within your 3 system. So, it's more than just if I issue this 4 bond and A rating versus a AA I will save 1, 2, 5 3 million dollars a year. It's a bigger issue. 6 And it also, I mean, ratings reflect the 7 underlying financial strength of the system. You 8 want to have a higher rating because you want to 9 be a strong system. It's not a discreet 10 discussion. 11 MR. HUANG: Thank you. 12 HEARING OFFICER BROCKWAY: Are you going 13 onto -- let's go off the record. 14 - - - 15 (At this time, a discussion was held off the 16 record.) 17 - - - 18 HEARING OFFICER BROCKWAY: On the 19 record. We will take a break until 11:00. 20 - - - 21 (At this time, a break was taken.) 22 - - - 23 HEARING OFFICER BROCKWAY: We are back 24 on the record.</p>
<p style="text-align: right;">Page 83</p> <p>1 gives her presentation -- I can't recall where 30 2 year MMD is right now. 3 HEARING OFFICER BROCKWAY: I don't think 4 that's the question. 5 MR. HUANG: Yeah. How much of the debt 6 becomes more expensive? 7 MS. CLUPPER: Oh. Any new money that 8 you issue -- if you are issuing 250 million a 9 year, you can either issue that at cost of 10 capital of 4 percent or 4.5 percent depending on 11 where rates are. 12 HEARING OFFICER BROCKWAY: So, you go 13 through this in your testimony in the filing of 14 what the different bond issuances are and what 15 rates they're at and projected issuances? 16 MS. CLUPPER: I mean, the discussion of 17 ratings is more than just the cost of capital. 18 It's also the ratings are a reflection of the 19 financial stability of the system which allows 20 you to do a lot more. If you want to have a 21 created debt structure, if you want to create 22 subordinate debt, if you want to have a CIP 23 program, if you want to really tightly manage the 24 cost of your debt, you need to be at higher rate</p>	<p style="text-align: right;">Page 85</p> <p>1 What are your next presentations, 2 Mr. Dasent? 3 MR. DASENT: Black &amp; Veatch continues, 4 so Dave and -- 5 HEARING OFFICER BROCKWAY: Do we have up 6 here at the desk everybody who is going to be 7 answering the questions? 8 MR. DASENT: Yes. 9 HEARING OFFICER BROCKWAY: Please 10 proceed. 11 MS. KUMAR: Good morning, again. We are 12 now going to go to the kind of the last part of 13 this discussion this morning that we've been 14 having. 15 HEARING OFFICER BROCKWAY: Your name 16 again? 17 MS. KUMAR: I'm Prabha Kumar from Black 18 &amp; Veatch. 19 Dave here, my colleague, talked about 20 really the building, two building -- the first 21 two building blocks which are financial plan and 22 cost of service. He talked about the financial 23 plan projections of the revenue, the revenue 24 requirements and all the obligations that they</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 86</p> <p>1 daily have to meet in terms of not only it's 2 operation and capital program but also general 3 bond coverages, the insurance coverage and rate 4 requirement later the plan, the six-year plan. 5 And then from there we went more specifically 6 into the two years, which was the rate being 7 requested which is the FY17 and FY18 where they 8 talked about the cost of service analysis, how 9 you take the revenue requirement and then you 10 break it down into service time between retail 11 and wholesale. And within retail, how you break 12 it down within service type. 13 Why do you do that? Because based on 14 that, you really set the rates. If you look at 15 Philadelphia rate structure, it really has 16 primarily on the water side it has the fixed 17 charges which are based on meter side and then 18 you have the volume rate. Those rates are 19 defined based on the detail cost of service 20 analysis. And intention with that, Philadelphia 21 also has on the retail side stormwater rates. 22 The stormwater rates are also defined based on 23 the detail cost of service that Dave kind of 24 talked about.</p>	<p style="text-align: right;">Page 88</p> <p>1 Philadelphia. 2 When you look at that group of 5/8" 3 meters with 600 cubic feet of water usage, which 4 is what we call typical, the monthly bill 5 currently the customer is paying for water and 6 sewer and stormwater included is \$67.40. Now, 7 with the proposed rate increase that has been 8 filed, the additional monthly charge expected is 9 \$4.20. The charge would go up to \$71.60 for a 10 customer who does not have any discount like a 11 senior discount. If it's a senior citizen, it 12 will go from \$50.60 to \$53.07 in '17. 13 Then in '18 there is additional rate 14 requested that is being asked for. With that 15 there will be an additional increase of \$3.19 if 16 you look at from our monthly standpoint. The 17 bill is expected to go to \$75.50. These numbers 18 are rounded to the nearest 10-cents. This is 19 what is expected for a typical residential 20 customer in Philadelphia with the rate increases 21 that have been filed. 22 How does this compare when you look at 23 it from a national -- 24 HEARING OFFICER BROCKWAY: Sorry to</p>
<p style="text-align: right;">Page 87</p> <p>1 That brings the logical question, what 2 is the impact of all these rates on the customer. 3 In this section, we are going to talk about what 4 are the impact on bills. And when we talk impact 5 on bills, we typically talk about residential 6 customers because they are more of a homogenous 7 group. We are going to talk about that. 8 And then also the question is that how 9 does Philadelphia compare with other 10 municipalities, other utilities. We will get a 11 glimpse of that, as well. When we talk about 12 rate and rate impact, a logical question also is 13 can something be done for customers who are in 14 need? We will talk about the customer assistance 15 program. 16 What is the impact of the rate increase 17 if you're talking specifically in FY17? That is 18 a snapshot here. The current year, which is '16, 19 there was no rate increase. Currently, if you 20 take a typical residential customer. When we use 21 the word typical in this context, we are really 22 talking about a residential customer that uses 6 23 ccf or 600 cubic feet of water and 5/8" customer. 24 That's the predominant customer base in</p>	<p style="text-align: right;">Page 89</p> <p>1 interrupt. Does the rate filing have a bill 2 frequency analysis? 3 MS. KUMAR: Mean different levels of 4 usage? 5 HEARING OFFICER BROCKWAY: Yes. 6 MS. KUMAR: Yes, it does. 7 How does this compare when you compare 8 Philadelphia nationally in terms of water, sewer 9 and stormwater? How does that compare? 10 The chart actually shows utilities from 11 highest to the lowest in this group that we are 12 presenting here. And you can see Philadelphia is 13 more on the lower end of the spectrum. All the 14 utilities presented here, their rates are FY16 15 charge. It's not FY17. So what we have done for 16 Philadelphia, we are showing the FY16. And here 17 it is not the rounded number. Here it is the 18 actual, which is \$63.43. We are also showing at 19 '17 where it will be. You really get both view 20 in the same one bar for Philadelphia. 21 One thing to point out here, when we 22 talk about comparing Philadelphia with other 23 utilities of any benchmark that we talk about, 24 it's not really apples to apples on risk. Why is</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 90</p> <p>1 that? It's because there are significant 2 differences on utilities as to where they draw 3 their water. If you take water utility, for 4 example, where do they draw their water? Is it 5 surface water? Do they use a combination of 6 surface and well waters? What kind of frequent 7 processes they have? Do they have frequent 8 process, or do they use more chlorination? There 9 are differences like that. And the level of the 10 aging infrastructure, not all of the 11 municipalities, even though some of them are 12 large like municipalities like Philadelphia, not 13 all of them have the same level of aging 14 infrastructure. 15 And also, if you look at how they have 16 historically funded their capital program, how 17 leveraged they are, what kind of bond and 18 insurance requirements they have and even what 19 their rates setting processes are, they are 20 significantly different. All of those factors go 21 into water utility and how they recover those 22 costs and ultimately what their bills look like. 23 That's why we say it's not always apples to 24 apples. However, it just gives you a high level</p>	<p style="text-align: right;">Page 92</p> <p>1 issues that are now corrected. 2 MS. KUMAR: We also took a look at how 3 do the proposed residential bills compare when 4 looking at from regional perspective. It still 5 compares very favorably. And especially you can 6 see on the sewer side Philadelphia, even the 7 current rate, we are actually the lowest. So 8 something to, again, keep in mind when we are 9 looking at these proposed request for rate 10 increases. 11 On the stormwater side, the reason we 12 had to pull stormwater out into separate analysis 13 is because not many municipalities have 14 stormwater fees. We took a look at some of the 15 large utilities that do have stormwater fees. 16 There again, Philadelphia's stormwater charges, 17 even the current and the proposed are extremely 18 favorable despite the large program we have for 19 long term plan and other programs. 20 When we talk about the financial plan 21 and the cost of service and the rates and the 22 impact, so while we have emphasized importance of 23 the revenue requirement and the utility meeting 24 all of its obligations, the obligations also</p>
<p style="text-align: right;">Page 91</p> <p>1 guidance of where does Philadelphia fall. 2 So while we can't interpret too much 3 from this in terms of operational performance or 4 cost efficiencies, it just gives you a broader 5 look at where Philadelphia stands. 6 Now, how does Philadelphia compare 7 regionally? We also took a much closer look at 8 Philadelphia and the neighboring utilities. In 9 this, we also looked at utilities of Pennsylvania 10 American and Aqua Pennsylvania and New Jersey 11 American. And here again Philadelphia, compares 12 very favorably both in terms of the current rates 13 in '16 and the '17 proposed bill when you look at 14 the typical bill. 15 MS. LABUDA: We can pause. I believe we 16 need to redial them. 17 HEARING OFFICER BROCKWAY: We are off 18 the record. 19 - - - 20 (At this time, a discussion was held off the 21 record to dial back in people on the phone.) 22 - - - 23 HEARING OFFICER BROCKWAY: We will go 24 back on the record. We are having some telephone</p>	<p style="text-align: right;">Page 93</p> <p>1 include the customer side. We really have two 2 sides of the coin, the utility side and also the 3 customer side. That is why we need to take a 4 balanced approach when we are trying to establish 5 both the financial plan and the cost of service 6 rate. One of the ways to establish is not only 7 trying to maintain the financial solvency of the 8 utility, but also is there anything that can be 9 done to protect customers from a perspective of 10 affordability. 11 The Water Department actually has a 12 number of programs as you can see here from 13 senior citizens discount to some discounts from 14 charitable organizations to the Assistance 15 Program and Home Emergency Loan Program. There 16 are different types of program and the 17 Conservation Assistance Program, so there are 18 different types of program that are already in 19 place to help low income customers. When you 20 look at these programs in aggregate and in FY15, 21 the Water Department provided over \$24 million of 22 assistance just for these programs. 23 Now on top of these programs that Dave 24 alluded to, there is going to be new</p>



Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 94</p> <p>1 Affordability Program as passed by the counsel. 2 That Affordability Program and its needs are 3 coming on top of this assistance that's already 4 being provided. And the Affordability Program 5 Jon Davis from Raftelis is instrumental in 6 helping the City work through the program. He 7 will talk about that. 8 MR. POPOWSKY: Just before you do that. 9 The senior citizen discount, is that for low 10 income senior citizens? It's not for all? 11 MS. KUMAR: It's income tested, that is 12 correct. It's income tested. 13 MR. BRUNWASSER: The assumption is that 14 the new program -- I mean, the new requirements 15 passed by City Council will not be -- the 16 25 percent discount for eligible seniors will 17 continue over and above the new program? 18 MS. KUMAR: That is correct. That is 19 the assumption. 20 MR. BRUNWASSER: Right. Right. That 21 program went into effect over 30 years ago. 22 Every senior was grandfathered in regardless of 23 income at that time. So, I doubt there's too 24 many left that don't meet the requirements.</p>	<p style="text-align: right;">Page 96</p> <p>1 transition to Jon Davis. He was instrumental in 2 helping the City with the program. He's going to 3 provide details on the program. 4 MS. OLANIPEKUN-LEWIS: Even though I was 5 a councilperson, I didn't help the council who 6 put this together, for the record. I was not 7 part of the drafting of this program, so you'll 8 be informing me. 9 MS. LABUDA: If I may go on the record 10 with just a clarifying comment, I apologize for 11 not stepping in earlier. But in terms of senior 12 citizens, they will have the option to either 13 stay in the 25 percent discount or apply for the 14 new program. There is not a scenario I foresee 15 where they would get both the discount an -- 16 MS. OLANIPEKUN-LEWIS: That's what I was 17 trying to understand. 18 MS. LABUDA: -- and the new 19 Affordability Program. I apologize for not 20 jumping in there. 21 MR. DAVIS: Good morning. My name is 22 Jon Davis. I'm with Raftelis Financial 23 Consultants. We had the opportunity over the 24 past several months to work with the Water</p>
<p style="text-align: right;">Page 95</p> <p>1 MS. OLANIPEKUN-LEWIS: I just wanted to 2 be clear. The new program accounts recently 3 enacted would be on top of the senior citizens 4 program? 5 MS. KUMAR: On top of all these 6 different assistance programs that you are seeing 7 on the screen. 8 MS. OLANIPEKUN-LEWIS: Okay. 9 HEARING OFFICER BROCKWAY: But it may 10 not result in a different rate because depending 11 on the design of the program, this is what's 12 called a burden-based program. You try to get 13 the rate to meet to determine percentage of the 14 customer's income. And there's a whole lot of 15 options there about how you define income and how 16 you define what the percentage is and how you 17 define what the usage is. But putting all of 18 those things aside, you end up with a target bill 19 for the customer. 20 MS. OLANIPEKUN-LEWIS: Would the new 21 program result in additional discounts, i.e., 22 less revenues to the Water Department I guess is 23 where I'm trying to go? 24 MS. KUMAR: This is a good time to</p>	<p style="text-align: right;">Page 97</p> <p>1 Department, the Water Revenue Bureau and the City 2 Council to help draft a new customer 3 Affordability Program that better meets the needs 4 of economically disadvantaged customers within 5 the system. 6 The general structure of the program is 7 captured in the existing city ordinance which we 8 alluded to. A lot of the details, the 9 implementation details of the program, have yet 10 to be fully thought through and established. In 11 fact, a lot of the details of the program rely 12 pretty heavily on the outcome of this rate 13 filing. So over the next few months, we will be 14 working on this. 15 However, we do have some of the program 16 details, and we'd like to share some of those 17 with you here today. For instance, the program 18 is going to be divided into three income tiers as 19 we see here on the slide. That is based on 20 federal poverty level. And it's available for 21 customers at or below 150 percent of the federal 22 poverty level. 23 Within each of the income tiers, we have 24 usage levels which try to capture customers that</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 98</p> <p>1 are existing in different level of consumption 2 currently. We have a low, medium and high usage. 3 And you see the development of those here. This 4 program is consistent with the EPA guidelines on 5 the development of affordability. It's also 6 consistent with industry practice in this regard, 7 so that's kind of in the basis of some of that 8 discussion. 9 MS. OLANIPEKUN-LEWIS: With each tier 10 you have a utilization analysis. Is that what 11 you're saying? 12 You have three income tiers. Within 13 each tier, then, you would look at consumption 14 utilization? 15 MR. DAVIS: That's correct. First, 16 you'd be placed in tiers. Then you look at 17 historical consumption to place you in. 18 Like to look at kind of the scope of the 19 program as we're -- as we analyzed it. The 20 potential is here for us at 56,000 PWD accounts 21 for about 13 percent of the residential 22 population that fall within this program with 23 respect to the income tiers that have been set 24 up. Additional assistance above the discount</p>	<p style="text-align: right;">Page 100</p> <p>1 Board regarding the details of implementation. 2 And we will be working through those over the 3 coming months. 4 MS. OLANIPEKUN-LEWIS: In no instance 5 would a customer pay 0. They will pay at least 6 \$12? 7 MR. DAVIS: Yes. There is a minimum 8 bill concept. 9 MR. POPOWSKY: Earlier slide you were 10 projecting a revenue decrease of 16.1 to 18.6 11 million. I assume, first of all, that is when 12 the program is fully in effect. 13 When is that? Is that 2018 or -- 14 MR. DAVIS: Yes. 2018 is the 15 implementation. 16 MR. POPOWSKY: You wouldn't see that in 17 2017? 18 MR. DAVIS: Correct. You would see some 19 ramp up in costs resulting in the additional 20 personnel that you saw discussed in the costs of 21 service earlier. You also have some 22 implementation with respect to system design. 23 MR. POPOWSKY: What's -- what percentage 24 of customers, eligible customers, what's the</p>
<p style="text-align: right;">Page 99</p> <p>1 tiers that we set up. We have additional 2 assistance for payment plans for other qualifying 3 customers, so it's just not limited to 150 4 percent or below of the federal poverty level. 5 And finally, the implementation of the 6 program as we mentioned, the details of it depend 7 on the outcome of this rate filing. 8 The table here at the bottom of the 9 slide shows some of the ways that the tiers and 10 the usage levels are divided up. And then the 11 resulting -- the resulting discounts that 12 customers would receive if they fall into these 13 tiers and usage levels. You see some pretty 14 significant discounts here. We also, if the 15 discounted bill falls below the minimum bill that 16 we have in the far right-hand corner, the 17 customer would receive a minimum bill. So, we do 18 have that. 19 So based on the result of the rate 20 filing, based on some of the technical issues 21 that are inherent in a program of this complexity 22 and the size, we will be working through a lot of 23 the implementation issues going forward. I know 24 the -- there were some questions from the Rate</p>	<p style="text-align: right;">Page 101</p> <p>1 assumption as to what percentage of the customers 2 will take you up on it. 3 MR. DAVIS: That was one of the major 4 questions in developing the cost that we showed 5 earlier. This is a real -- really a unique 6 program. There are certainly instances of 7 customer affordability programs both within the 8 water and wastewater industry and within other 9 utility industries. But every one is unique in 10 that once it's put in place, there is no 11 certainty with respect to what's subscription 12 rate or the number of customers who qualify will 13 actually apply. 14 So, we made some assumptions from that. 15 We have used benchmarks from other utilities, 16 other regional utilities. We have tried to make 17 sure that the risk to PWD and to the City are 18 manageable risks. Those assumptions would be 19 fine tuning subsequent rate cases once the 20 program is in place. 21 MR. POPOWSKY: That was my question. 22 What is the assumption basic? To get to 16 to 23 18 million, you must have made an assumption. 24 MR. DAVIS: We have some assumptions</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

Page 102

1 there. I can refer you to how exactly they are  
2 handled within the work papers. What we wanted  
3 to do is create a situation where 80 percent of  
4 the time, the loss revenues would fall at or  
5 below a certain market. That's how we came to  
6 the numbers side of it.  
7 MR. POPOWSKY: That's why I still don't  
8 understand. That was the simulation you did so  
9 that 80 percent of the time you'd cover your  
10 cost. I still don't know what percentage of  
11 customers you expect to participate.  
12 MR. DAVIS: I would have to walk through  
13 those details with you. It's consistent with  
14 what other regional utilities are doing.  
15 MR. HUANG: Isn't income eligibility  
16 based on eligibility for gas?  
17 MR. DAVIS: For this --  
18 MR. HUANG: Or is it separately  
19 determined?  
20 MR. DAVIS: It's separately determined.  
21 MR. HUANG: Okay.  
22 MR. DAVIS: But they use similar  
23 criteria.  
24 HEARING OFFICER BROCKWAY: Did you have

Page 103

1 a question?  
2 MS. OLANIPEKUN-LEWIS: I was just  
3 feeling Sonny's frustration here. Of the 56,000  
4 accounts, you are making some assumption as to  
5 who is participating. I think that's what you're  
6 trying to get at. Is it 70, 50, 30 percent?  
7 What is that number?  
8 MR. DAVIS: It depends on the income  
9 level. We see different subscription rates at  
10 different income levels. Basically, if I have a  
11 lower income and I'm eligible for a larger  
12 discount, I am more likely to apply. So roughly  
13 speaking, I would put it between 50 and  
14 75 percent subscription.  
15 HEARING OFFICER BROCKWAY: If it's  
16 acceptable to the Board, I would think we might  
17 be helped if we invite Mr. Ballenger to ask  
18 questions if he has them right now about this. I  
19 expect their witness Mr. Holden will be putting  
20 on some testimony regarding, or we could wait.  
21 It's up to you, Mr. Ballenger.  
22 MR. BALLENGER: I might refer to  
23 Ms. Pickens, as well. Yeah. I guess we can have  
24 a couple of -- maybe just a couple of quick

Page 104

1 questions.  
2 Just for purposes of determining the  
3 percentage discounts on page 46, Mr. Davis, we  
4 have spoken before. I am just guessing, is this  
5 based on the mid point of each tier again?  
6 MR. DAVIS: Yes. It's based on the  
7 middle -- the median income within the tier and  
8 the median consumptions within the usage.  
9 MR. BALLENGER: Okay. Is it also based  
10 on a hypothetical family size of 2.5 persons or  
11 thereabout that I think we dealt with in the  
12 past?  
13 MR. DAVIS: Under those circumstances,  
14 the family size wouldn't play into that.  
15 HEARING OFFICER BROCKWAY: How could it  
16 not?  
17 MR. BALLENGER: You have to determine  
18 the amount of the actual household income.  
19 MR. DAVIS: I'm sorry. I misunderstood  
20 your question.  
21 MR. BALLENGER: Okay.  
22 MR. DAVIS: It is based on the average  
23 household size for the City of Philadelphia.  
24 MR. BALLENGER: Okay. Just in

Page 105

1 calculating those discounts. Okay. As  
2 Ms. Brockway mentioned, this is a burden-based  
3 piece of legislation. What were the burdens used  
4 that underlie these particular tier calculations  
5 as a percentage of household income?  
6 Do you happen to know what those were?  
7 MR. DAVIS: I'm sorry. Are you talking  
8 about the thresholds?  
9 MR. BALLENGER: Yeah. Sort of the  
10 affordability targets. We use different language  
11 for them. I think Ms. Brockway referred to them  
12 as burdens. We have talked about them in  
13 different ways in the past.  
14 Do you happen to know what those are?  
15 MR. DAVIS: Generally, I think the  
16 target is set by counsel for tier one is  
17 2 percent of income; for tier 2 it was 3 percent  
18 of income; and for tier 3 it was 4 percent of  
19 income.  
20 MS. BECKLEY: Clarify, the final version  
21 of the bill I believe council left that to the  
22 Rate Board. There was an earlier version of the  
23 bill that included some of these.  
24 MR. BALLENGER: But for purposes of the

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 106</p> <p>1 proposal, those were the tiers. I just wanted 2 to -- I don't want to go into too many details 3 because this can, as you know, take on a life of 4 its own. 5 MS. PICKENS: Wasn't anticipated that in 6 years after the implementation year, that the 7 discounts will remain where they are on your 8 chart? 9 MR. DAVIS: I don't think we made 10 specific assumptions as to how that would be 11 handled. It seems like that would be reviewed 12 periodically to make sure those are still within 13 the intent of the original. 14 HEARING OFFICER BROCKWAY: I don't mean 15 to say that you need to ask questions all now or 16 all today, I just wanted to make sure that the 17 Board was brought up to speed on any issues 18 hanging out there that would be important to look 19 at as we look at the program. 20 MR. BALLENGER: Yeah. I think those 21 were sort of some of the bigger issues that we 22 touched upon is what sort of -- behind the scenes 23 here, what are we looking at what is affordable 24 is one thing we wanted to get at. What Josie was</p>	<p style="text-align: right;">Page 108</p> <p>1 of 16 to 18 million. But if you look at 2 specifically at 18, because there is an 3 assumption that the City grants portion of the 4 WRAP Program will be eliminated, therefore, the 5 net revenue decrease in '18 is 13.4 million. So 6 to your question, yes. Some of the other offsets 7 were looked into before driving the net revenue 8 decrease. 9 MR. BAKARE: Then just as a follow up 10 then, is there an isolated number that shows just 11 the cost of the new assistance program aside from 12 City's overall revenue decrease? 13 MS. BROCKWAY: I'm not sure I understand 14 the question. 15 MR. BAKARE: I'm wondering if the new 16 assistance program, I'm wondering what the cost 17 of that program itself is aside from just the 18 wholistic revenue decrease the Department will 19 experience at FY18. I think the Board would 20 benefit from isolating the cost of that specific 21 program just to get an idea of what the -- what 22 that line item impact is for the Department. 23 HEARING OFFICER BROCKWAY: By cost, if I 24 can just clarify, I think you mean revenues</p>
<p style="text-align: right;">Page 107</p> <p>1 getting at is that the percentage of it remains 2 the same forever, wouldn't necessarily meet the 3 objective. We are going to do some more 4 discovery and have some more conversations about 5 this I think as we go on. I will leave it at 6 that. 7 MR. BAKARE: My name is Ade Bakare, 8 Counsel for the Philadelphia At Large Interest 9 Group. Mr. Popowsky asked about the revenue in 10 the assistance program. It wasn't clear to me if 11 the figure that was given in the 16 to 12 18 million-dollar figure, is that you have same 13 customer option out of the senior citizens 14 discount program. Is that just on the cost side 15 of the new program? 16 MS. KUMAR: Just a minute. Let me go 17 back to that slide so that we can answer that 18 question. 19 HEARING OFFICER BROCKWAY: What's the 20 number of that? 21 MR. HUANG: Slide 26. 22 MS. KUMAR: Slide 26. This is Ms. Kumar 23 from Black &amp; Veatch. Slide 26 we kind of touched 24 upon the revenue. So, we mentioned the decrease</p>	<p style="text-align: right;">Page 109</p> <p>1 foregone plus net additional administrative 2 costs. 3 MR. BAKARE: Correct. 4 HEARING OFFICER BROCKWAY: And I say net 5 because there may be some savings. I don't know 6 whether that's going to be argued. But some have 7 argued there are administrative savings because 8 you make bills affordable. 9 But actually, did you look into that 10 question whether or not there was any 11 administrative savings from making bills 12 affordable? 13 MR. DAVIS: We did not make any 14 assumptions as to that in 2018 because we wanted 15 to see how the program would be implemented. 16 Keep in mind that a lot of the development of 17 this was -- was done while the discussions were 18 going on. The City can also -- details being 19 finalized. So, we do not have assumptions with 20 respect to any savings on that area. 21 The cost of the -- the cost in lost 22 revenue associated specifically with the customer 23 Affordability Program are captured on this slide. 24 The increase in costs and the assumptions for</p>

28 (Pages 106 to 109)

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 110</p> <p>1 lost revenue were used in the cost of service. 2 MS. KUMAR: The revenue portion shows 3 the revenue decrease, but then the personnel and 4 citizen shows the cost increase the cost of 5 administering the program. So, those are the 6 personnel costs and the services cost. 7 MR. BAKARE: Okay. I guess that what I 8 hear is that at this point in time, that isolated 9 cost of this program doesn't -- isn't available 10 at this point in time. 11 MS. KUMAR: That is the -- the personnel 12 costs and the services cost are the cost of the 13 program when you're talking about isolated cost. 14 That 22 staff positions with the cost of 1.6 or 15 2.4 million projected for the study period and 16 the additional 1.3 million just in '17 for the 17 basis2 billing system to get it up and running to 18 accommodate this program and the 0.7 to 19 0.8 million in '18 through '21 to again support 20 this program. Those are the isolated costs from 21 the cost side of the fence. 22 So that is in addition to the revenue 23 decrease of 13.4 million they are showing in '18. 24 MR. BAKARE: Yup. That makes sense.</p>	<p style="text-align: right;">Page 112</p> <p>1 MS. OLANIPEKUN-LEWIS: You would at 2 least do it a year out before sometime. 3 MS. BETHEL: Oh, yes. Yes. I think a 4 lot of this comes when we have a final decision 5 from the Board. We will be able to move forward 6 on what we are actually going to be pushing out 7 to our customers. 8 MR. HUANG: If my math is right, the 9 FY17 outlay is 1.6 million plus 1.3 million. The 10 first number is for personnel and the second 11 number is for the IT. And that's in the year 12 prior to the roll out of the actual discount. 13 MS. LABUDA: Correct. So in our '17 14 budget submission that we're currently working on 15 that aren't yet public, you are absolutely 16 correct that the Water Revenue Bureau's budget 17 does contemplate the additional hiring of the 18 full-time staff during FY17. It does also -- the 19 Water Revenue Budget as well as the Water 20 Department Budget also capture the additional 21 incremental cost related to basis2 changes as 22 well as additional support measures that we need. 23 MR. BRUNWASSER: Is it a safe bet even 24 now to say that at a very low minimum, this would</p>
<p style="text-align: right;">Page 111</p> <p>1 Thank you. 2 HEARING OFFICER BROCKWAY: I do have one 3 more question. What assumption is made about 4 outreach and intake for the program? 5 How are customers advised that the 6 program exists? Who does the intake? 7 MR. DAVIS: With respect to the cost of 8 that, we did look at those costs. And the 9 assumption would -- 10 HEARING OFFICER BROCKWAY: Pardon me. 11 I'm not looking at costs. 12 MR. DAVIS: You're just looking at 13 implementation? 14 HEARING OFFICER BROCKWAY: Yeah. How 15 that was done. What assumption was made about 16 how it was done? 17 MS. BETHEL: Hi, I'm Michelle Bethel. 18 I'm the Deputy Revenue Commissioner for Water 19 Revenue. 20 Specific assumptions for how we're going 21 to do outreach, we are actually waiting to put 22 the whole implementation plan together. So, we 23 don't have specific numbers on actually how we 24 would roll that out at this time.</p>	<p style="text-align: right;">Page 113</p> <p>1 be actually printed on the bill these -- this 2 program could be -- the alert could be printed on 3 the bill and also billing inserts which would not 4 cost the Water Department or the Revenue Bureau 5 any extra postage as they would insert that into 6 the bill? I mean, that I think we can probably 7 assert now. 8 MS. BETHEL: Yes. That's an accurate 9 assumption. You said the billing inserts and 10 putting the messages on the bill, that's 11 something that we have control of right now. 12 That it's not going to be an additional cost. 13 MR. BRUNWASSER: Correct. 14 MS. BETHEL: For the bill messaging. 15 MR. MARKUS: Is the Department looking 16 to outsource --(trails off.) 17 HEARING OFFICER BROCKWAY: This is Ed 18 Markus, a financial consultant. The question is, 19 has the Department looked at whether to outsource 20 the intake of customers? 21 MS. BETHEL: We have not settled on 22 exactly how we will do that. We are open to 23 taking that into consideration to outsource that 24 process.</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 114</p> <p>1 HEARING OFFICER BROCKWAY: If I could 2 follow up on that, my assumption is that at this 3 point, the Department of Revenue personnel would 4 take payments and receive applications and 5 determine who would be eligible. 6 MS. BETHEL: If I'm understanding your 7 question, the personnel that take payments are 8 not the personnel that will be taking the 9 applications. Payment processing, which is 10 within Revenue on the tax side, handle all of our 11 payments. They do not handle or process the WRAP 12 current applications. 13 HEARING OFFICER BROCKWAY: So that -- 14 MS. BETHEL: It's a different group of 15 personnel. 16 HEARING OFFICER BROCKWAY: Still under 17 Revenue. 18 MS. BETHEL: Still under Revenue, yes. 19 HEARING OFFICER BROCKWAY: Just to alert 20 you that some of the things that I think would be 21 useful to get into before the Board makes a 22 decision will be to what extent somebody is 23 deemed eligible by virtue of their receipt of 24 some other means tested benefit. And.</p>	<p style="text-align: right;">Page 116</p> <p>1 record. 2 MS. McCARTY: Now we're at the Rate 3 Board questions that we received. Those were 4 numbered. Hopefully, you can follow along. 5 Questions 1 through 6, we believe we 6 addressed in sections of this presentation, 1 7 through 3 in the cost of service presentations. 8 Question 7, which is describe the major factors 9 effecting the order of bond ratings. That will 10 be addressed in Kathy Cuppler's presentation from 11 PFM. 12 And Question 10 is -- we believe, again, 13 is addressed in the cost of service 14 presentations, section four. And that's the 15 proposal to implement the low income payment, 16 excuse me, the low income program. 17 So Question 9 and 11, I will try to 18 address right now. So Question 9, for those of 19 you who don't have the question, I will read it 20 first. 21 "Why is the Department switching from 22 automatic meter reading, AMR, to advance meter 23 reading infrastructure, AMI? What are the 24 anticipated quantifiable costs and benefits of</p>
<p style="text-align: right;">Page 115</p> <p>1 MR. MARKUS: Do the 22 positions reflect 2 the assumption that the review is done in-house? 3 MS. BETHEL: Yes. 4 MR. MARKUS: No decision has been made 5 yet. 6 MS. BETHEL: Has not. But we would be 7 prepared that it if were handled in-house, that's 8 how we would -- as I said, we are up for thinking 9 differently for processing of those additional 10 pieces of paper that would come in through the 11 program. 12 HEARING OFFICER BROCKWAY: Does the 13 Board want to pursue this further at this time? 14 (No further questions from the Board.) 15 HEARING OFFICER BROCKWAY: You will have 16 more on this. At this point -- 17 MR. DAVIS: That's all I have. 18 HEARING OFFICER BROCKWAY: Let's go off 19 the record. 20 - - - 21 (At this time, a discussion was held off the 22 record.) 23 - - - 24 HEARING OFFICER BROCKWAY: Back on the</p>	<p style="text-align: right;">Page 117</p> <p>1 that decision and when is it supposed to be 2 implemented?" 3 This is no longer a part of our rate 4 filing. But I wanted to note that moving to AMI 5 will provide our customers with better service, 6 will allow the Department to address service 7 issues in a more timely manner, should streamline 8 the shutoff process. And that it will -- we're 9 eventually going to have to replace the ERTs, the 10 encoded radio transmitters because they are 11 coming to the end of their useful life. 12 This contract will need to be approved 13 by City Council. The final contract for AMI will 14 need to go before City Council. It's a long term 15 contract and it will need to be approved by them. 16 So going on to -- if there is no -- yes? 17 MS. OLANIPEKUN-LEWIS: I'm dating 18 myself. I was actually working for the Finance 19 Director when the first AMIs were installed. I 20 was detailed to Board of Water Revenue Bureau. 21 The big issue was, I did a subcommittee on theft 22 of services. 23 Can you talk a little bit about how the 24 new AMI is going to, I guess, better detect theft</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 118</p> <p>1 of services relative to the current AMRs? 2 MS. McCARTY: So currently, we get a 3 reading once a month when the Itron truck, if you 4 will, that had PW on it as well drives by and 5 picks up the reads from the various groups that 6 it does on a monthly basis. And so, it's 7 basically every 30 days plus or minus you get a 8 reading. AMI will provide the data, you know, 9 pretty much instantaneously. We will be able to 10 see what's going on. 11 The goal is the technology is evolving 12 as we speak even. The goal is to be able to 13 detect if the meter is taken offline. We will 14 know, for instance, if we shut off a delinquent 15 customer, if they start using water again, that 16 means -- and they are not supposed to, they 17 illegally restored themselves, we will get that 18 the next day once we start seeing consumption 19 again. A shut off customer should be zero 20 consumption. We will see that pretty much 21 instantaneously. 22 MS. OLANIPEKUN-LEWIS: You are not using 23 a radio signal anymore? What type of technology 24 do you use to capture that data?</p>	<p style="text-align: right;">Page 120</p> <p>1 MR. BRUNWASSER: Yes. 2 (Laughter) 3 MS. McCARTY: Right now we don't have 4 a -- I mean, it's hard to say. Again, this is 5 out of the rate filing period. But for the, you 6 know, 17/18. But it will cost something, I can 7 assure you. What that is, you know, we haven't 8 even begun to -- we have an idea, but it's 9 difficult to say until we know exactly what we 10 want. We are still in the preliminary stages of 11 figuring that out, looking at what's out there, 12 working with vendors, figuring it all out. 13 I really can't give a good answer to 14 that right now. 15 MR. POPOWSKY: I think PECO got a 16 200 million-dollar grant from the Federal 17 Government to just pay part of their switch to 18 AMI for electric. So I just -- before you spend 19 this money, I was just hoping to get some sense 20 of how much this will cost. I mean, what are 21 the -- the question is what are the quantitative 22 benefits -- I realize it's no longer part of this 23 case. I certainly hope at some point we will 24 find out what the quantitative costs and the</p>
<p style="text-align: right;">Page 119</p> <p>1 MS. MCCARTY: It -- 2 MS. OLANIPEKUN-LEWIS: Let me rephrase 3 it. Under the AMR it's a radio frequency. 4 MS. McCARTY: Right. The truck has to 5 drive by. 6 MS. OLANIPEKUN-LEWIS: What technology 7 will you use under AMIs? 8 MS. McCARTY: We are looking at fixed 9 network where you'll have receivers placed 10 throughout the City. Depends upon the vendor. 11 Some need more, some need less. Again, we're in 12 the preliminary stages of figuring all of this 13 out. But fixed network will be -- you know, 14 there will always be contact with that. That's 15 the goal. 16 MR. POPOWSKY: Do you know, are there 17 Pennsylvania water utilities using AMI? Aqua PA? 18 Pennsylvania American that are going to AMI? 19 MS. McCARTY: Off the top of my head, 20 couldn't tell you. I think Aqua is moving toward 21 it. I can't tell you off the top of my head. 22 MR. POPOWSKY: Do you know how much it's 23 going to cost? 10 million? 50 million? A 24 hundred million?</p>	<p style="text-align: right;">Page 121</p> <p>1 quantitative benefits are. I understand the 2 benefits of automated meter reading for water 3 utility. 4 MR. BRUNWASSER: I think moving to AMR 5 back in 1996, it meant the elimination of up to 6 130 meter readers from the Water Revenue Bureau. 7 And at the time, they were successful in reading 8 a meter perhaps only once every three times. And 9 they tried to read on a quarterly basis. So, the 10 typical house was read once a year leading to 11 lots of disputes, lots of phone conversations 12 between the customer and the Revenue Bureau. 13 So, there was a tremendous savings. And 14 of course, the savings of employees' continues. 15 All of those people were phased out. They were 16 not laid off. 17 HEARING OFFICER BROCKWAY: Can I ask the 18 question this way. Do you yet have even a draft 19 business case for the investment? By which I 20 mean, what the Member Popowsky was talking about, 21 there is all the anticipated cost. Here is all 22 the anticipated savings. 23 What's the relationship between cost and 24 savings?</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

Page 122

1 MS. LABUDA: There has been some  
2 preliminary work done. It would be disingenuous  
3 to say there wasn't some work done. We are  
4 coming fast upon the end of the contract of our  
5 current technology. We have no choice but to do  
6 something different. And I don't want to get the  
7 year wrong on the record. I don't know if it's  
8 '19. But there are preliminary analyses. And I  
9 think that's why we are pausing on this.  
10 We are not trying to hold something  
11 back. I think it's just all very preliminary,  
12 and we are still reviewing it. I respect your  
13 request to come back at some point and talk about  
14 this further. But I think today it's very  
15 preliminary.  
16 MR. POPOWSKY: That's fine. I was  
17 hoping at some point before you spent hundreds of  
18 millions of dollars --  
19 MS. LABUDA: I think it's a very fair  
20 and valid request. I just -- I think we need --  
21 I am looking at our legal counsel and our CEO. I  
22 think we need a little more time to really do our  
23 homework and do a more formal presentation.  
24 HEARING OFFICER BROCKWAY: One of the

Page 123

1 reasons that I ask is because you already got  
2 the -- as Chair Brunwasser says, the labor  
3 savings. In addition to new meters, my  
4 understanding of AMI is that you need this new  
5 two-way communication system. And you need a new  
6 back office system for meter reading management.  
7 Both of those are part of the big cost drivers  
8 for electric and gas when they go to AMI.  
9 MS. McCARTY: Well, what I can tell you  
10 is that we have looked at our meters and then  
11 done extensive testing. And believe that we will  
12 not need to replace the meters as part of this.  
13 So, that's a substantial savings to our  
14 customers.  
15 HEARING OFFICER BROCKWAY: If you  
16 don't -- that's interesting. If you don't need  
17 to replace the meters, the contract is coming to  
18 an end. Would it not be possible to extend the  
19 contract, there is then an alternative that you  
20 are looking for?  
21 MS. McCARTY: There are two one-year  
22 options to renew on an existing contract. We are  
23 anticipating being able to, you know, do the roll  
24 out in conjunction with taking those two things,

Page 124

1 two one-year options to renew. Those two  
2 extensions. The -- the contract we have is an  
3 excellent contract. Our lawyers served us well.  
4 And we would have to renegotiate costs with the  
5 current vendor and do not expect to get as  
6 attractive rates as we currently have. And in  
7 fact, we pretty much been told good luck with  
8 that.  
9 HEARING OFFICER BROCKWAY: Right. And  
10 so, that would go into any temporary hypothetical  
11 or preliminary business case as I was using.  
12 MS. McCARTY: Right. As I think I  
13 mentioned, we do need to replace the ERT. Their  
14 additional life is coming to an end. We have to  
15 do something.  
16 HEARING OFFICER BROCKWAY: The ERTs  
17 meaning the module on the meter.  
18 MS. McCARTY: Exactly. There are three  
19 components of what I could consider a meter.  
20 There is the meter, measuring the flow, then  
21 there's a register recording that consumption,  
22 and then register is sending a signal to the ERT.  
23 The ERT is what sends the signal to the trucks  
24 that drives by.

Page 125

1 HEARING OFFICER BROCKWAY: I don't want  
2 to take time now. Sounds as if you're not there  
3 yet in your study of this. But just to raise the  
4 issue of -- I don't want an answer now, but just  
5 to raise the question. Will there be a  
6 difference in the cyber security of Department  
7 functions if you go to AMI as opposed to  
8 extending ERT?  
9 MS. McCARTY: Well, security is one of  
10 the issues that we are concerned about of course.  
11 HEARING OFFICER BROCKWAY: Any more  
12 questions on the AMI at this point?  
13 (No questions from the Board at this time.)  
14 MS. McCARTY: Moving to Question 11:  
15 "Please briefly discuss the Department's efforts  
16 to ensure the safety of the City's water supply  
17 particularly with respect to the level of lead in  
18 the drinking water."  
19 If you haven't figured out already from  
20 what I said previously, we take our commitment to  
21 provide safe drinking water to our customers  
22 very, very seriously. As such 24/7, 365 days a  
23 year, our employers are working to ensure we live  
24 up to that commitment. The two plants utilized



Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 126</p> <p>1 best available technology to treat the river 2 waters while still controlling costs. Treatment 3 of water is, I like to tell folks, is a 4 chemical/physical process. You add some 5 chemicals and things physically happen. You 6 remove things. The pollutants basically is what 7 we are hoping to remove. And, you know, so 8 physically through sedimentation and filtration. 9 We have monitors throughout our 10 distribution system or conveyance system. And 11 that allows us to monitor and maintain quality to 12 each of our customers to their tap. Speaking 13 specifically to the lead issue, as part of the 14 treatment process to control corrosion in the 15 conveyance system, we add safe orthophosphate. 16 This practice creates a thin coating 17 inside the pipe. The coating prevents water from 18 coming in contact with the lead solder or the 19 lead pipe. It's important to note that the Water 20 Department does not have any lead pipes. 21 Remember, that our customers own from the 22 connection to the water main up to and including, 23 you know, to the meter. And then, of course, 24 inside. The remainder of the inside plumbing.</p>	<p style="text-align: right;">Page 128</p> <p>1 future revenue requirements?" 2 The answer is yes. We have talked 3 already about the three major acts. Let me give 4 you some examples under each act. 5 First act would be the Clean Water Act. 6 And under that act, there presently on the 7 horizon some new water quality standards for both 8 Wissahickon Creek and the Delaware River. EPA 9 proposed new standards for Wissahickon Creek in 10 May of 2015 that would control the total amount 11 of the phosphorous entering the watershed. 12 That kind of rule is called a total 13 maximum daily load or TMDL. It would set limits 14 on phosphorous entering the Wissahickon Creek 15 Watershed from both wastewater treatment plants, 16 stormwater and other sources. That document is 17 still in draft form and we don't know when it's 18 going to be finalized. 19 On the Delaware, the Delaware River 20 Basin Commission recently mentioned strengthening 21 the dissolved oxygen standard in the Delaware. 22 And that may be revised to better protect fish in 23 the Delaware. Again, that's very preliminary. 24 And we don't have a good date on when that may</p>
<p style="text-align: right;">Page 127</p> <p>1 The meter is already inside. 2 So, the idea is that that coating when 3 your water was sitting in there, doesn't -- keeps 4 the water from coming in contact with the lead 5 solder and the lead pipe. Water is universal 6 solvent, so you don't want it dissolving -- the 7 lead dissolving in our water. And we estimate 8 about 50 to 60,000 properties do have lead pipes 9 or lead solder. 10 MR. BRUNWASSER: And the water that we 11 get, the water that leaves the pre-water 12 treatment plants is lead-free? 13 MS. McCARTY: Yes. 14 MR. DASENT: I believe we have one final 15 question on the regulatory compliance. 16 MS. McCARTY: Scott Schwarz will handle 17 that question. 18 MR. SCHWARZ: I'm Scott Schwarz, general 19 counsel for the Water Department. The question 20 was as follows: "the federally mandated unfunded 21 long term control plan seems to be the major 22 challenge for the Department both now and in the 23 future. Are there new and more stringent federal 24 or state rules on the horizon which may impact</p>	<p style="text-align: right;">Page 129</p> <p>1 happen. 2 Also under the Clean Water Act, there 3 are some other ways that more stringent 4 requirements go into a place. One is through our 5 permits. All of our permits have expired, so we 6 are operating under automatic renewals. And we 7 have some drafts of the new requirements. There 8 are some new requirements in the draft permits. 9 For example, the stormwater draft permit for a 10 stormwater system would require us to do 11 additional monitoring and take certain remedial 12 actions that would monitor for certain results. 13 There is a lot of new requirements at 14 our treatment plant. Draft permits. Just to 15 give you an example, the new draft permit for our 16 Northeast Plant requires us to do a study of 17 trash in the Tacony-Frankford Creek. If it turns 18 out that our system is contributing to the trash, 19 take certain remedial actions. Those permits are 20 not finalized yet, but they are on the horizon. 21 And finally, under the Clean Water Act, 22 there is EPA guidance and policy interpreted 23 continuously under our consent order or 24 agreement. We just got a letter from EPA a month</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 130</p> <p>1 ago that asked for a new analysis of alternatives 2 for providing for overflow controls. That's due 3 January 2017. We also have a major filing under 4 the current consent order due in October. It's 5 called -- well, there are various things 6 required. But the major filing is called an 7 Evaluation Adaptation Plan. And the consent 8 order provides that we will make changes to the 9 long term control plan if necessary based on 10 that. 11 Those are the Clean Water Act changes. 12 It's both a water quality standard permit 13 requirements and EPA interpretation of the policy 14 and guidance. Under the Clean Air Act, the big 15 issue following, it's been in the news lately, is 16 the EPA's plan for reducing greenhouse gas 17 emissions from electric generation units. City 18 is actually a party in that case. It's been 19 appealed in the DC Circuit by about 200 parties. 20 There's tons of parties involved. 21 The Supreme Court states that rule a few 22 weeks ago, five to four vote. The rules stayed. 23 But the rule is now being created for DC Circuit. 24 All the first briefs were filed on Friday,</p>	<p style="text-align: right;">Page 132</p> <p>1 and copper. It's entirely possible we will have 2 not only a new rule for lead and copper but some 3 new guidance on how to monitor for lead and 4 copper. 5 That is kind of an overview. I don't 6 think I covered everything on the horizon. But 7 those are the ones that potentially could impact 8 over the next couple of years or beyond that in 9 the long term horizon. 10 MS. McCARTY: If I may add to the lead 11 and copper, we test every three years as per the 12 regulation. Next year in 2017, which is FY18, we 13 will sample in the warmer weather, spring and 14 summer. Will be -- if those regulations change, 15 it will likely impact that sample and/or the 16 guidelines. 17 MR. BRUNWASSER: Are you done with the 18 questions so far? 19 MS. McCARTY: Right. 20 MR. BRUNWASSER: I have one. I think I 21 mentioned it in the written portion. Clearly, 22 the Department has lowered its revenue 23 requirements somewhat by refinancing old debt 24 which is with lower interest than has effected</p>
<p style="text-align: right;">Page 131</p> <p>1 briefings done in April. The outcome of that 2 case may have some long term impact on energy 3 crisis. It's not a direct impact to us, but it 4 could have a direct impact. 5 And finally, under the Safe Drinking 6 Water Act, we already mentioned lead and copper. 7 There is a number of rules under the Safe 8 Drinking Water Act that may be revised and are on 9 the horizon for revision. One is the Unregulated 10 Contamination Modicum Rule. That rule was 11 proposed by EPA in December for comment. The 12 comment period closed February 9, and that rule 13 required us to monitor for 30 unregulated 14 contaminants beginning in 2017. 15 Another rule, drinking water rule, is 16 the Revised Total Pollen Form Rule. EPA 17 published that rule some time ago and requires us 18 to monitor for pollen-formed bacteria. Takes 19 effect April 2016. There's a parallel effort 20 in the state to do a state rule that would be more 21 stringent. And that was proposed October 3 of 22 2015 and is currently being reviewed at the state 23 for implementation in 2017. 24 And if accepted, briefly mentioned lead</p>	<p style="text-align: right;">Page 133</p> <p>1 the Fed service to the benefit of lowering the 2 revenue requirement. But there are other things 3 that the Department has done. I think the solids 4 handling was a major factor in the Department. 5 The City wastewater side does created a 6 tremendous amount of solids each and every day, 7 24/7. 8 I'd kind of like to get an update on 9 that improvement and what that has resulted in, 10 in lowering of revenue requirements over the past 11 few years and how that's going today. 12 MS. McCARTY: I apologize. I don't have 13 those numbers off the top of my head. We can 14 provide that. 15 I can tell you that it continues to be 16 very successful. And is -- does save us a lot of 17 money every year. It's been a good partnership 18 with the vendors. We can get you those numbers. 19 MR. BRUNWASSER: Yeah, that would be 20 great. That would also address the clean air 21 problem. 22 MS. McCARTY: Yes. 23 MR. BRUNWASSER: Near the Southwest 24 Plant or near the airport for those of you used</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

Page 134

1 to experience those odors.  
2 HEARING OFFICER BROCKWAY: I was  
3 thinking it as a procedural matter that if you  
4 have questions that you have taken, that  
5 Mr. Dasent can put them in the form of discovery.  
6 Call it the record reflects, whatever you want.  
7 Answer them that way and then the answers will be  
8 posted in due course on the website.  
9 MS. LABUDA: I believe there was one  
10 more question from the Board that we haven't yet  
11 answered if I may address it. The question  
12 related to why is -- I apologize.  
13 "Please describe and quantify any  
14 expected payments to be made from the Department  
15 to the City's general fund during FY17 and 18."  
16 Earlier in the presentation I described  
17 the interest earnings on the Debt Service Reserve  
18 Fund. We're required to transfer those from the  
19 Debt Service Reserve Fund to the Residual Fund  
20 and from the Residual Fund to go to the City's  
21 Con Cash. Outside of that, we make payments to  
22 the general fund for services that they provide.  
23 In the filing, the projection for the general  
24 fund, our payment for services I believe in FY17

Page 135

1 was approximately 8.5. And in '18 it's 10.4.  
2 But inclusive in those numbers, and I'm sure our  
3 consultants will double check me on this, are our  
4 portions of the payment for the construction of a  
5 combined sewer outflow. That is why there is  
6 slightly higher than prior years.  
7 MS. MCCARTY: If there are no more  
8 questions.  
9 HEARING OFFICER BROCKWAY: There any  
10 more questions from the Board?  
11 MR. BRUNWASSER: I also had a question  
12 about, you know, obviously the Department and the  
13 City Treasurer met with bond rating agencies when  
14 the question of a Rate Board came up. And  
15 changing the rate making policy of the Water  
16 Department, you know, which have been in effect  
17 about 65 years. I was wondering -- I read the  
18 two reports by Fitch and Moody's.  
19 I was wondering what they may have said  
20 verbally to the Department and the City regarding  
21 the Board itself?  
22 MS. LABUDA: Kathy Clupper and I will  
23 address that question.  
24 MR. BRUNWASSER: Oh, that's fine.

Page 136

1 MS. CLUPPER: As you know, historically  
2 the rating agencies have given the City a pass or  
3 it's been a credit positive that the Commissioner  
4 can ultimately set the rate. So the City has  
5 historically set the rates close to 1.2 and has  
6 used the rate stabilization fund to maintain  
7 coverages. Which I will talk about in my  
8 presentation. That's on the low side of kind of  
9 utility 1.2 and 1.21 coverage. The City kind of  
10 has gotten a pass.  
11 The new Rate Hearing Board which was  
12 presented during the last rating presentations,  
13 we did an outline, what was the new rule, we gave  
14 them the legislation. We basically said this was  
15 a new construct. I think we articulated it was  
16 an opportunity to kind of have a long kind of  
17 ongoing relationship with the Rate Hearing Board  
18 which is typical in other municipalities who had  
19 independent Rate Boards. It's very much of here  
20 is a presentation. Here is information. And  
21 then they deliberate and they, you know, either  
22 improve or whatever.  
23 So, that's how it was presented. It was  
24 an opportunity. They understand what the rules

Page 137

1 are, what was in legislation or the ordinance.  
2 Fitch in particular did raise it as a credit  
3 concern because it's an unknown. Anything that's  
4 an unknown in the world of rating agencies is  
5 credit negative because they always default to  
6 the worst possible scenarios.  
7 So in this case, I think they're -- and  
8 investors are anticipating what's going to  
9 happen. They are going to see what comes back.  
10 It's also a trend. I think it's a "to be  
11 determined" whether it's ultimately a credit  
12 positive or credit negative.  
13 MS. LABUDA: I think on the other side,  
14 though, to address your question is that during  
15 the financial crisis, there was something called  
16 Dodd-Frank Act. Rating agencies in their reports  
17 and in our discussions paralleled their concerns.  
18 The discussions in the room were paralleled in  
19 the rating presentations. It's not as if there's  
20 some offset discussion that wasn't captured in  
21 those reports. If you read the reports, you can  
22 highlight the concern, the uncertainty on many  
23 fronts on rising capital program. And, of  
24 course, the uncertainty with the Department's

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 138</p> <p>1 ability to achieve requested rate increases. 2 MS. CLUPPER: The public conversion, if 3 you refer to the last official statement, does 4 outline what's in the rate for this Board. And I 5 did go back after because of the question and 6 looked at the rating presentation. There was a 7 couple slides that basically just outlined what 8 was in there and kind of what's going to happen. 9 That was really the extent of the conversation. 10 Nobody knows what's going to happen, so 11 that's basically it. 12 MR. BRUNWASSER: Thank you. 13 HEARING OFFICER BROCKWAY: Go off the 14 record. 15 - - - 16 (At this time, a discussion was held off the 17 record.) 18 - - - 19 HEARING OFFICER BROCKWAY: Go back on 20 the record. 21 MS. MCCARTY: The Department believes 22 that the proposed plan and rate request will 23 sustain us and our mission of providing 24 integrated water, wastewater, stormwater services</p>	<p style="text-align: right;">Page 140</p> <p>1 presentation. And please feel free to interrupt 2 me. 3 So starting on page 2, I thought it 4 might be a good idea just to kind of talk about 5 what the credit rating agencies, what they view 6 their role is, what they are and what they 7 aren't. As Missy alluded to, Dodd-Frank has 8 changed kind of a lot of their approaches. They 9 are much more uptight about their presentations 10 and information flow. 11 So what they are, credit ratings are 12 opinions about essentially credit risks. They 13 are supposed to be forward-looking opinions. 14 They express opinions about the ability and the 15 willingness of an insurer to meet its financial 16 obligations in full and on time. They are not a 17 recommendation or prognosis, but are intended to 18 provide market participants with information 19 about relative credit lists. 20 They express relative opinions about 21 credit worthiness related to debt from the 22 strongest to the weakest and with the universe -- 23 within the universe of credit risk. They also 24 take a global view, too, as well just in</p>
<p style="text-align: right;">Page 139</p> <p>1 to our customer. So, it provides the financial 2 sufficiencies, the stability that a large utility 3 such as us, ourselves, require, supports 4 equitable cost recovery, provides customer 5 assistance as responsible utilities should do, 6 and meets our General Bond Ordinance and 7 insurance covenants. 8 So, all those requirements are met in 9 our request. And then I am actually done. 10 HEARING OFFICER BROCKWAY: We will go 11 off the record. 12 - - - 13 (At this time, a discussion was held off the 14 record.) 15 - - - 16 HEARING OFFICER BROCKWAY: Let's go back 17 on the record. We are going to push through 18 until 1:00 a.m -- 1:00 p.m. 19 (Laughter) 20 MS. CLUPPER: Thank you very much. I 21 was asked to provide a presentation on credit 22 ratings, some of the impact on the hearing on the 23 Water Department's credit rating. So, what I 24 would like to do is just to go through this</p>	<p style="text-align: right;">Page 141</p> <p>1 comparing credits within the United States. They 2 do not constitute investment advice. Credit 3 ratings are not indications of market liquidity 4 in the debt security or its price in the 5 secondary market. They are not guarantees of 6 credit quality or future credit risk. 7 Feel like I'm a commercial. 8 They are not absolute measures of 9 default probability, but they are at the end of 10 the day to speak about the likelihood of default. 11 So when they do the analysis, the credit analysts 12 are generally sector specific. There are some 13 credit analysts that also rate the City, but 14 generally there is at least one credit analyst 15 that is specific to the utility sector. 16 They look at the sources of funding, 17 security, revenue diversity and stability. They 18 are going to look at financial flexibility, the 19 ability to meet obligations, strength in the 20 operations for maintenance, you know, when they 21 deliver the product, liquidity investments and 22 cash flow, debt structure. They are going to 23 look and see how much fixed rate you have, how 24 much variable rate you have, do you have</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 142</p> <p>1 derivatives. 2 The strength of the management team is 3 an important quality. That is something the City 4 has generally rated very high on both in the City 5 general funds as well as water. They are going 6 to look at historic performance current year and 7 look at future. They look at trends. If you 8 change something this year that might be a credit 9 positive, but it's not necessarily going to 10 translate into an upgrade. They are going to 11 want to see a trend in later years. 12 The rating agencies provide a lot of 13 written material on kind of their view of 14 different sectors. That material was connected 15 to my or part of my testimony, so I would 16 encourage you to read it. It's very informative. 17 I think it's very interesting. 18 So when you look at the sector credit on 19 utilities, there is just a couple things that 20 they have a concern about. Economic climate. I 21 mean, the water utility sector provides a central 22 service. That's a credit positive. Everybody 23 needs to have sewer water. That's a good thing. 24 The economic cycle has been a big</p>	<p style="text-align: right;">Page 144</p> <p>1 unchanged or slightly lower despite aging 2 infrastructure. It takes a while for 3 municipalities to gear up and give the 4 constituency buy in, political buy in. At the 5 end of the day, increased capital requires 6 increased revenue. 7 Those are some of the things that are 8 indicated in some of the sector writeups. The 9 next page talks a little bit about the key rating 10 drivers. When we are advising our clients on 11 what to do as far as rating agencies, we spend a 12 lot of time going through these computations to 13 help our clients provide their information in a 14 way that's going to be beneficial to outcome. 15 Moody's has recently in '14 released a 16 scorecard to try to make the process a bit more 17 transparent. The scorecard scores certain 18 metrics, the system characteristics which would 19 include asset conditions, service area, system 20 size, financial strength. Some of the key ratios 21 are debt service coverage, cash on hand and debt 22 to operating revenue. Management is an important 23 component. And then legal provisions, which 24 would include the rate covenant and some of the</p>
<p style="text-align: right;">Page 143</p> <p>1 conversation over the last several years. There 2 is a more positive growth in the economy, but 3 they don't really necessarily think that the 4 current expansion is just going to have a 5 marginally positive impact on operation, which is 6 interesting. It's not a boom kind of scenario. 7 Cost recovery remains a challenge. 8 Total cost recovery is a challenge because most 9 of the utility rely on consumer usage to fund 10 fixed costs. So you have when consumer usage is 11 down, obviously, you have less revenue. That is 12 a problem when a part of your expenses are fixed 13 debt service, potential liability and other 14 things. That's a concern. 15 Changes in the environmental 16 regulations, of course, is a concern that's going 17 to lead to increased operating and capital costs. 18 And I think there's going to be wastewater 19 utilities faced individual pressures from 20 enhanced discharge requirements. 21 Another theme is the delayed capital 22 spending. This is a theme not just in water 23 utilities, but all over municipal sector. Long 24 term capital spending remains moving either</p>	<p style="text-align: right;">Page 145</p> <p>1 debt service reserves fund requirement. 2 This is all put into an Excel 3 spreadsheet. It spits out a scorecard which is 4 then qualitatively changed or adjusted depending 5 on, you know, certain factors. So they -- it 6 only assists in the analysis and provide kind of 7 a point of conversation. So if you have a 8 scorecard that shows you have a rating of A and 9 you end up getting a rating of A-minus, then you 10 have a point of contention to talk to the rating 11 agency about. 12 S&amp;P more recently in January of 2016 13 finally released their analytical framework which 14 is a similar attempt to try to make the process 15 more transparent. There's is a little more 16 complicated. They take enterprise risk profile 17 and financial risk profile, and then they apply 18 overlapping factors and rating caps. So, rating 19 cap might be the rating of the underlying 20 municipality. So, they take what could be a very 21 simple framework and made it more complicated. 22 At least it gives a lot of really more detailed 23 guidance. 24 They will, for instance, look at the</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 146</p> <p>1 economic fundamentals, look at the underlying 2 economic conditions, industry risk, external 3 factors of the sector, market position, 4 operational management. And then the financial 5 risk profiles look at these different areas, some 6 of the key ratios. And there's obviously a theme 7 with all the rating agencies on the ratios, 8 liquidity ratios or these cash on hand, debt to 9 capitalization, which is your long term debt -- 10 short/long term debt over your debt position, 11 debt service coverage and then sort of 12 contingency liabilities over long term debt. 13 These are key ratios that they look at. 14 And then Fitch has not really come up with a 15 scorecard yet. They're writeup is much more 16 qualitative. I think there's really, if you have 17 a chance to read it, there's a lot of written 18 material and best practices. They have their ten 19 C's of analytical framework. 20 They do actually do a good job in 21 writeup. Talking about attributes for strong 22 systems, medium and weaker system. It's a really 23 good kind of guideline, you know, to see where 24 you fit in. Because these are all -- even though</p>	<p style="text-align: right;">Page 148</p> <p>1 presentations or the rating writeups of different 2 peers. Because maybe some one peer might be 3 changing their debt structure, so it throws off 4 the ratio. It's important to see this as a 5 dynamic process, but it's also your requirements 6 in the ordinance that you do consider peer 7 comparisons. We want to make sure we gave you 8 this information. 9 So, you can see in this page 6, that 10 overall most water utilities and large systems 11 are in the AA category. And that is, you know, 12 pretty typical. I mean, it's just all three 13 rating systems, most of them are AA credits. 14 It's essential service. Most of them have a 15 degree of liquidity and coverage that allows them 16 to fall in the AA category. 17 HEARING OFFICER BROCKWAY: Just a 18 clarification. The ratings that you have in the 19 column, there are three different ratings. 20 Typically, those are the three different ratings. 21 Can you just share which is which? 22 MS. CLUPPER: The first one typically is 23 Moody's. You will know Moody's ratings because 24 it's an A with a small letter or B with a small</p>
<p style="text-align: right;">Page 147</p> <p>1 there is a scorecard which makes it easier, you 2 do need to look at peer comparisons. 3 At the end of the day, you put all this 4 information in and you need a point of reference. 5 So page 6 just gives you an idea of larger 6 systems. There was a question about some of 7 the -- that I received about why certain peers 8 were selected. 9 You know, what we do and we do this with 10 Missy. We spend a lot of time talking about what 11 are good peers. You obviously want to look at an 12 urban area, larger area. You want to look at a 13 peer that's maybe on the east coast because 14 they're going to have the same kind of water 15 issues and combined sewer overflow issues versus 16 the west coast, which is lack of water. 17 And, you know, you want to pick some 18 peers such as DC Wasser, which is best practice 19 kind of peer. They do a lot of cutting edge. 20 They do the first green bond and they do year 21 century bonds. They do a lot of interesting 22 things. That is sort of what we think about when 23 we think about peers. It really needs to be a 24 dynamic process. You know, we look at the rating</p>	<p style="text-align: right;">Page 149</p> <p>1 letter. The middle one is Standard &amp; Poor's. 2 And then Fitch is usually last. And when there's 3 just two ratings, typically it's Moody's and 4 Standard &amp; Poor's. 5 So for instance, Baltimore does not have 6 Fitch. It's also important to note that once you 7 are rated by a rating agency that a debt is 8 outstanding, they will continue to hold that 9 rating until the rating no longer exists. You 10 can't -- it's not as easy to pick and choose 11 rating agencies once your debt is rated with a 12 Moody's A. Even if you didn't call them up with 13 the next issue, that issue will always have a 14 Moody's A rating. The investors know that. It's 15 not as easy to kind of go shopping. 16 On page 7 shows where the Water 17 Department ratings are. Just for point of 18 reference, Water Department are the highest rated 19 credit in the suite of Philadelphia's ratings. 20 That would include general obligation credit 21 rating, airport and PGW. It is probably 22 considered -- it is considered the strongest of 23 the four rating categories. So, that's good 24 news. I think there was a question a little bit</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 150</p> <p>1 about what's the relationship between the 2 underlying City rating and the water rating? 3 There is a relationship. It's one of those caps 4 or factors that they add to it. 5 For instance, if the City's rating -- 6 and it does reflect the underlying, you know, 7 wealth or poverty of the household income -- if 8 that's on the low side, that would be a credit 9 negative. The pension, unfunded pension 10 liability is a huge issue for the City of 11 Philadelphia. Philadelphia Water Department has 12 a, you know -- is a percent of that unfunded 13 liability, so they carry their own unfunded 14 liability. 15 They also have to pay a percentage about 16 45 million. I think it would be minimum MMO that 17 the City pays. They also pay another \$26 million 18 of debt service for the pension fund. There is a 19 connection there. It is a City Department. 20 There is a connection. It's not to say that the 21 Water Department if they all the sudden had 1.5 22 times coverage over a period of years when they 23 get through their increases, but there is a 24 connection there.</p>	<p style="text-align: right;">Page 152</p> <p>1 appropriate. Not all due. That sort of, you 2 know, something that the Department's been 3 encouraging kind of over a period of years. 4 There is another concern, of course, is 5 the large capital improvement budget. I think 6 these are pretty much consistent across the 7 Board. What the rate agency will look for this 8 time will be continued increasing debt service 9 coverage. We spent a lot of time talking to them 10 in the past several years about trying to move 11 from that 1.2 to a higher debt service coverage. 12 We're going to look at, you know, days cash on 13 hand. They are going to, frankly, look at the 14 result of Rate Hearing Board. They are going to 15 continue to look at trends. 16 They are also going to look at the 17 City's unfunded pension. You know, how is the 18 City addressing that? That is an important 19 issue. You know, I think that they will be 20 interested in what happens here. 21 What we have done, I'm hope I'm not 22 talking too fast. Everybody is hungry, I know. 23 On page 9, what we did was we tried to 24 identify some key rating metrics. And I mean, I</p>
<p style="text-align: right;">Page 151</p> <p>1 On page 8, we try to outline sort of 2 these are key facts or quotes from the most 3 recent rating reports in 2015. Just in general, 4 not to read them through, but there are some 5 themes there. Credit positives are, you know, 6 there's a large -- you serve a large and diverse 7 service area. Management has always been cited 8 as a credit positive. You have ample water 9 supply, which is important. 10 Some of the challenges would include the 11 legal covenants, the fact that you don't have to 12 have 1.2 times coverage without using the Rate 13 Stabilization Fund would be a weaker real 14 covenant. There is zero debt service coverage 15 levels. The weak demographics, as I said, does 16 present a challenge, obviously. 17 Then sort of the -- in past writeups, 18 the last writeup, we did have days cash on hand 19 because you had just gone through the rate 20 increase. You did not have additional revenue 21 that was, you know, available. And the rating 22 agencies in the past, they start to now include 23 the Rate Stabilization Fund in their calculation 24 of these cash on hand which we think is</p>	<p style="text-align: right;">Page 153</p> <p>1 think it's also important to know that these can 2 change. I mean, we spend lot of time with the 3 Water Department financial staff thinking about 4 what we should include, you know, read this. You 5 know, it's a work -- work in process. I want to 6 point out a couple sort of themes that are 7 critical. This is mentioned before. That's the 8 debt ratio, which is your debt to assets. 9 You are highly leveraged system. You do 10 have for your assets of 2 billion an outstanding 11 debt of 1.8 billion. It would be better if that 12 was -- your debt was a lot lower than your 13 assets. That means you funded your projects. 14 So, that's a ratio that we kind of looked at. 15 Debt service coverage is another one, and then 16 days cash on hand. Those are three really 17 critical ratios. 18 What we talked about in the past is sort 19 of honing down on those and creating an ongoing 20 Philadelphia Water Department scorecard. I 21 think -- those would be three things that we 22 would harp on or continue to raise. 23 Just to talk a little bit about why -- 24 what my -- you know, my recommendation is when I</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 154</p> <p>1 submitted my testimony, spent some time 2 discussing Pay Go. If you increase the Pay Go, I 3 know that the Department is looking at 20. I 4 think 40 percent Pay Go would be a great goal to 5 have. If you do that, if you start to fund your 6 capital with a higher percentage of current 7 revenues, these other ratios will fall in line. 8 You will have debt service coverage. You will 9 have the liquidity that you need. You will then 10 be stronger and more financially stable system 11 because you're not -- every capital project is 12 not funded by debt. 13 And while now, you know, we are just 14 looking -- what we do is we look at more than 15 five years. You need to look, 10, 20 years and 16 you can have an idea that you are going to be 17 borrowing 200 to 250 a year pretty much. I mean, 18 you have a significant capital plan. And if you 19 do that and take that out over a period of years 20 at 20 percent Pay Go or 40 percent Pay Go, it's a 21 significant difference. And it allows the system 22 to have a financial flexibility to address, you 23 know -- I think on the next page 10, which is the 24 graph that I alluded to, illustrates this very</p>	<p style="text-align: right;">Page 156</p> <p>1 certainly are. They help buy down the cost of 2 credit. They are also a reflection of your 3 ability to maintain financial stability during 4 different periods of the economy. So, it does 5 lower your cost to borrow to have a higher credit 6 rate. It also helps on certain other products 7 that you can do liquidity facilities, bank 8 facility. It allows you, as I mentioned before, 9 to create different structures within your debt 10 structure, commercial paper. 11 So, subordinate debt structure would 12 allow you to issue bonds on a subordinate basis 13 with a debt service fund that allows you to 14 borrow more money. You know, you don't have to 15 fund 10 percent or debt to service fund. That's 16 positive. You are able to have a more complex 17 debt structure if you're in the higher rating 18 category. 19 So, that is my spiel for having 40 20 percent Pay Go. I think the Department seems to 21 be going in the right direction. And we support 22 the financial plan, you know, moving higher debt 23 service coverage, more Pay Go, and more cash on 24 hand, as well.</p>
<p style="text-align: right;">Page 155</p> <p>1 well. 2 I mean, it allows the Department to 3 address those things and habit which are economic 4 crisis, increase the cost of materials. So, what 5 this chart is, it's just the revenue spread to 6 the AAA. MMD is an industry -- it's a basket of 7 rates that are set. Our industry uses that to 8 price transactions off of the MMD. It's a yield 9 curve. There's an MMD rate for every year 1 10 through 40. This looks to 20 years and the 11 revenue MMD. And it's spread to the AAA. 12 So AAA MMD is like the gold standard. 13 And then it's A rated. And if you are AA rated 14 credit throughout this crisis, you had consistent 15 spreads. I mean, it went up after '08, but it 16 didn't spike. If you were an A-rated credit 17 after '08, you see the, you know, space between 18 the spread is, you know, significantly higher in 19 '08 and it's starting to come down. And of 20 course if you're a BBB rated credit, it really 21 spiked. 22 I think what this table tries to 23 illustrate is so that rating -- credit ratings 24 are not just about the next bond issue. They</p>	<p style="text-align: right;">Page 157</p> <p>1 MR. HUANG: Roughly, what is the AAA MMD 2 rate right now? 3 MS. CLUPPER: The AAA MMD rate for GO, 4 this is like being the State of Maryland, 30 year 5 right now is 2.78 percent. The 10-year average, 6 I knew you would ask this question, so I looked 7 it up -- that's 4 percent. That's 10-year 8 average for the AAA MMD. The Water Department 9 prices when they do a bond issue now and they 10 rate in their level is about -- can be between 11 70 -- you add another 70 basis point, 7 percent 12 to 80 or 90. That does get you when you're doing 13 projections up to 5 percent, 5 and a half because 14 you have to be conservative projecting out. 15 Just as a point of interest, the credit 16 spread for the Department has decreased in the 17 last couple years from 2013 for the longer end. 18 It was like 90 -- 0.9 percent. The last 19 transaction was 0.7 percent. You do get a 20 benefit from kind of the increase. The ratings 21 didn't change necessarily, but there was better 22 coverage. And you know, there's a lot of 23 reasons. 24 The credit spread is a dynamic</p>



Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 158</p> <p>1 situation. When we're asked what interest rate 2 we should use to project, we usually default to 3 5 percent. I mean, another little interesting 4 fact that I looked up, the MMD in the 30 year has 5 been lower than where it is now less than 6 1 percent since 1986. I mean, we are at 7 incredibly low rates. It's just so unusual. And 8 so, I think when you're doing future projections, 9 you have to be mindful of the fact -- 10 MR. HUANG: It's only going to go up. 11 MS. CLUPPER: Yeah. 12 MR. MARKUS: Can you explain, they talk 13 about why the Department is not historically in 14 use. 15 MS. CLUPPER: When you create a 16 subordinate structure, we did look at this a 17 couple years ago. You have your senior lien. 18 Like say, for instance, just City of Baltimore 19 for example. 20 In their documents, right, a senior lien 21 of 1.4 percent. And then their subordinate lien 22 would be 1.15 percent. Well, if you have a 23 1.2 percent coverage, you don't have any room to 24 create a subordinate debt. That's what I'm</p>	<p style="text-align: right;">Page 160</p> <p>1 we issued the 2015 A deal, the best practice was 2 to issue long day to debt to lock in low interest 3 rates. And that was to the benefit. 4 MS. CLUPPER: I also want to mention 5 that Standard &amp; Poor's is really concerned about 6 variable rate debt because they are totally 7 concerned about liquidity facilities. When you 8 have a lot of variable rate debt, you not only 9 have interest rate risk as a municipality, you 10 now have bank risk and corporate risk. You can 11 see that in 2008, those issuers that were in the 12 BBB and A category, including the City of 13 Philadelphia, had difficulty replacing their 14 letter of credits because there were banks who 15 just didn't want to do that anymore. 16 That's a really critical risk that you 17 don't want to take unless you are pretty sure you 18 are cream of the crop in the rating category. 19 MS. LABUDA: It might make sense when 20 you issue variable rate debt, you have to have 21 the ability the bond can be put back and given 22 back to you at any point in time. What Kathy is 23 talking about liquidity facility, you take a step 24 back. It's almost like the price we pay to</p>
<p style="text-align: right;">Page 159</p> <p>1 talking about when you create and have a higher 2 coverage level, obviously, then you are able to 3 create different structures within your debt 4 structure. At this point the Water Department 5 doesn't have the coverage history to create a 6 subordinate lien. 7 MR. MARKUS: Also, behind why not more 8 variable rate? 9 MS. CLUPPER: Yes. I think the 10 Department has a pretty good debt structure. 11 There's not a lot of variable rate. 12 MS. LABUDA: From a classical theory, 13 given the level of interest rates over the past 14 five years, we are best poised to enter into long 15 term fixed rate debt because it's natural. When 16 does variable rate debt make sense? 17 Variable rate debt will make sense is a 18 rising interest rate environment. So, I think we 19 have taken a classical approach. We've issued 20 our most recent financing, we went long. And I 21 think as market conditions changed and the 22 ratings improve, we will look to add more 23 variable rate. Right now for the interest rate 24 environment we are in, given what we are in, when</p>	<p style="text-align: right;">Page 161</p> <p>1 maintain somebody to provide the ability for the 2 Department to absorb or buy back, take back all 3 of its bonds at some point in time because the 4 rates ten to reset at some frequent period, 5 weekly, daily, quarterly. You have to have the 6 capacity at any point in time to be able to buy 7 all of those bonds back. And there is a price to 8 pay for that flexibility because we do not have 9 enough cash to do that ourselves. 10 MR. MARKUS: In the CIP, there's a very 11 small amount for PENNVEST in the next five years 12 or so. Curious as to why not more? 13 MS. LABUDA: I mean, PENNVEST actually 14 creates rate pressures. Let's be honest here. 15 PENNVEST has a very short useful life. You 16 amortize it over 20 years. I have no control or 17 no ability to set the pattern of my principal 18 with the pattern of my infrastructures, so I'm 19 putting a new water main in and it has a useful 20 life of 50 years. PENNVEST says that doesn't 21 matter. Your useful life, you have to amortize 22 the debt over 20 years. That fact pattern puts 23 pressure on current rate payers today. 24 The other problem with PENNVEST in this</p>

41 (Pages 158 to 161)

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 162</p> <p>1 five-year planning period is also that we have a 2 Debt Service Reserve Fund requirement. PENNVEST 3 is on parity with all other debt. I do not have 4 a tool or a means via this debt structure to pay 5 for my reserve fund requirement. And what has 6 happened with prior PENNVEST loans is I have had 7 to take it out of the operating side and fund my 8 debts service reserve fund. 9 So in this rate period, PENNVEST would 10 only increase our rate request through the 11 issuance pattern, very short useful life, how you 12 have to pay for the Debt Service Reserve Fund. 13 It just doesn't -- from that very simple 14 financial perspective, it doesn't make sense. 15 Now five years out, we can talk about it 16 again. But in the next two years, three years, I 17 just don't see that making sense unless we're 18 going to raise our rate. 19 HEARING OFFICER BROCKWAY: So, does the 20 Board have any more questions on this topic? 21 Let's go off the record. 22 - - - 23 (At this time, a discussion was held off the 24 record.)</p>	<p style="text-align: right;">Page 164</p> <p>1 weekly basis as an advocate for tenants which is 2 47 percent of the households in the City of 3 Philadelphia, I'm constantly bumping heads with 4 the Staff of the Water Department or the Water 5 Revenue Bureau with respect to USTRA. 6 HEARING OFFICER BROCKWAY: With respect 7 to what? 8 MR. CARNEY: USTRA, Utility Services 9 Tenant Rights Act, which is a state law to 10 protect rate payers from being shut off when it's 11 not their fault, it's the landlord's fault. 12 We're an organization -- a tenant advocacy 13 organization. We deal with tenants but 14 overwhelmingly we deal with low income tenants on 15 a daily basis. Being able to pay rent and 16 utilities is a constant difficulty for so large a 17 section of the population. 18 Although, I applaud City Council's 19 Affordable Rate Program, I'm not sure it's 20 enough. So my first question is that, is that I 21 would ask that the rate increase be tailored in 22 such a way that the income of the households is 23 very specifically taken into effect before they 24 could be issued the rate increase. Because</p>
<p style="text-align: right;">Page 163</p> <p>1 - - - 2 HEARING OFFICER BROCKWAY: I have got 3 about 12:40. We will come back at 1:45 and pick 4 up with questions from the active participants. 5 - - - 6 (At this time, a break was taken.) 7 - - - 8 HEARING OFFICER BROCKWAY: We have 9 discussed off the record the order of questioning 10 by active participants. We would like to bring 11 up first Mr. Tim Carney who is a tenants' rights 12 specialist from the Tenant Unit Representative 13 Network. 14 MR. CARNEY: Thank you, Madam Chair 15 person and Members of the Board. My name is Tim 16 Carney. I'm a staff worker at the Tenant Unit 17 Representative Network, TURN. I'm here today 18 because I have two major concerns that I wanted 19 to question about this rating increase -- 20 proposed rate increase. 21 The first concern is that so much of 22 Philadelphia is poor and I don't see them paying 23 the rate increase. And the second concern is in 24 the area of customer service. Whereas, on a</p>	<p style="text-align: right;">Page 165</p> <p>1 despite the WRAP program and the new City Council 2 Custom Affordability Program, though I saw the 3 discounts were incredible in some of the 4 percentages of poverty, they weren't extended 5 above 150 percent of poverty. In some families 6 they are still needed. 7 Two, as I learned in my long work in 8 social services, that an overwhelmingly large 9 percentage of people when you have to apply for 10 the program never apply for the program, 11 therefore, don't guess use of it. While you may 12 have wanted to keep the 16 million as a low 13 figure, I certainly stood and sat in the back and 14 wanted it to be an extremely high figure. 15 Because I would have hoped that every single 16 eligible person would apply for it and cost you a 17 lot more than what you're projecting in your 18 16 million or 13 million. 19 My first question is, please don't 20 extend the rate increase unless you are going to 21 monitor people's ability to pay carefully, which 22 means you may have to restructure very 23 considerably. 24 And the second question I have is, how</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 166</p> <p>1 are you going to use any of the money that you 2 have now or you would get in a rate increase to 3 improve customer service? Because on a weekly 4 basis, myself and my coworkers on behalf of 5 Philadelphia tenants are battling your staff. 6 And we're all paid for by the City. We are all 7 on the same team. And yet, it seems like 8 sometimes we run into staff people at the Water 9 Department who think that USTRA was never passed 10 or doesn't exist. 11 And you ask to talk to supervisors. You 12 ask to talk to folks. And the hurdles and the 13 burdens that are put in front of tenants just 14 keep piling up higher and higher even though the 15 water shut off came from the Water Department, 16 it's the Water Department that broke the law. 17 And yet, the staff people tend to make the poor 18 and low income tenants as though they're the 19 thieves of water. 20 My question is, how are you going to 21 improve customer service so that people who apply 22 for USTRa can be treated fairly and very, very 23 quickly because we can waste four hours and in 24 some cases days, fourteen days trying to get</p>	<p style="text-align: right;">Page 168</p> <p>1 issues, probably fall outside of the purview of 2 this proceeding but nonetheless must be 3 addressed. We will have someone at WRB interact 4 with Mr. Carney and make sure between the Law 5 Department and our people at other personnel at 6 WRB that we address this issue and hear his 7 concern. 8 HEARING OFFICER BROCKWAY: Why do the 9 customer service issues fall outside the 10 proceeding in our view? 11 MR. DASENT: Because the statute 12 establishing the report deals specifically with 13 rate issues as opposed to customer service and 14 other related issues that would remain under the 15 public utility code and not specifically 16 addressed in Water Rate Boards. 17 HEARING OFFICER BROCKWAY: So, let's 18 not -- let me see if I can break this down. 19 With respect to the 150 percent, my 20 understanding from the discussion this morning 21 was that the Department is not fixed on that as 22 an upper limit but has chosen that as the basis 23 for the planning? 24 MR. DASENT: The ordinance also</p>
<p style="text-align: right;">Page 167</p> <p>1 somebody's water reconnected when insurmountable 2 hurdles are put in somebody, like, when demand a 3 lease when this part of the City has verbal 4 leases and people don't have lease. Yet, that's 5 the only thing you'll take. 6 People are beaten down and they're not 7 getting the service we need. We need somebody in 8 the Water Department that we can call up who 9 understands USTRA and is going to effectively 10 administer on behalf of our citizens. 11 My question is, and I will stop, how are 12 we going to improve the customer service 13 specifically around USTRA so a agency like ours 14 who is advocating for tenants every single day 15 can have somebody you can talk to get this done, 16 especially when the water is being metered and, 17 therefore, the water companies knows they are 18 never going to lose a pay. 19 MR. DASENT: If I might, Madam Hearing 20 Officer, authority to pay issues that are raised 21 by Mr. Carney are very important to us and are 22 addressed in the filing. We are happy to address 23 those. Customer service issues, although very 24 important to us, related to USTRA or other</p>	<p style="text-align: right;">Page 169</p> <p>1 addresses the various thresholds, so we need look 2 too much further than Bill No. 140607 creating 3 the program to see that the various tiers, 4 various thresholds we must address. 5 HEARING OFFICER BROCKWAY: You must 6 address those. Doesn't say you're not allowed to 7 address others is my understanding. But anyway, 8 that whole question is going to be taken up. 9 What I would do is I would treat 10 Mr. Carney's question as a statement request. 11 And we'll make sure to get at that question when 12 we get further into those details. 13 MR. BALLENGER: Madam Hearing Officer, I 14 was just taking some notes. I don't have a 15 microphone. I will try to use my outside voice. 16 HEARING OFFICER BROCKWAY: Is this on 17 the 150 percent? 18 MR. BALLENGER: No, ma'am. 19 HEARING OFFICER BROCKWAY: Because I had 20 more to say. 21 MR. BALLENGER: I was taking some notes 22 when Mr. Carney was speaking. I thought I heard 23 him ask was how will you improve customer service 24 with these new rates, which to me seems to be</p>

43 (Pages 166 to 169)

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 170</p> <p>1 relevant to rates and charges. I just, you know, 2 in all fairness to Mr. Careny, his issues as well 3 as others issues, are in some ways relative to 4 rates and charges. 5 HEARING OFFICER BROCKWAY: If you had 6 not interrupted me, that's what I would have 7 said. I don't see that it's off limits to talk 8 about those. How exactly that's going to come 9 up, I don't know. I also understand the 10 Department is not prepared today to answer that 11 question. 12 MR. DASENT: Yes. That's certainly 13 true. I was taking it a step further because of 14 the limited time that we do have before the Rate 15 Board that we would devote it to issues that are 16 specifically, according to the Rate Board 17 Ordinance, in your purview so that we accomplish 18 those things that we need to accomplish. 19 HEARING OFFICER BROCKWAY: Well, I would 20 say to that is absolutely. But as I manage the 21 hearing process, I'm on the lookout for where are 22 their disputes. Probably 90 percent of the 23 filing is not in dispute. And so we don't need 24 to spend much time on it. What we are looking</p>	<p style="text-align: right;">Page 172</p> <p>1 Mr. Bakare. 2 MR. BAKARE: Yes. Thank you. First, my 3 name is Adeolu Bakare. I'm counsel for the 4 Philadelphia Law Coalition for ad hoc customers 5 in the Law Department Service. As in the initial 6 segue, I have a very similar customer service 7 issue, so just to frame my perspective on that. 8 The Water Department's filing itself 9 discusses the customer's service structure in the 10 Department utilizes with the Water Revenue Board 11 being responsible for dealing with customer 12 payment issues and the Water Department itself 13 not performing those functions. So as I 14 understand from a general utility standpoint, a 15 customer service issue in a rate case context is 16 individual service issue. A customer may not be 17 able to come here and say, hey, you didn't fix 18 the leak in my house last Tuesday. But a 19 structural customer service issue that effects 20 the Department on the whole is, from in my 21 understanding, a rate related issue because that 22 is a wholistic customer service issue that 23 relates the way the customers paid for service. 24 That's how I would frame those customer service</p>
<p style="text-align: right;">Page 171</p> <p>1 for is where are those areas where people 2 disagree and might have an impact on the outcome. 3 I'm not prepared to say we don't have time to get 4 into this. I would urge the Department to be 5 thinking along the lines of what is their budget 6 for customer service and what is their 7 relationship to those who actually give it 8 service. If there is time, we will definitely 9 get into it. 10 Anything else from the Board on this? 11 (No Board response.) 12 HEARING OFFICER BROCKWAY: With that, we 13 can't answer your questions today, but we have 14 taken them down. And the first one is definitely 15 going to be addressed. Second one sounds like 16 there is disagreement about how far we can get 17 into it. We will -- I think if you want to talk 18 to Mr. Ballenger, he is leading the charge for 19 customers. And you can talk to him about the 20 extent to which you need. 21 Is that all right? 22 MR. CARNEY: (Nods head.) 23 HEARING OFFICER BROCKWAY: Thank you 24 very much, Mr. Carney.</p>	<p style="text-align: right;">Page 173</p> <p>1 issues from my perspective. 2 So the issue that I would like to raise 3 to ask the Department is for large industrial 4 customers whose services are more complex than 5 other smaller customers, when they call the water 6 Revenue Board to raise issues in terms of rate 7 complaints, bill inaccuracies and other bill 8 disputes, there is often a lot of confusion with 9 the Water Revenue Board because they're not 10 intimately familiar with these customers' 11 facilities and services as a Water Department 12 would be, especially with the new stormwater 13 rates coming in and have been coming in over the 14 past few years. 15 To that end, would the Department 16 consider instituting a new position where you 17 would have someone on the Department side that's 18 sort of an industrial customer service 19 representative to field those complaints? That's 20 an interesting standard other water utilities, 21 even municipal utilities, generally implement. 22 Water Department historically does not. 23 MR. DASENT: Mr. Bakare, you should be 24 aware of the fact that the Water Department has a</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

Page 174

1 team of people who are directly related to  
2 stormwater management or larger customers to  
3 communicate with directly and deal with those  
4 particular issues that you've highlighted in your  
5 comment. Historically, we have had other folks  
6 in the Department that are designated to receive  
7 calls for larger customers also, so there is not  
8 a sort of bureaucratic runaround.

9 MR. BAKARE: That's correct. And I will  
10 clarify that a little bit because my members have  
11 reported the Water Department is actually very  
12 good and very responsive to the stormwater  
13 mitigation measures and the operational side of  
14 stormwater program. The problem is with billing  
15 disputes related to stormwater issues and sewer  
16 rates and water rates. As I mentioned, those  
17 issues are handled by the Water Revenue Board.

18 So the customers between a rock and hard  
19 place. They have the billing dispute to call the  
20 Revenue Board and say that there is something  
21 wrong here. The Revenue Board really does not  
22 have the knowledge of their systems and their  
23 individual facilities to address the issues that  
24 generate those rate and billing disputes.

Page 175

1 MS. McCARTY: Are you talking about --  
2 for the stormwater that is online is the, you  
3 know, the manual for and it goes through how you  
4 can appeal, et cetera. As Mr. Dasent mentioned,  
5 there is a whole team that will review those if  
6 there are any disputes with the stormwater.

7 Are you talking for, you know, like the  
8 surcharge customers?

9 MR. BAKARE: Not just that. Even if the  
10 customer is able to reach the Department and  
11 express stormwater safe credit not properly  
12 calculated, the Department will look at that.  
13 But the Revenue Board at the same time isn't part  
14 of that process. They still want the payment  
15 even though the billing dispute is being  
16 addressed on the Department side, the Revenue  
17 Board is not necessarily involved in that  
18 process. They are still demanding payment.

19 MS. McCARTY: You're saying that the  
20 account isn't being put in dispute. And Water  
21 Revenue Bureau is acting on the delinquency? Is  
22 that what you're saying?

23 MR. BAKARE: Yes. I'm saying there  
24 could be better communication between the

Page 176

1 Department and the Water Revenue Board. I think  
2 the solution would be for large industrial  
3 customers to have not just stormwater personnel  
4 within the Department, but actually transfer  
5 billing dispute responsibility for large  
6 industrial customers from the Revenue Board to  
7 the Department.

8 MS. WILLIAMS: Erin Williams,  
9 Philadelphia Water Department. Just to address  
10 the stormwater related issues. Similar to water  
11 and billing sewer water disputes, for stormwater  
12 you are correct the staff handling the customers  
13 service issues are housed as Water Department as  
14 opposed to Water Revenue Bureau. We do follow  
15 similar procedures that customer service  
16 representatives at the WRB follow. We do raise a  
17 call and we document the dispute in the basis2  
18 billing system and follow then customer service  
19 interaction. That's online that Commissioner  
20 McCarty mentioned earlier.

21 We do make sure we have adequate  
22 communication with WRB so that when our customers  
23 call WRB to bring up stormwater billing issues,  
24 it's documented in a database that's accessible

Page 177

1 to both WRB and PWD.

2 MR. BAKARE: That's a helpful  
3 explanation. We don't have to address this. I  
4 will just make the point that that -- I think  
5 considering how seeing sort of centralizing the  
6 responsibility for all industrial customers,  
7 something the Department should consider whereas  
8 a further centralizing beyond what the present  
9 structure offers.

10 MS. DAHME: Joanne Dahme. We have been  
11 working on a call center initiative for about two  
12 years now. We are with Revenue Michelle Bethel.  
13 The goal of that is to cross transfer. Now we  
14 have two different call centers. Customer call  
15 when center for one type of thing. They call the  
16 Water Revenue Bureau for the other issues.

17 We are looking to cross train  
18 representatives so that both of our reps will  
19 have knowledge on both sides of the business. I  
20 think that will help address some of that. We  
21 are looking to more formalize some of the  
22 training regiment so higher so higher levels of  
23 information about operations and services and  
24 that type of thing. We are hoping to launch that

45 (Pages 174 to 177)

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 178</p> <p>1 some time in the spring as sort of like a pilot. 2 But our ultimate goal is really to make sure no 3 matter what number a customer calls, they will 4 get a representative who can address billing and 5 service issues and be able to answer all those 6 question. 7 I think there will always be something 8 to bump up. I understand there is a need and who 9 would you bump that up to? That is also 10 something we are looking at. 11 MR. BAKARE: Specifically, although I 12 understand all customers are important, regarding 13 industrial customers because they are so few of 14 them and their issues are so specialized, some 15 particular consideration for that customer 16 service pipeline could be advisable. 17 MS. McCARTY: Again, if it's the 18 surcharge customers, you know they have a 19 pipeline to our industrial waste unit who is 20 responsible for that program. 21 MR. BAKARE: When you say surcharge 22 customers, I'm not -- 23 MS. McCARTY: Customers that get billed 24 on basically the strength of the wastewater they</p>	<p style="text-align: right;">Page 180</p> <p>1 there is by customer service because that's -- 2 that's where one of the fundamental differences 3 about whether the bill gets paid is reflected. 4 Because stormwater only customers, PWD has 5 limited from less -- they can't shut off water 6 and get -- and have more response to paying a 7 bill as the water and sewer customer. 8 As such, we reflect a lower collection 9 factor for stormwater only customers. And that's 10 stormwater only, city and water and sewer general 11 serve retail billing are the only three factors 12 that we reflect. 13 MR. BAKARE: So for water customers, 14 strictly water, every water customer pays the 15 same rate -- I'm sorry, not unaccounted for 16 water. I apologize -- for non-revenue water in 17 terms of the billing standpoint? Customer 18 rearranges, those no-revenue percentages for 19 non-payment, late payment, all customers pay the 20 same non-revenue percentage? 21 MR. JAGT: Now in the fact that it's a 22 collection of factors, so we're projecting 23 collections or revenues from the customers and 24 we're not actually projecting the expense of the</p>
<p style="text-align: right;">Page 179</p> <p>1 discharge to our system. 2 MR. BAKARE: Right. Okay. 3 MS. McCARTY: Like a Pepsi or Coca-Cola. 4 MR. BAKARE: I did mention stormwater, 5 but this issue isn't limited to stormwater 6 issues. It's really a billing issue across the 7 board for sanitary stormwater and wastewater. 8 MS. McCARTY: I mean, offline if you 9 have a specific customer, I'm happy to speak to 10 you, as well. 11 MR. BAKARE: Thank you. 12 I think earlier in the presentation we 13 mentioned importance of cost of service. The 14 question that I had is the Water Department, as I 15 read the filing, doesn't separately allocate it's 16 unaccounted or nonrevenue water costs as you 17 calculate this system-wide range. That 18 percentage is not applied across the Board to all 19 customer classes; is that correct? 20 MR. DASENT: Going to ask Black &amp; Veatch 21 to field that question. 22 MR. JAGT: Just to clarify, it's true 23 that we don't have -- there's not a difference in 24 the collection factor for customer type, but</p>	<p style="text-align: right;">Page 181</p> <p>1 non-payment. So, it's reflected in our financial 2 plan in that we only reflect the revenues coming 3 in and receipts on that basis. But it's not like 4 you'll see a revenue requirement for the 5 non-payment. 6 MR. BAKARE: You don't project a certain 7 percentage of unpaid pills in your projection. 8 MR. JAGT: To clarify, we do. I'm just 9 pointing out the fact that it would be in the 10 fact that it's not in our receipts. And that's 11 how we reflect it as like -- in the bottom line, 12 it ends up as like a requirement. But it's not 13 like you can go down the revenue requirements and 14 see uncollected as a revenue requirement. It's a 15 cost. 16 MR. BAKARE: Then my question is, has 17 the Department ever considered looking at the 18 uncollectibles on a customer class in either size 19 basis and allocating that across different 20 customer classes of either size? 21 MR. JAGT: Over the years, it's been 22 considered and it's been looked at. There's 23 never been -- the variation between it has never 24 been considered enough to show the difference</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

Page 182

1 between customer classes. And there are some  
2 policy issues that go along with that to drive.  
3 For one thing, we don't track the reps and rate  
4 stabilization is system wide. It's not like we  
5 do a detailed, true up by customer class to see  
6 how much rate stabilization is associated with  
7 each class.  
8 Another factor is the fact that we use  
9 the same -- currently under the current rate  
10 structure, all of the meters, there is the same  
11 charge for all customer classes by meter size.  
12 And as such, to introduce a new factor that would  
13 vary across customer classes, we would almost  
14 have to consider introducing another or rate  
15 structure to address the cost recovery difference  
16 among the customer types.  
17 MR. BAKARE: Okay.  
18 MR. JAGT: The level of difference, I  
19 don't know what that would be. It's rather de  
20 minimus compared to the total revenue.  
21 MR. BAKARE: That may actually address  
22 my next question, too, which is I was wondering  
23 how the Department would allocate the cost of the  
24 new Affordability Program?

Page 183

1 Would that be also sort of across the  
2 Board, or would that be tilted more towards  
3 residential less than non-residential?  
4 MR. JAGT: At this point, it's across  
5 the board. That's consistent with EPA standards  
6 for affordable low income programs.  
7 MR. BAKARE: I think I was promised 15  
8 minutes of fame here. I will try to wrap this  
9 up.  
10 MR. JAGT: One point, this approach to  
11 do it across the board is also consistent with  
12 how we currently recover the discount programs  
13 that we have in place right now. So, the  
14 non-residential discounts and the senior citizen  
15 discounts that are -- well, PHA, the discounts  
16 for non-residential for charitable customers and  
17 the discounts for senior citizens -- the  
18 non-residentials also includes schools. They're  
19 all recovered across the entire customer base.  
20 MR. BAKARE: Thank you.  
21 One question that I had -- again, I  
22 don't want to go too far down into this issue.  
23 But there was a discussion on the switch from  
24 automatic meters to AMI. The question that got

Page 184

1 raised for me -- is something for the Department  
2 to just hear and keep in mind in the future. The  
3 issue that I saw in that discussion was the fact  
4 that if you discuss the installing AMI at City  
5 Council and there's a City Council mandate to  
6 move forward before the rate considerations have  
7 been addressed, that rate could put customers in  
8 a situation where it's sort of -- you're moving  
9 ahead before we really discuss what the rate  
10 impact begins.  
11 What mr. Popowsky hinted at earlier, I  
12 would wonder how will the Department interact  
13 with City Council for establishing the cost basis  
14 for the AMI program?  
15 Remember, I said this is not -- we don't  
16 have to go into the details now.  
17 MS. McCARTY: It is in the future. Of  
18 course, whatever we would take before City  
19 Council and the Rate Board, of course, we would  
20 have our numbers. We just don't right now have  
21 what those numbers are. As I mentioned, we have  
22 looked at if we had to replace the meters. And  
23 at this point, we don't believe we do from our  
24 testing. So that will save a lot of money for

Page 185

1 our rate payers. But what it will look like with  
2 AMI in terms of vendors that have been provided,  
3 we don't have that right now. But we are working  
4 on it. And it will be part of probably the next  
5 rate case.  
6 MR. BAKARE: Thank you.  
7 And I think my final question relates  
8 back to the 5 percent annual increase in purchase  
9 power costs. And the question there is the  
10 Department would have a very different electric  
11 file than other City buildings and accounts, so  
12 this is sort of two part question.  
13 The first part is, does anybody here  
14 know whether the City really separately looks at  
15 the Department in terms of how -- going to  
16 rephrase.  
17 Has the Department ever looked at buying  
18 power on its own apart from the city and weighed  
19 those costs and benefits of going on the market  
20 or undergoing and then buying power as opposed  
21 just going in the City? I would wonder if the  
22 Department specific load profile would lead to  
23 more beneficial power contract than being lumped  
24 in with other City accounts with very, very

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

Page 186

1 different low profiles.  
2 MR. SCHWARZ: Scott Schwarz again.  
3 The energy buying policy is set on  
4 citywide level. Three separate prices the city  
5 charges the Department. One price for airport,  
6 one for water and one for general fund. We do  
7 believe that what you are suggests has been taken  
8 into account.  
9 MR. BAKARE: We can move onto  
10 Mr. Ballenger.  
11 HEARING OFFICER BROCKWAY: Okay. Thank  
12 you very much. Okay. Mr. Ballenger.  
13 MR. BALLENGER: Thank you. To start  
14 with, I'd like to again apologize for the  
15 interruption earlier, Madam Hearing Officer. I  
16 wasn't being impolite. I'm sorry for it.  
17 Just sort of a preliminary comment, I  
18 just -- I'm appreciating seeing how attentive and  
19 interested everyone is here today, particularly  
20 the Board Members and appreciated all of your  
21 questions. I hope that as this process moves  
22 forward, we will not be in the same position to  
23 have witnesses here to answer your questions  
24 directly. I'm hopeful that we can hear from you

Page 187

1 in other ways. Maybe you can attend technical  
2 hearings, follow-up questions as this case moves  
3 forward. But we appreciate the opportunity to  
4 ask some questions here today of the Department  
5 as we really get underway.  
6 I guess the first question as the  
7 Department's focused, we have had a lot of  
8 discussion on the bonds. And I'm not a bond  
9 buyer. But I just -- as the matter of curiosity  
10 wanted to know when the last downgrade was of the  
11 Water Department's bonds if anyone recalls?  
12 MR. BRUNWASSER: I can answer that.  
13 Water Department didn't -- just slight  
14 background.  
15 The Water Department up until 1974 was  
16 dependent on the City's general obligation debt  
17 to fund its capital program. The Water  
18 Department, of course, was the one that paid the  
19 debt service on its share of the GO Debt at the  
20 time. What happened beginning in 1974, the Water  
21 Department was allowed under state -- under  
22 change in state law to issue revenue bonds for  
23 the first time, backed up by the full, of the  
24 rates and revenues of the Department and not the

Page 188

1 general pledge of the city.  
2 From 1974 to 1990, the bonds were rated  
3 A, single A. In 1990, the City had some major  
4 dropping off of revenue. And the result was the  
5 downgrading of all City credit by all three bond  
6 rating agencies at the time. And those were  
7 single digit numbers like D or C or whatever they  
8 were, but it was certainly way below investment  
9 grade.  
10 In 1991, Water Department was the first  
11 City credit to go out into the marketplace again.  
12 The way it was done -- by the way, at the same  
13 time we were doing this, the state was beginning  
14 to organize PICA, the Pennsylvania  
15 Intergovernmental Cooperation Agency. It's still  
16 here today because there's probably still some  
17 PICA debt out there.  
18 PICA was designed to raise capital for  
19 the City which it could not go into the capital  
20 markets. But the Water Department was able to go  
21 into the capital markets in June of '91 and  
22 receive BBB or BBB minus. I forget right now.  
23 Low investment rate level. And we sold and  
24 issued roughly \$300 million from which the

Page 189

1 proceeds of we paid off consolidated cash of the  
2 City, got ourselves out of consolidated cash for  
3 the City, which is one of the requirements. And  
4 also, we paid back the capital fund of the City  
5 the con cash, consolidated cash accounts of the  
6 City. So, we actually had some infusion of money  
7 into the city which we owed the City because  
8 everybody was riding on -- I think the Airport  
9 capital fund at that time.  
10 Anyway, in order to sell these bonds,  
11 the rating agencies had to be convinced that the  
12 City could not dip their hands into any Water  
13 Department funds. And later on the Airport did  
14 the same thing in order to be able to access the  
15 capital markets. In order to sell the bonds, we  
16 had to go on a tour of institutional investors in  
17 cities like Boston, Chicago, San Francisco,  
18 Philadelphia and New York to explain why people  
19 could invest in Philadelphia bonds.  
20 What we discovered was the further out  
21 from Philadelphia we were, the more marketable  
22 the bonds were. But in any event, it was a big  
23 success and it was very important to the City  
24 because a little later on the City came within \$5



Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 190</p> <p>1 billion of blowing payroll. So, the City had to 2 issue script since 1929 but we were almost there. 3 But that was the last downgrade. And it 4 was a slow but steady improvement to get to the 5 ratings that we have today, which are actually 6 the highest ratings the Department's ever had. 7 MR. BALLENGER: Thank you. That was my 8 recollection from the financial statements was 9 the ratings have definitely come up. 10 I wanted to ask a little bit about the 11 rate methodology. I think Dave and Prabha maybe 12 can help me out a little bit here. I just wanted 13 to see if you would note any -- from a very high 14 level, any changes to the models since the last 15 rate case in terms of how -- this is the first 16 time we have seen the, you know, the model 17 itself. But it seems as though the presentations 18 style has changed. We have Table C1 instead of 19 Table 11 for, example. 20 But are there any changes sort of in how 21 you construct the model now as compared to how it 22 was constructed three and a half years ago? 23 MR. DASENT: Let me interject one 24 thought. If you'll remember, the rate model was</p>	<p style="text-align: right;">Page 192</p> <p>1 I was looking for. 2 I don't have everything in front of me, 3 so I may be slightly wrong about the numbers. I 4 trust you'll all correct me. I believe in 2012 5 when the last three cases settled, there was an 6 expectation that the combined rate stabilization 7 Residual Fund balances will be maintained at 8 approximately the hundred million dollar level as 9 of the end of Fiscal 15. 10 MR. DASENT: The settlement agreement on 11 that point will speak for itself subject to 12 check. Mr. Jagt can answer it. 13 MR. JAGT: Subject to check 115. 14 MR. BALLENGER: I knew it was ballpark. 15 Okay. And I just -- we're now looking at the 16 FY15 numbers and we're saying about double that 17 in the combined balances, right? 18 MR. JAGT: Uh-huh. 19 MR. BALLENGER: You talked a little bit 20 about the use of those various funds before. And 21 my understanding was that rate stabilization and 22 Residual Fund and even construction fund, all of 23 those are available as a source of borrowing to 24 meet operating expenses. Subject to check, it</p>
<p style="text-align: right;">Page 191</p> <p>1 proprietary model provided to you by 2 confidentiality agreement. I'm not sure on the 3 public record if there is best way to vet that 4 concern as opposed to ask them offline the very 5 same questions. You have signed the 6 confidentiality agreement and no one else has. 7 MR. BALLENGER: I wasn't talking about 8 the manner in which it works. I meant in terms 9 of meeting the City's needs. 10 MR. DASENT: Just trying to protect 11 Black &amp; Veatch any way I can. 12 HEARING OFFICER BROCKWAY: Seems to me 13 if the answer is yes or no, that that would not 14 violate the confidentiality agreement. I agree 15 going beyond that, we start getting into details. 16 MS. KUMAR: Technically, the model is 17 not different. It's following the same industry 18 guidelines and principles. The naming of the 19 tables is a little more granular breaking it 20 between water tables, wastewaters tables, 21 wholesale tables and stormwater tables. One 22 continues in numbers that used to be there 23 before. 24 MR. BALLENGER: Okay. Thank you. What</p>	<p style="text-align: right;">Page 193</p> <p>1 says that in the official statements. 2 MR. DASENT: If that's a legal 3 conclusion I'm not sure. 4 MS. LABUDA: I would call up Ballard 5 Spahr. 6 MR. DASENT: Valarie Allen from Ballard 7 Spahr is here. That will give authoritative 8 source. 9 MR. BALLENGER: Sure. 10 HEARING OFFICER BROCKWAY: Off the 11 record. 12 - - - 13 (At this time, a discussion was held off the 14 record.) 15 - - - 16 HEARING OFFICER BROCKWAY: While we've 17 been off the record, I had a question on the side 18 as to what is the evidentiary weight to be given 19 to the statements here? 20 Just to remind everybody, there will be 21 no oaths taken at any point in the proceeding so 22 you're all on Scout's honor to tell the truth. 23 But we definitely do expect that you are telling 24 the truth. So anybody -- anything that you say</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 194</p> <p>1 now somebody else could rely upon with the usual, 2 oh, I made a mistake or I had to clarify, yadda, 3 yadda, yadda. But we don't have oaths and we 4 don't have certainly speaking evidence, but we do 5 have information. And I appreciate the 6 forthcoming and honesty of everybody involved. 7 MS. ALLEN: Is it working? I've been 8 watching everybody do this all morning. Still 9 good. Okay. Great. My name is Valarie Allen 10 I'm a lawyer at Ballard Spahr hear in 11 Philadelphia. We are counsel to the Water 12 Department. 13 I'm sorry. Can you repeat the full 14 question? 15 MR. BALLENGER: I just wanted -- and 16 this is sort of the least consequential part of 17 the question. I wanted to confirm that rate 18 stabilization Residual Funds and construction 19 fund balances are available for borrowing to 20 cover expenses if necessary? 21 MS. ALLEN: Yes. Rate stabilization is 22 available to transfer to the revenue fund, and 23 then can be used for operating expenses. 24 Physical fund monies can be transferred and used</p>	<p style="text-align: right;">Page 196</p> <p>1 deficiencies. As you might be aware, December is 2 a pretty tough month for the Water Department. 3 We make our pension payment in December as well 4 as pay our largest debt service payment. So, 5 that loan between RSF and water operating is 6 booked and rebooked at the start of every fiscal 7 year. 8 MR. BALLENGER: There is still a 9 45 million a year loan? 10 MS. LABUDA: The 206 loan includes the 11 45 million loan. It's not added into. 12 MR. BALLENGER: No. 13 MS. LABUDA: Just so we're clear. 14 MR. BALLENGER: I didn't believe it was. 15 I just wanted to sort of track where the money is 16 moving to from time to time. I think we're going 17 to have more to explore about that later. 18 I wanted to ask, in a lot of public 19 utility rate cases, and this has been the case 20 also in the past with the Department, we have 21 looked at certain expenses and seen a statement 22 from the Department as to whether those projected 23 expenses were non-recurring or continuing. Seems 24 like there's a few in this case. And I don't</p>
<p style="text-align: right;">Page 195</p> <p>1 for operating expenses directly. Construction 2 fund money is not available for operating 3 expenses. 4 MR. BALLENGER: Well, I don't have it in 5 front of me, but I believed -- subject to check, 6 I believe it was available at least for borrowing 7 to cover expenses. 8 MS. ALLEN: For borrowing, but it would 9 have to be reimbursed. 10 MR. BALLENGER: Sure. 11 MS. ALLEN: Just to reiterate from this 12 morning, there is limitation on the amount of 13 money that can be used from the -- 14 MR. BALLENGER: For coverage purpose, 15 yes. In the past there's been a sort of 16 historical practice to borrow on an annual basis, 17 a fairly substantial amount from the Rate 18 Stabilization Fund. I believe it was 19 \$45 million. 20 Has that process continued to date or is 21 that discontinued? 22 MS. LABUDA: I think what you're 23 referring to is the procedural practice where the 24 RSF makes a loan to water operating to cover any</p>	<p style="text-align: right;">Page 197</p> <p>1 have, you know, again, the whole file here. 2 Think there's a start up costs associated with 3 new loan income program, for example. Think it 4 was \$1.3 million. 5 Would the Department consider that it 6 would be fair to amortizing that cost as opposed 7 to including it in year one? 8 MS. LABUDA: I don't mean to go back to 9 the bond ordinance, but how would we amortize an 10 expense that would occur in FY17? Our bond 11 ordinance is on a cash basis. The cash for the 12 obligation or expense in occurs in year. I don't 13 have the ability to amortize expense. That's not 14 how General Bond Ordinance works. That's on cash 15 basis. 16 MR. BALLENGER: But coverage or -- 17 MS. LABUDA: Coverage in -- 18 MR. BALLENGER: You move money out of 19 rate stabilization fund to make sure you 20 maintain. We have talked about managing to the 21 1.2, 1.21, 1.22. These are costs that customers 22 would be asked to pay \$1.3 million in rates in 23 perpetuity for a program that gets billed only 24 once. It's built into the rates.</p>

50 (Pages 194 to 197)

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 198</p> <p>1 HEARING OFFICER BROCKWAY: Before you 2 answer the question, what 1.3 million in 3 perpetuity? Is that every year? 4 MR. BALLENGER: It's built into the 5 rates is all I'm saying. 6 MR. DASENT: Please note this isn't an 7 objection, but it's very close. In perpetuity 8 assumes the Board will never act on it, and 9 that's just not -- 10 MR. BALLENGER: For a period of two 11 years when it only gets spent in the first. 12 HEARING OFFICER BROCKWAY: If the 13 Department could break this up into we absolute 14 can't do it legally or we can do it, but it's a 15 stupid idea. 16 MS. ALLEN: I just wanted to make sure I 17 understood your point about the fact that the 18 Department makes transfers from rate 19 stabilization but then it pays itself back. That 20 all happens within one fiscal year. That is not 21 something that once that loan is made, they don't 22 have the ability under the ordinance to amortize 23 that over -- 24 MR. BALLENGER: I understand.</p>	<p style="text-align: right;">Page 200</p> <p>1 of capital? I don't believe they do because they 2 are really on the operating level. So, it 3 doesn't feel to me as it would be with -- those 4 expenses would meet the terms of capital 5 guidelines as provided by the City of 6 Philadelphia. 7 HEARING OFFICER BROCKWAY: Go ahead. 8 MS. KUMAR: Chairman, if I may answer, 9 just for clarity, the 1.3 million that is being 10 referred, it's really the basis2 system modeling 11 cost and the office business associated with 12 that. But the primary cast is basis2 in the 13 1.3 million. It's not recording cost. It's only 14 incurred in '17 not in '18. Just for clarity. 15 HEARING OFFICER BROCKWAY: But doesn't 16 that -- that to me suggests because it's going to 17 be used for many years after. That's why it's 18 strange to me that's capital cost and not an 19 expense -- an expense, not a capital costs. 20 MS. LABUDA: It would have to -- I don't 21 have the guidelines in front of me. I will say 22 to fact check. If that lasts greater than '17 23 year, hard to know if this one-time 24 implementation will extend the life of the</p>
<p style="text-align: right;">Page 199</p> <p>1 MS. ALLEN: If that is the analogy you 2 are drawing, I'm not quite sure what you're 3 asking them to do. 4 MR. BALLENGER: I'm just asking whether 5 it would be fair to amortize the non-recurring 6 expenses for purposes of accounting for those 7 costs. 8 MS. ALLEN: Unfortunately, they would be 9 able to -- for ordinance purposes, there is no 10 way to do that. There is no mechanism to do 11 that. They have to recognize expense as it 12 occurs to see what is available to pay debt 13 service in the given year. 14 HEARING OFFICER BROCKWAY: Let me back 15 up, if I might, to see if this helps. I actually 16 had a question about why the 1.3 million or all 17 of it was an expense item as opposed to a capital 18 item because I don't know what it's being used 19 for. But my guess is that some of it for 20 benefits that will extend beyond the year. 21 MS. LABUDA: You have to read City's 22 capital guidelines. The question is, is it 23 greater than the limited amount to meet capital 24 eligible? Yes. But does it meet the definition</p>	<p style="text-align: right;">Page 201</p> <p>1 system. Does not meet capital guidelines as per 2 the standards. 3 MR. BALLENGER: Sort of skipping around. 4 Sorry. We talked a little bit about usage 5 reduction sort of on a population basis and that 6 being one of the drivers of this case. I was 7 looking at the numbers of residential customers 8 since 2010. It seemed to me there had also been 9 a fairly significant decline in the number of 10 residential customers over the last five years. 11 I mean, does the Department have an idea 12 as to why that would be the case? I believe it's 13 about 30,000 or so. I don't know which table, 14 I'm sorry. 15 MS. LABUDA: I think we may have to 16 follow up on this one because I do not have total 17 recall, nor do I have the privilege of work for 18 the City in 2010 to attempt to answer that. May 19 we get back to you? 20 MR. BALLENGER: Absolutely. Thank you. 21 I just wonder if there is portion of -- one 22 question we had about the usage and we talked 23 about that. I think the Board at its last 24 meeting and even today, I think, is aware that</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 202</p> <p>1 Philadelphia is really in a lot of ways coming 2 up. And it was a concern of ours that I would 3 like it if you follow up. 4 MS. LABUDA: Can I just repeat the 5 question back. 6 MR. BALLENGER: Sure. 7 MS. LABUDA: The question is, can we 8 articulate the shifts in customer accounts since 9 2010, specifically the drop, the decrease in 10 residential accounts. 11 MR. BALLENGER: Yeah. Not the numbers, 12 just the reason why there's been a decline. 13 MS. LABUDA: Thank you. 14 MR. JAGT: Is that in reference to 15 usage? 16 MR. BALLENGER: I'm not talking about 17 usage. Talking about number of residential 18 accounts. I think it started, don't quote me, 19 440. It's now down to 410 or thereabouts 20 ballpark. 21 One other thing, and I'm going back a 22 little bit to the conference call that we had 23 back in December. I'm probably -- my memory is 24 suspect a little bit, but I'm starting from one</p>	<p style="text-align: right;">Page 204</p> <p>1 by June 30. And of course, a lot of the bills 2 that were sent out in June are not due. The due 3 date falls beyond the fiscal year. So roughly, 4 you collect historically approximately 85 to 5 86 percent of current billings. Historically, 7 6 to 9 percent of the immediate prior year 7 billings, and historically, 2 to 3 percent of all 8 prior year to that. All prior to that. And the 9 end you, you've collected roughly 96 percent on 10 average. 11 MR. BALLENGER: Is that more or less? 12 MR. JAGT: Correct. The details of all 13 the specific collection factors for the three 14 years -- the current year, first year prior and 15 second year prior -- and also the breakdown 16 between the collection factor for water and sewer 17 and stormwater only are provided in the 18 assumptions document. And while it's being 19 presented is the effective collection -- total 20 collections for retail for that fiscal year. 21 MS. KUMAR: It's 96.3 percent per the 22 document. 23 MR. BALLENGER: Okay. Thank you. I 24 thought it was probably just a rounding issue.</p>
<p style="text-align: right;">Page 203</p> <p>1 of the pages in the presentation. 2 MR. DASENT: This the workshop 3 presentation? 4 MR. BALLENGER: That's where the 5 question originated from. I want to make sure we 6 were clear. On page 25 of the cost of service 7 presentation, it says that fiscal year cash 8 receipts reflect 96 percent of fiscal year 9 billings. And I just wasn't quite sure how that 10 correlated with the collection factor that was 11 designated in the December filing? I think we 12 were looking at 84 and change percent of current 13 year collections. 14 Is this the sum of all. 15 MR. DASENT: Are you talking about a 16 rolling twelve months or collection factor? 17 MR. BRUNWASSER: That's a current 18 collection factor. 19 MR. BALLENGER: Yeah. 20 HEARING OFFICER BROCKWAY: I'm sorry, 21 folks. One at a time. 22 MR. BRUNWASSER: By definition that's 23 what's billed beginning July 1, the beginning of 24 a fiscal year and what's collected in that year</p>	<p style="text-align: right;">Page 205</p> <p>1 MS. KUMAR: Yes. 2 MR. BALLENGER: This may be more for 3 Water Revenue, but I will let anyone answer it 4 who is so inclined. 5 As we talked about during that December 6 call, the 84 and change is down a little bit from 7 where we were three years ago with about 85.5 8 being the collection amount. Are there -- does 9 the Department set sort of performance goals at 10 the beginning of the year as to our goal is to 11 collect 86 percent or next year we want to go to 12 87 percent? 13 Does the Department do that kind of 14 planning from year to year? If so, how? And how 15 would it measure its performance if it did? 16 MS. BETHEL: Michelle Bethel again. 17 Our goal is always to collect every 18 penny that we bill. But as we stated 19 historically, what we collect during the fiscal 20 year is, it is what it is. Of course, we always 21 want to collect more. But historically, that is 22 what we have been able to collect. 23 MR. BALLENGER: Okay. I think I've gone 24 through questions that I had in my mind. I'm</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

Page 206

1 looking to my team to see if there's anything --  
2 HEARING OFFICER BROCKWAY: Let's go off  
3 the record.  
4 - - -  
5 (At this time, a discussion was held off the  
6 record.)  
7 - - -  
8 MS. PICKENS: Hi, everyone. Josie  
9 Pickens again. I have a general question about  
10 the new staffing and what factors went into the  
11 calculation in the numbers of people you need  
12 both for the WRAP and for the new Water  
13 Department positions?  
14 MS. BETHEL: For the 22 positions that  
15 we were projecting for WRB, it's going with  
16 amounts of pieces of paper that we would  
17 anticipate perhaps receiving based on what we get  
18 right now. So right now that unit deals in like  
19 12,000 pieces of paper. If we went with that  
20 assumption of 50,000 and, of course, if it's not  
21 a hundred percent adoption, we still have to --  
22 just for -- in a perfect scenario, if we got all  
23 that, then we did the calculations based on that.  
24 So, that's what got us to our staffing.

Page 207

1 With the IT, same thing they did. They  
2 knew how long, projected how long this project  
3 would take. And they broke it out how many  
4 people they would need for that many of hours.  
5 MS. LABUDA: For the Water Department  
6 positions, I will give you an example. I will  
7 speak about the Finance Division. We looked at  
8 current projects we needed to complete in house.  
9 We look at civil service regulations. Identified  
10 positions, identified the salary, figured out  
11 what the job specs would be based on the work we  
12 needed to get done. That's how it -- that would  
13 be the formula for most of the -- all of the  
14 Water Department positions.  
15 Just looking back to the document, human  
16 resources that we provided as part of the filing  
17 and also as part of the proceeding, each division  
18 it talks about the position with human resource  
19 and admin and how many people, what they were  
20 going to do and the estimate of the salary. It's  
21 same type of formula. What's the work that needs  
22 to be done? What's the civil service code it  
23 correlates to. What's the salary. Of course, in  
24 addition to salaries paid for pension.

Page 208

1 MS. MCCARTY: If I may, you know there  
2 is 21 positions for the Water Department. You  
3 know, they are scattered around for compliance  
4 purposes like a concept order agreement. But  
5 some of those positions are related to inspection  
6 of our sewer connections, connection to the sewer  
7 system which is protection of our infrastructure.  
8 We find plumbers maybe don't do the best job. We  
9 are going to be changing some things around so  
10 there is better inspection of them. And our goal  
11 is for the Water Department to perform those  
12 inspections. Sewer system integrity is prolonged  
13 either further. That's an example.  
14 MS. PICKENS: You mentioned new  
15 initiatives. Are there things that you haven't  
16 covered in the presentation that you anticipate  
17 would be contemplated by that?  
18 MS. MCCARTY: What I -- what I just  
19 mentioned is a new initiative.  
20 MS. LABUDA: That's really it. When I  
21 speak about finance, I think of things like just  
22 reconciliations.  
23 MS. PICKENS: Thank you.  
24 MR. BALLENGER: I think at this point I

Page 209

1 would like to ask if they are on the phone with  
2 us, if anyone from Exeter or otherwise would like  
3 to have any questions. If so, they would chime  
4 in on.  
5 MR. MIERZWA: I'm good right now.  
6 MR. MORGAN: This is Lafayette Morgan.  
7 I have a couple of questions. One deals with --  
8 can you hear me okay?  
9 MR. BALLENGER: Yes.  
10 MR. MORGAN: One deals with electric  
11 power. And I realize someone just asked a  
12 question on this, but the audio was bad so I  
13 couldn't quite get the full gist of the question.  
14 First question is, I'm trying to see if  
15 I can find out from whom does the Department get  
16 it's electric power?  
17 HEARING OFFICER BROCKWAY: It's what?  
18 MR. BALLENGER: Electric power.  
19 MR. SCHWARZ: This is Scott Schwarz  
20 again. The Department does not buy power  
21 directly. The City buys power. The Department  
22 is not a separate legal entity. We cannot enter  
23 into contracts. The City's buys power through a  
24 low service provider directly off the grid.

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 210</p> <p>1 We're a member of PJM. And there's procedure 2 City Council set up for buying power directly off 3 the grid. 4 MR. BALLENGER: Did you hear him? 5 MR. MORGAN: Yes. Yes. In other words, 6 not a specific rate schedule that it uses to get 7 power if I'm understanding correctly? 8 MR. SCHWARZ: That's correct. We are 9 required to get three quotations. And usually 10 the purchase is executed within a few minutes. 11 HEARING OFFICER BROCKWAY: The "we" as I 12 understand it in that sentence was the City, not 13 the Department? 14 MR. SCHWARZ: That's correct. All power 15 is purchase by the City of Philadelphia through 16 the Procurement Department. From that, there is 17 separate account for the airport, water and the 18 general fund. They each charged a separate rate 19 by the City. 20 MR. MORGAN: How does the power get a 21 apportioned to the Department? It's some metered 22 or? 23 MR. SCHWARZ: We don't have meters for 24 all our facilities. But there is a load profile.</p>	<p style="text-align: right;">Page 212</p> <p>1 employees. It also looks at our retirees versus 2 city retirees. That table, those metrics, are 3 best displayed in the most recent city general 4 obligation offering in the back of the document. 5 There's a table that just shows the calculation 6 of Water Department or Water Fund employees 7 versus overall city employees. 8 MR. MORGAN: Okay. That's all I have. 9 MR. BALLENGER: Thank you, Lafayette. 10 With that, I believe the Public Advocate will 11 turn it over to anyone else who has questions. 12 HEARING OFFICER BROCKWAY: As far as I 13 know, no one else has questions, but we will give 14 people one last shot. Yes. Do come on up. 15 Good. 16 MR. HELBING: Good afternoon. Promise 17 to keep this short. My name is Mike Helbing for 18 PennFuture. One of the participants in this 19 case. PennFuture is an environmental 20 organization, our focus on this case is slightly 21 different than some of the other groups. We are 22 focused primarily on -- we are very supportive of 23 the Water Department's Green City Clean Waters 24 program. That is where a lot of our focus is. I</p>
<p style="text-align: right;">Page 211</p> <p>1 The Water Department is not involved in that. 2 It's a different office. But there's an energy 3 consultant these quarterly meetings. The load 4 profiles are examined, and the prices are set 5 based on load profiles. 6 MR. MORGAN: Okay. The other area I had 7 input intentions. And my understanding is that 8 the Department, the employees of the Department 9 participate in the City's pension plan; is that 10 correct? 11 MS. LABUDA: Yes, that is correct. 12 We're a part of the City of Philadelphia's 13 pension plan. 14 MR. MORGAN: Can you help me understand 15 again how those costs are apportioned to the 16 Department? 17 MS. LABUDA: Again, I'm going to cite my 18 favorite phrase today, I think, which is fact 19 check. I'm speaking from memory, and I don't 20 want to misstate something on the record. 21 The Department is charged its pension 22 cost based on the Department's allocable share of 23 pension which is really the number of Department 24 or Water Fund employees over total City</p>	<p style="text-align: right;">Page 213</p> <p>1 just had two specific questions about some things 2 that came up in the last rate case that I saw 3 also in some of the document here, but I just 4 wasn't sure. I didn't see a lot of analysis. 5 The first is the credit program. This 6 is in statement 9B from the Black &amp; Veatch. It 7 talks about on page 13 it allows for credit of -- 8 depending on the circumstances, 80 percent, 9 90 percent IAGA credit. And at the bottom says 10 credit program -- no changes are proposed to this 11 current credit program. 12 My question is, was there any further 13 analysis done on in this rate case versus any 14 data gathered in the interim since the last rate 15 case? Or was it just carried forward for these. 16 MS. KUMAR: In terms of the percentages 17 which are regulation, these are in the 18 regulations. And so, these were all vetted 19 during the last rate case proceedings. So, these 20 percentages were not changed. Because one of the 21 things that also came in the last citizens 22 advisory committee during the last rate case, one 23 of the questions raised was what is the guarantee 24 that we are doing this current program and what</p>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<p style="text-align: right;">Page 214</p> <p>1 is the guarantee this credit program will be 2 there next time? And the Department wanted to 3 honor that. This was all decided on doing that 4 last rate case. It's only fair to retain that 5 for a period of time. 6 So with that in mind, this was reviewed 7 by the percentages. And decide these will still 8 be valid for these rate proceedings. 9 MR. HELBING: You said the numbers were 10 reviewed. Is that in the documents made 11 available? Is that part of the formal notice the 12 review? 13 MS. KUMAR: They are there in the 14 regulation, as well. 15 MR. HELBING: Okay. Similar question 16 about enhanced program. In the document it say 17 it's basically being carried forward as in the 18 last rate case. Was that being reevaluated based 19 on data gathered since the last rate filing? 20 MS. KUMAR: That is true. The enhanced 21 capital program, it's in the statistics there in 22 the testimony itself. 23 HEARING OFFICER BROCKWAY: Can you slow 24 down just a tad.</p>	<p style="text-align: right;">Page 216</p> <p>1 2 3 <b>CERTIFICATION</b> 4 5 I, hereby certify that the 6 proceedings and evidence noted are 7 contained fully and accurately in the 8 stenographic notes taken by me in the 9 foregoing matter, and that this is a 10 correct transcript of the same. 11 12 13 ----- 14 ANGELA M. KING, RPR 15 Court Reporter - Notary Public 16 17 (The foregoing certification of 18 this transcript does not apply to any 19 reproduction of the same by any means, 20 unless under the direct control and/or 21 supervision of the certifying reporter.) 22 23 24</p>
<p style="text-align: right;">Page 215</p> <p>1 MS. KUMAR: Statistic is there in the 2 testimony, but there is also additional responses 3 given in the interrogatory questions that were 4 raised in terms of pattern. The program is 5 officially closed, was closed in September of 6 2013 to the normal new enrollees. The existing 7 enrollees will continue to be in the program as 8 long as they meet the eligibility requirements. 9 MR. HELBING: Okay. Thank you. That's 10 all I have. 11 HEARING OFFICER BROCKWAY: Okay. 12 Anybody else? 13 Seeing none, I want to thank the 14 Department very much for subjecting yourself to 15 all these questions and to the participants for 16 asking questions. And I want to thank the 17 Members. Feels cheeky to do that. 18 This is adjourned and this Presentation 19 day is closed. 20 (Presentation adjourned at 3:00 p.m.) 21 22 23 24</p>	

55 (Pages 214 to 216)

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<b>A</b>	30:23 74:18	<b>action</b> 70:17	112:22	<b>adjustments</b>	164:19	133:24	130:1
<b>A-minus</b>	131:24	70:18,19	113:12	23:1 24:8,9	183:6	149:21	<b>Amawalk</b>
145:9	<b>access</b> 189:14	<b>actions</b>	115:9	29:6	<b>afternoon</b>	186:5 189:8	5:21
<b>A-rated</b>	<b>accessible</b>	129:12,19	124:14	<b>admin</b> 61:12	6:24 212:16	189:13	<b>American</b>
155:16	176:24	<b>active</b> 2:11	129:11	207:19	<b>agencie</b> 33:3	210:17	20:21 91:10
<b>a.m</b> 139:18	<b>accommoda...</b>	163:4,10	151:20	<b>administer</b>	<b>agencies</b>	<b>alert</b> 113:2	91:11
<b>AA</b> 81:18,23	110:18	<b>acts</b> 128:3	215:2	167:10	11:21 24:6	114:19	119:18
82:2,5 84:4	<b>accomplish</b>	<b>actual</b> 16:10	<b>address</b> 34:1	<b>administeri...</b>	42:17 81:11	<b>Allen</b> 4:10,10	<b>AMI</b> 116:23
148:11,13	170:17,18	16:15 26:24	35:3 36:20	110:5	135:13	193:6 194:7	117:4,13,24
148:16	<b>account</b> 32:8	69:5 81:16	39:5 79:20	<b>administrat...</b>	136:2 137:4	194:9,21	118:8
155:13	32:12 37:14	89:18	116:18	109:1,7,11	137:16	195:8,11	119:17,18
<b>AAA</b> 155:6	37:17,20	104:18	117:6	<b>ado</b> 7:3	140:5	198:16	120:18
155:11,12	38:1,8	112:12	133:20	<b>adoption</b>	142:12	199:1,8	123:4,8
157:1,3,8	42:24 65:2	<b>actuals</b> 69:2	134:11	206:21	144:11	<b>allocable</b>	125:7,12
<b>ability</b> 36:24	66:6,13,19	<b>ad</b> 172:4	135:23	<b>advance</b>	146:7	211:22	183:24
138:1	66:23 68:1	<b>Adaptation</b>	137:14	116:22	149:11	<b>allocate</b> 21:5	184:4,14
140:14	73:5 175:20	130:7	154:22	<b>advanced</b>	151:22	25:18,23	185:2
141:19	186:8	<b>add</b> 16:14,16	155:3	12:14 59:8	188:6	26:1 27:13	<b>AMIs</b> 117:19
156:3	210:17	48:4 126:4	167:22	<b>advice</b> 141:2	189:11	28:9,9,12	119:7
160:21	<b>accounting</b>	126:15	168:6 169:4	<b>advisable</b>	<b>agency</b> 33:6	179:15	<b>amortize</b>
161:1,17	30:23 199:6	132:10	169:6,7	178:16	145:11	182:23	161:16,21
165:21	<b>accounts</b>	150:4	174:23	<b>advise</b> 31:24	149:7 152:7	<b>allocated</b>	197:9,13
197:13	31:22 32:1	157:11	176:9 177:3	<b>advised</b> 111:5	167:13	20:11 28:1	198:22
198:22	32:3 45:9	159:22	177:20	<b>advising</b>	188:15	74:17,21,23	199:5
<b>able</b> 21:21	49:15,16	<b>added</b> 196:11	178:4	144:10	<b>aggregate</b>	74:24	<b>amortizing</b>
23:5 41:6	51:2 79:6,7	<b>addition</b>	182:15,21	<b>advisory</b>	93:20	<b>allocating</b>	197:6
59:10 69:3	79:11,12,14	13:17 44:18	<b>addressed</b>	213:22	<b>aging</b> 79:20	26:23	<b>amount</b> 16:23
112:5 118:9	79:15,16	53:6 55:22	35:9 116:6	<b>advocacy</b>	80:17 90:10	181:19	36:8 37:15
118:12	95:2 98:20	56:4 57:7	116:10,13	164:12	90:13 144:1	<b>allocation</b>	48:8 50:6
123:23	103:4	66:7,16	167:22	<b>advocate</b> 3:18	<b>ago</b> 6:17 79:9	27:22 29:13	51:4 55:13
156:16	185:11,24	68:9,14,15	168:3,16	3:20,22,24	82:4 94:21	75:24	63:6 65:6
159:2 161:6	189:5 202:8	80:11 82:7	171:15	164:1	130:1,22	<b>allocations</b>	66:17,24
164:15	202:10,18	110:22	175:16	212:10	131:17	74:11	71:12 84:1
172:17	<b>accurate</b>	123:3	184:7	<b>advocating</b>	158:17	<b>allow</b> 32:8	104:18
175:10	113:8	207:24	<b>addresses</b>	167:14	190:22	117:6	128:10
178:5	<b>accurately</b>	<b>additional</b>	35:6 51:11	<b>Affairs</b> 5:2	205:7	156:12	133:6
188:20	216:7	15:17,21	65:12 70:4	<b>affect</b> 22:9	<b>agree</b> 21:19	<b>allowed</b> 31:13	161:11
189:14	<b>achieve</b> 66:3	16:17 22:1	80:19 169:1	<b>affordability</b>	191:14	169:6	195:12,17
199:9	138:1	37:18 39:16	<b>addressing</b>	54:22,23	<b>agreement</b>	187:21	199:23
205:22	<b>achieved</b>	48:9,12	152:18	55:1 57:8	12:11 44:22	<b>allows</b> 32:4	205:8
<b>absolute</b>	11:24	56:4,14,17	<b>Ade</b> 2:22	57:14,15	129:24	83:19	<b>amounts</b> 33:8
141:8	<b>achievement</b>	57:1,4,7,10	107:7	62:8 80:3	191:2,6,14	126:11	206:16
198:13	12:8	57:24 58:16	<b>Adeolu</b> 172:3	93:10 94:1	192:10	148:15	<b>ample</b> 151:8
<b>absolutely</b>	<b>act</b> 11:17	58:17,24	<b>adequate</b>	94:2,4	208:4	154:21	<b>AMR</b> 116:22
32:18	12:10,12,12	61:16 62:6	176:21	96:19 97:3	<b>ahead</b> 27:18	155:2 156:8	119:3 121:4
112:15	80:8,9,9	63:15 66:2	<b>adjourned</b>	98:5 101:7	41:16 44:17	156:13	<b>AMRs</b> 118:1
170:20	128:4,5,5,6	67:12,18	215:18,20	105:10	54:20 59:18	213:7	<b>analogy</b>
201:20	129:2,21	88:8,13,15	<b>adjust</b> 43:14	109:23	69:17 184:9	<b>alluded</b> 93:24	199:1
<b>absorb</b> 161:2	130:11,14	95:21 98:24	<b>adjusted</b>	165:2	200:7	97:8 140:7	<b>analyses</b>
<b>acceptable</b>	131:6,8	99:1 100:19	28:15,17	182:24	<b>air</b> 12:12 80:9	154:24	122:8
42:4,5	137:16	109:1	145:4	<b>affordable</b>	130:14	<b>alternative</b>	<b>analysis</b> 40:1
103:16	164:9 198:8	110:16	<b>adjusting</b>	106:23	133:20	123:19	44:1,1 55:5
<b>accepted</b>	<b>acting</b> 175:21	112:17,20	42:12	109:8,12	<b>airport</b>	<b>alternatives</b>	86:8,20



Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

89:2 92:12	85:7	<b>apply</b> 96:13	109:7	75:17	<b>automated</b>	160:21,22	13:22
98:10 130:1	<b>answers</b> 68:6	101:13	<b>arrangement</b>	<b>assumption</b>	121:2	160:24	<b>Ballard</b> 4:10
141:11	134:7	103:12	7:20 14:8	40:18 51:14	<b>automatic</b>	161:2,2,7	38:19 193:4
145:6 213:4	<b>anticipate</b>	145:17	<b>art</b> 27:23	59:5 61:1	116:22	163:3	193:6
213:13	29:23 31:2	165:9,10,16	<b>articulate</b>	94:13,19	129:6	165:13	194:10
<b>analyst</b>	59:13	166:21	202:8	101:1,22,23	183:24	185:8 189:4	<b>Ballenger</b>
141:14	206:17	216:18	<b>articulated</b>	103:4 108:3	<b>available</b>	197:8	3:23,24 8:3
<b>analysts</b>	208:16	<b>apportioned</b>	136:15	111:3,9,15	67:1 69:13	198:19	18:13,21
141:11,13	<b>anticipated</b>	210:21	<b>aside</b> 32:20	113:9 114:2	97:20 110:9	199:14	24:16,21
<b>analytical</b>	60:5 106:5	211:15	43:20 95:18	115:2	126:1	201:19	48:14
145:13	116:24	<b>appreciate</b>	108:11,17	206:20	151:21	202:5,21,23	103:17,21
146:19	121:21,22	187:3 194:5	<b>asked</b> 34:12	<b>assumptions</b>	192:23	207:15	103:22
<b>analyzed</b>	<b>anticipating</b>	<b>appreciated</b>	51:21 88:14	8:19 15:11	194:19,22	212:4	104:9,17,21
98:19	123:23	186:20	107:9 130:1	15:15 21:15	195:2,6	<b>backed</b>	104:24
<b>and/or</b>	137:8	<b>appreciating</b>	139:21	27:24 36:19	199:12	187:23	105:9,24
132:15	<b>anybody</b> 5:12	186:18	158:1	40:2,7 49:6	214:11	<b>background</b>	106:20
216:20	5:24 6:24	<b>approach</b>	197:22	51:2 56:18	<b>average</b> 11:7	187:14	169:13,18
<b>Andre</b> 4:8	15:1 17:10	48:22 93:4	209:11	63:12,13,23	58:5 104:22	<b>backup</b> 63:17	169:21
<b>ANGELA</b> 1:6	21:12 24:19	159:19	<b>asking</b> 14:17	74:6 77:4	157:5,8	<b>bacteria</b>	171:18
216:13	185:13	183:10	199:3,4	77:23	204:10	131:18	186:10,12
<b>Ann</b> 4:7	193:24	<b>approaches</b>	215:16	101:14,18	<b>aviation</b>	<b>bad</b> 209:12	186:13
12:23 48:21	215:12	140:8	<b>assert</b> 113:7	101:24	50:20 76:5	<b>Bakare</b> 2:22	190:7 191:7
74:10	<b>anymore</b>	<b>appropriate</b>	<b>asset</b> 66:10	106:10	<b>award</b> 11:10	2:22 107:7	191:24
<b>Ann's</b> 40:14	118:23	152:1	144:19	109:14,19	11:12,14,20	107:7 108:9	192:14,19
<b>annual</b> 45:23	160:15	<b>appropriati...</b>	<b>assets</b> 66:12	109:24	12:2,5	108:15	193:9
48:14 53:16	<b>anyway</b> 2:16	43:6 73:23	66:14 73:1	111:20	<b>awards</b> 11:22	109:3 110:7	194:15
58:4 59:14	169:7	<b>approve</b>	153:8,10,13	204:18	11:23 12:4	110:24	195:4,10,14
59:16 60:2	189:10	17:10	<b>assistance</b>	<b>assure</b> 120:7	<b>aware</b> 7:17	172:1,2,3	196:8,12,14
61:24 68:12	<b>apart</b> 185:18	<b>approved</b>	8:22 79:22	<b>attempt</b>	173:24	173:23	197:16,18
69:2 185:8	<b>apologies</b>	17:15,16,16	87:14 93:14	145:14	196:1	174:9 175:9	198:4,10,24
195:16	24:22	38:19 58:10	93:17,22	201:18	201:24	175:23	199:4 201:3
<b>answer</b> 19:19	<b>apologize</b>	117:12,15	94:3 95:6	<b>attend</b> 187:1	<b>awareness</b>	177:2	201:20
34:3,9 35:2	19:17 49:21	<b>approves</b>	98:24 99:2	<b>attention</b>	78:22	178:11,21	202:6,11,16
35:23 60:16	57:7 96:10	14:24 17:20	107:10	7:15	<b>AWWA</b>	179:2,4,11	203:4,19
62:14 81:16	96:19	<b>approximat...</b>	108:11,16	<b>attentive</b>	74:18	180:13	204:11,23
107:17	133:12	38:16 60:16	139:5	186:18	<hr/>	181:6,16	205:2,23
120:13	134:12	135:1 192:8	<b>assists</b> 145:6	<b>attorney</b> 3:16	<b>B</b>	182:17,21	208:24
125:4 128:2	180:16	204:4	<b>associated</b>	<b>attractive</b>	<b>B</b> 148:24	183:7,20	209:9,18
134:7	186:14	<b>April</b> 131:1	55:4 56:9	124:6	<b>B-u-i</b> 12:24	185:6 186:9	210:4 212:9
170:10	<b>appeal</b> 175:4	131:19	56:11	<b>attributes</b>	<b>B&amp;V's</b> 63:10	<b>balance</b> 10:16	<b>ballpark</b>
171:13	<b>appealed</b>	<b>Aqua</b> 53:8,9	109:22	146:21	<b>back</b> 19:18	13:24 33:9	192:14
178:5	130:19	91:10	182:6 197:2	<b>audio</b> 209:12	29:11 33:1	67:3 68:17	202:20
186:23	<b>applaud</b>	119:17,20	200:11	<b>audit</b> 29:7,23	33:1 38:2	68:19,21	<b>Baltimore</b>
187:12	164:18	<b>Arch</b> 1:5	<b>Association</b>	30:2,18	39:16 43:21	69:24 70:10	149:5
191:13	<b>apples</b> 89:24	<b>area</b> 109:20	11:21 20:22	31:3,8	53:9,12	71:4,20,21	158:18
192:12	89:24 90:23	144:19	<b>assume</b> 50:15	<b>audit's</b> 29:7	63:5 84:23	<b>balanced</b>	<b>bank</b> 156:7
198:2 200:8	90:24	147:12,12	50:24 75:18	<b>audited</b> 29:3	91:21,24	93:4	160:10
201:18	<b>appliances</b>	151:7	100:11	<b>audits</b> 30:18	107:17	<b>balances</b>	<b>banks</b> 160:14
205:3	78:21	163:24	<b>assumed</b>	<b>authoritative</b>	115:24	69:13 70:3	<b>bar</b> 64:8,9,9
<b>answered</b>	<b>applications</b>	211:6	50:11	193:7	121:5	70:6 192:7	64:11 65:4
21:11	114:4,9,12	<b>areas</b> 146:5	<b>assumes</b>	<b>authority</b>	122:11,13	192:17	89:20
134:11	<b>applied</b>	171:1	198:8	74:24 76:4	123:6 137:9	194:19	<b>Barking</b> 61:2
<b>answering</b>	179:18	<b>argued</b> 109:6	<b>assuming</b>	167:20	138:5,19	<b>balancing</b>	<b>Bart</b> 5:20
					139:16		

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<b>base</b> 48:6 55:12 73:9 77:2 82:19 87:24 183:19	181:3,19 184:13 195:16 197:11,15 201:5	195:5 <b>believes</b> 138:21 <b>benchmark</b> 89:23	153:11 157:21 175:24 208:10	73:2 153:10 153:11 190:1	73:21 74:3 100:1 103:16 105:22 106:17 108:19 112:5 114:21 115:13,14 116:3 117:20 125:13 134:10 135:10,14 135:21 136:11,17 138:4 152:7 152:14 162:20 163:15 170:15,16 171:10,11 172:10 173:6,9 174:17,20 174:21 175:13,17 176:1,6 179:7,18 183:2,5,11 184:19 186:20 198:8 201:23	71:1,10,13 72:9 83:14 84:4 86:3 90:17 116:9 135:13 139:6 147:20 155:24 157:9 160:21 187:8 188:5 197:9,10,14	<b>breakout</b> 75:7,18 <b>breath</b> 69:9 <b>bridge</b> 19:7 32:9,12 <b>brief</b> 39:13 40:3 41:3 45:8 46:17 54:20 76:21 <b>briefings</b> 131:1 <b>briefly</b> 40:7 41:23 45:10 125:15 131:24 <b>briefs</b> 130:24 <b>bring</b> 39:8 163:10 176:23 <b>brings</b> 87:1 <b>broader</b> 91:4 <b>Brockway</b> 1:12 2:2,3 3:10 4:12 5:7,24 6:3 7:10,14 8:1 8:5 9:23 10:7,10 12:20 14:2 14:7,16,20 14:24 15:6 15:23 16:21 17:6,18,24 18:11 19:16 22:12,15,21 23:20 24:3 24:18 27:17 27:21 28:16 28:19 29:10 30:22 35:18 39:10,15 41:22 44:6 47:8,14,17 47:21 48:3 49:20 50:1 52:8,15 53:4,24 54:6 57:6 57:12,17,21 58:11 59:17 61:3 75:6 75:15 77:7 77:21 78:6
<b>based</b> 18:6 21:14 34:16 40:14 44:9 49:3 50:4 50:23 55:11 59:12,15 67:5 69:4 69:11 70:24 73:24 74:1 86:13,17,19 86:22 97:19 99:19,20 102:16 104:5,6,9 104:22 130:9 206:17,23 207:11 211:5,22 214:18	<b>basis</b> 2 56:12 110:17 112:21 176:17 200:10,12 <b>basket</b> 155:6 <b>battling</b> 166:5 <b>BBB</b> 81:18 82:2 155:20 160:12 188:22,22 <b>beaten</b> 167:6 <b>Beckley</b> 2:19 2:19 30:3 35:11 105:20 <b>beginning</b> 56:17 70:10 73:6 131:14	<b>beneficial</b> 144:14 185:23 <b>benefit</b> 73:9 108:20 114:24 133:1 157:20 160:3 <b>benefits</b> 56:9 58:3,6,8 116:24 120:22 121:1,2 185:19 199:20 <b>BERNARD</b> 1:12 <b>Bernie</b> 3:8 73:10 <b>Bertoc</b> 17:14 <b>best</b> 7:21 40:21 48:7 53:1 65:9 65:11 73:7 126:1 146:18 147:18 159:14 160:1 191:3 208:8 212:3	<b>beyond</b> 72:17 132:8 177:8 191:15 199:20 204:3 <b>big</b> 12:8 40:7 42:16 117:21 123:7 130:14 142:24 189:22 <b>bigger</b> 84:5 106:21 <b>bill</b> 50:8 55:2 80:4 88:4 88:17 89:1 91:13,14 95:18 99:15 99:15,17 100:8 105:21,23 113:1,3,6 113:10,14 169:2 173:7 173:7 180:3 180:7 205:18 <b>billed</b> 49:17 178:23 197:23 203:23 <b>billing</b> 49:11 49:13 51:6 56:12 110:17 113:3,9 174:14,19 174:24 175:15 176:5,11,18 176:23 178:4 179:6 180:11,17 <b>billings</b> 50:14 50:16,16,23 51:8 203:9 204:5,7 <b>billion</b> 72:24	<b>bills</b> 8:20,22 10:2 23:3,4 44:3 57:22 87:4,5 90:22 92:3 109:8,11 204:1 <b>biosolids</b> 11:3 <b>bit</b> 4:13 8:10 20:19 21:8 23:10 36:18 117:23 144:9,16 149:24 153:23 174:10 190:10,12 192:19 201:4 202:22,24 205:6 <b>Black</b> 4:1,3,7 30:1,9 34:23 39:18 63:20 85:3 85:17 107:23 179:20 191:11 213:6 <b>blocks</b> 8:17 13:10 85:21 <b>blowing</b> 190:1 <b>blue</b> 64:9 67:21 <b>board</b> 1:2,13 1:13,14,14 2:4,7,10,21 3:4,6,9,11 6:4,10,19 6:21 7:11 9:9 12:18 24:20 25:12 34:6 35:12 35:22 36:21 39:6 43:3 44:18 51:12 51:23 65:13 68:7 73:10	105:22 106:17 108:19 112:5 114:21 115:13,14 116:3 117:20 125:13 134:10 135:10,14 135:21 136:11,17 138:4 152:7 152:14 162:20 163:15 170:15,16 171:10,11 172:10 173:6,9 174:17,20 174:21 175:13,17 176:1,6 179:7,18 183:2,5,11 184:19 186:20 198:8 201:23 <b>Board's</b> 41:11 51:20 70:4 80:20 <b>Boards</b> 136:19 168:16 <b>bond</b> 16:13 21:21 22:6 25:11 30:20 31:23 32:2 32:4,10 37:16,20,24 38:19 41:10 41:17,19 43:24 46:1 50:5 64:13 64:15,20,24 65:24 66:7 66:8,15	71:1,10,13 72:9 83:14 84:4 86:3 90:17 116:9 135:13 139:6 147:20 155:24 157:9 160:21 187:8 188:5 197:9,10,14 <b>bonds</b> 16:5 42:2,17 44:21 82:8 147:21 156:12 161:3,7 187:8,11,22 188:2 189:10,15 189:19,22 <b>booked</b> 196:6 <b>boom</b> 143:6 <b>borrow</b> 15:20 22:4 156:5 156:14 195:16 <b>borrowing</b> 15:19 16:17 154:17 192:23 194:19 195:6,8 <b>Board's</b> 41:11 51:20 70:4 80:20 <b>Boards</b> 136:19 168:16 <b>bond</b> 16:13 21:21 22:6 25:11 30:20 31:23 32:2 32:4,10 37:16,20,24 38:19 41:10 41:17,19 43:24 46:1 50:5 64:13 64:15,20,24 65:24 66:7 66:8,15	187:8 188:5 197:9,10,14 <b>bonds</b> 16:5 42:2,17 44:21 82:8 147:21 156:12 161:3,7 187:8,11,22 188:2 189:10,15 189:19,22 <b>booked</b> 196:6 <b>boom</b> 143:6 <b>borrow</b> 15:20 22:4 156:5 156:14 195:16 <b>borrowing</b> 15:19 16:17 154:17 192:23 194:19 195:6,8 <b>Boston</b> 189:17 <b>bottom</b> 13:12 13:21 14:1 99:8 181:11 213:9 <b>bound</b> 17:24 <b>break</b> 6:22,23 6:24 39:13 84:19,21 86:10,11 163:6 168:18 198:13 <b>breakdown</b> 76:2,15 78:1 204:15 <b>breaking</b> 191:19

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

78:12,18	<b>Brunwasser</b>	38:20	216:3	66:5,5,6,13	23:21	<b>central</b>	39:7 77:12
83:3,12	1:12 3:8,8	<b>build</b> 21:17	<b>C's</b> 146:19	66:19,21,21	120:23	142:21	82:4 132:14
84:12,18,23	3:12 10:4	<b>building</b> 8:16	<b>C1</b> 190:18	67:24 73:7	121:19	<b>centralized</b>	142:8 153:2
85:5,9,15	17:22 22:20	13:10 85:20	<b>calculate</b>	79:21 81:13	124:11	11:3	157:21
88:24 89:5	36:5 38:13	85:20,21	41:24	83:10,17	130:18	<b>centralizing</b>	187:22
91:17,23	44:11 62:15	<b>buildings</b>	179:17	86:2 90:16	131:2 137:7	177:5,8	203:12
95:9 102:24	73:11 94:13	185:11	<b>calculated</b>	137:23	172:15	<b>century</b>	205:6
103:15	94:20	<b>built</b> 52:5,8	175:12	143:17,21	185:5 187:2	147:21	<b>changed</b>
104:15	112:23	197:24	<b>calculating</b>	143:24	190:15	<b>CEO</b> 122:21	140:8 145:4
105:2,11	113:13	198:4	105:1	144:5 152:5	196:19,24	<b>certain</b> 28:14	159:21
106:14	120:1 121:4	<b>bulleted</b>	<b>calculation</b>	154:6,11,18	201:6,12	52:24 84:1	190:18
107:19	123:2	46:23 51:13	151:23	187:17	212:19,20	102:5	213:20
108:13,23	127:10	80:14	206:11	188:18,19	213:2,13,15	129:11,12	<b>changes</b> 31:5
109:4 111:2	132:17,20	<b>bump</b> 178:8,9	212:5	188:21	213:19,22	129:19	48:2 60:1
111:10,14	133:19,23	<b>bumping</b>	<b>calculations</b>	189:4,9,15	214:4,18	144:17	82:3 112:21
113:17	135:11,24	164:3	105:4	199:17,22	<b>cases</b> 101:19	145:5 147:7	130:8,11
114:1,13,16	138:12	<b>burden</b> 73:5	206:23	199:23	166:24	156:6 181:6	143:15
114:19	187:12	<b>burden-bas...</b>	<b>call</b> 27:23	200:1,4,18	192:5	196:21	190:14,20
115:12,15	203:17,22	95:12 105:2	32:16 88:4	200:19	196:19	<b>certainly</b>	213:10
115:18,24	<b>bucket</b> 32:11	<b>burdens</b>	134:6	201:1	<b>cash</b> 30:21	101:6	<b>changing</b>
121:17	<b>Bucks</b> 51:16	105:3,12	149:12	214:21	31:7 33:7,8	120:23	135:15
122:24	51:22 52:18	166:13	167:8 173:5	<b>capitalization</b>	33:13 37:14	156:1	148:3 208:9
123:15	52:19 53:3	<b>Bureau</b> 4:15	174:19	146:9	44:7,8	165:13	<b>Chapman</b>
124:9,16	53:7 77:1	56:7 97:1	176:17,23	<b>capped</b> 37:9	64:13,14,24	170:12	1:14 3:7,7
125:1,11	<b>budget</b> 13:22	113:4	177:11,14	<b>caps</b> 145:18	65:4,7,18	188:8 194:4	62:5 63:18
134:2 135:9	17:9 33:9	117:20	177:14,15	150:3	65:20 66:18	<b>certainty</b>	82:19
138:13,19	33:22 41:1	121:6,12	193:4	<b>capture</b> 97:24	66:20	101:11	<b>characteris...</b>
139:10,16	58:17 61:8	164:5	202:22	112:20	134:21	<b>certification</b>	26:3,8
148:17	61:13 62:16	175:21	205:6	118:24	141:22	216:17	144:18
162:19	62:20 64:5	176:14	<b>called</b> 20:23	<b>captured</b>	144:21	<b>certified</b>	<b>charge</b> 26:10
163:2,8	69:3,11	177:16	29:20 37:8	15:18 35:9	146:8	29:18	88:8,9
164:6 168:8	71:16,18,19	<b>Bureau's</b>	38:8 82:23	97:7 109:23	151:18,24	<b>certify</b> 216:5	89:15
168:17	71:21	112:16	95:12	137:20	152:12	<b>certifying</b>	171:18
169:5,16,19	112:14,16	<b>bureaucratic</b>	128:12	<b>card</b> 5:10	153:16	216:21	182:11
170:5,19	112:19,20	174:8	130:5,6	<b>care</b> 16:4	156:23	<b>cetera</b> 175:4	<b>charged</b>
171:12,23	152:5 171:5	<b>business</b> 5:10	137:15	<b>carefully</b>	161:9 189:1	<b>Chair</b> 1:12	210:18
186:11	<b>budgetary</b>	121:19	<b>calls</b> 80:11	165:21	189:2,5,5	123:2	211:21
191:12	30:11,14	124:11	174:7 178:3	<b>Careny</b> 170:2	197:11,11	163:14	<b>charges</b> 27:16
193:10,16	31:7	177:19	<b>cap</b> 145:19	<b>Carney</b>	197:14	<b>Chairman</b>	30:10,20
198:1,12	<b>budgeting</b>	200:11	<b>capacity</b>	163:11,14	203:7	3:10,12	32:22 33:22
199:14	69:14	<b>button</b> 18:18	21:21 161:6	163:16	<b>cast</b> 200:12	200:8	71:17 86:17
200:7,15	<b>buffer</b> 32:17	<b>buy</b> 144:4,4	<b>capital</b> 13:16	164:8	<b>categories</b>	<b>Chalfont</b>	92:16 170:1
203:20	33:15	156:1 161:2	16:6,22	167:21	27:8 149:23	52:10	170:4 186:5
206:2	<b>Bui</b> 4:7,7	161:6	17:13 22:1	168:4	<b>category</b>	<b>challenge</b>	<b>charitable</b>
209:17	12:17,23,23	<b>buyer</b> 187:9	23:15 37:18	169:22	81:19	127:22	93:14
210:11	14:6,12,18	<b>buying</b>	37:19,21	171:22,24	148:11,16	143:7,8	183:16
212:12	14:23 15:4	185:17,20	38:2,10	<b>Carney's</b>	156:18	151:16	<b>chart</b> 23:12
214:23	19:21 22:14	186:3 210:2	40:24 42:24	169:10	160:12,18	<b>challenges</b>	89:10 106:8
215:11	22:19,22	<b>buys</b> 209:21	46:1,2,14	<b>carried</b>	<b>ccf</b> 87:23	76:24	155:5
<b>broke</b> 166:16	23:22 24:4	209:23	64:2,5,7,14	213:15	<b>center</b> 11:3	151:10	<b>charter</b> 9:5,8
207:3	24:23 27:19	<b>BV-S1</b> 63:21	64:15,22	214:17	177:11,15	<b>chance</b> 6:21	<b>cheated</b> 69:17
<b>brought</b> 40:5	28:11,18,21	_____	65:1,4,15	<b>carry</b> 150:13	<b>centers</b>	146:17	<b>check</b> 33:12
106:17	29:14 36:10	<b>C</b>	65:17,19	<b>case</b> 6:6	177:14	<b>change</b> 30:6	38:5 135:3
		<b>C</b> 188:7 216:3					

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

192:12,13	29:17,20,22	19:2 34:22	132:21	50:24	181:2 202:1	<b>complete</b> 29:8	137:17
192:24	30:12,13	58:9 108:12	<b>clients</b> 144:10	<b>collection</b>	<b>comment</b>	30:2 31:9	163:18
195:5	37:7,14	125:16	144:13	50:11,12,13	61:5 96:10	41:14 207:8	<b>conclusion</b>
200:22	50:15,16,19	134:15,20	<b>climate</b>	179:24	131:11,12	<b>completed</b>	193:3
211:19	52:1 60:14	150:5	142:20	180:8,22	174:5	64:1	<b>conditions</b>
<b>cheeky</b>	60:23 61:23	152:17	<b>close</b> 30:7,7	203:10,16	186:17	<b>complex</b> 13:4	144:19
215:17	62:4,19	187:16	81:2 136:5	203:18	<b>commercial</b>	21:23	146:2
<b>chemical</b>	75:1,2 76:4	191:9	198:7	204:13,16	26:6 141:7	156:16	159:21
59:15,18,20	76:19 79:2	199:21	<b>closed</b> 131:12	204:19	156:10	173:4	<b>conduct</b> 13:7
<b>chemical/p...</b>	80:4 94:6	209:23	215:5,5,19	205:8	<b>Commission</b>	<b>complexity</b>	13:10
126:4	94:15 96:2	211:9	<b>closer</b> 91:7	<b>collections</b>	3:9 17:23	99:21	<b>conference</b>
<b>chemicals</b>	97:1,7	<b>citywide</b>	<b>closest</b> 73:16	50:7 180:23	128:20	<b>compliance</b>	202:22
56:23 59:6	101:17	186:4	<b>CLS</b> 3:21,24	203:13	<b>Commissio...</b>	12:1,2,9	<b>confidential...</b>
126:5	104:23	<b>civil</b> 207:9,22	<b>Clupper</b> 5:5,5	204:20	4:6,17,22	32:15 58:18	191:2,6,14
<b>Chicago</b>	108:3	<b>clarification</b>	33:4 81:5	<b>column</b>	7:7 111:18	58:21	<b>confirm</b>
189:17	109:18	148:18	81:14,14	148:19	136:3	127:15	194:17
<b>chief</b> 17:13	117:13,14	<b>clarify</b> 29:2	82:17 83:7	<b>combination</b>	176:19	208:3	<b>confused</b> 10:1
<b>chime</b> 209:3	119:10	36:9 54:8	83:16	90:5	<b>commitment</b>	<b>complicated</b>	<b>confusion</b>
<b>chlorination</b>	130:17	105:20	135:22	<b>combined</b>	125:20,24	145:16,21	173:8
90:8	133:5	108:24	136:1 138:2	12:11 61:19	<b>committee</b>	<b>comply</b> 12:6	<b>conjunction</b>
<b>choice</b> 122:5	135:13,20	174:10	139:20	66:18 72:1	213:22	26:19	123:24
<b>choose</b>	136:2,4,9	179:22	148:22	74:15 135:5	<b>communicate</b>	<b>component</b>	<b>connected</b>
149:10	141:13	181:8 194:2	157:3	147:15	174:3	29:21	142:14
<b>chosen</b>	142:3,4	<b>clarifying</b>	158:11,15	192:6,17	<b>communica...</b>	144:23	<b>connection</b>
168:22	150:2,10,17	29:17 96:10	159:9 160:4	<b>come</b> 13:19	123:5	<b>components</b>	61:2 126:22
<b>CIP</b> 83:22	150:19	<b>clarity</b> 200:9	<b>Coalition</b>	14:4 19:18	175:24	16:1 27:15	150:19,20
161:10	152:18	200:14	172:4	23:18 29:11	176:22	37:19 49:3	150:24
<b>Circuit</b>	158:18	<b>class</b> 58:16	<b>coast</b> 147:13	31:17 42:7	<b>Community</b>	76:22	208:6
130:19,23	160:12	74:22 75:11	147:16	42:11 45:13	3:17,19	124:19	<b>connections</b>
<b>circumstan...</b>	164:2,18	78:4 181:18	<b>coating</b>	115:10	<b>companies</b>	<b>composes</b>	208:6
104:13	165:1 166:6	182:5,7	126:16,17	122:13	24:7 44:22	13:15	<b>consent</b> 12:10
213:8	167:3	<b>classes</b> 74:20	127:2	146:14	167:17	<b>computations</b>	129:23
<b>cite</b> 211:17	180:10	76:12	<b>Coca-Cola</b>	155:19	<b>company</b> 2:5	144:12	130:4,7
<b>cited</b> 151:7	184:4,5,13	179:19	179:3	163:3 170:8	<b>compare</b>	<b>con</b> 37:14	<b>consequence</b>
<b>cities</b> 189:17	184:18	181:20	<b>code</b> 31:1	172:17	48:24 75:12	134:21	7:12 81:12
<b>citizen</b> 88:11	185:11,14	182:1,11,13	168:15	190:9	81:23 87:9	189:5	<b>consequential</b>
94:9 110:4	185:18,21	<b>classical</b>	207:22	212:14	88:22 89:7	<b>concept</b> 100:8	194:16
183:14	185:24	159:12,19	<b>coin</b> 93:2	<b>comes</b> 10:15	89:7,9 91:6	208:4	<b>conservation</b>
<b>citizens</b> 93:13	186:4 188:1	<b>clean</b> 11:21	<b>colleague</b>	37:13 46:11	92:3	<b>concepts</b> 8:18	54:3 78:22
94:10 95:3	188:3,5,11	12:10,11	85:19	69:13 112:4	<b>compared</b>	<b>concern</b>	93:17
96:12	188:19	80:8,9	<b>collect</b> 9:15	137:9	26:6 42:8	137:3,22	<b>conservative</b>
107:13	189:2,3,4,6	128:5 129:2	44:4 50:15	<b>coming</b> 12:3	182:20	142:20	157:14
167:10	189:7,7,12	129:21	204:4	13:23 25:5	190:21	143:14,16	<b>consider</b>
183:17	189:23,24	130:11,14	205:11,17	42:21 48:20	<b>compares</b>	152:4	124:19
213:21	190:1 200:5	133:20	205:19,21	67:13 94:3	91:11 92:5	163:21,23	148:6
<b>city</b> 1:1 2:20	201:18	212:23	205:22	100:3	<b>comparing</b>	168:7 191:4	173:16
8:24 9:4,7	209:21	<b>clear</b> 2:8	<b>collected</b>	117:11	89:22 141:1	202:2	177:7
9:11,16,18	210:2,12,15	14:21 16:2	44:10	122:4	<b>comparison</b>	<b>concerned</b>	182:14
9:20 15:1,9	210:19	35:19 95:2	203:24	123:17	8:22	125:10	197:5
15:11,12	211:12,24	107:10	204:9	124:14	<b>comparisons</b>	160:5,7	<b>considerably</b>
17:15,16,19	212:2,3,7	196:13	<b>collectible</b>	126:18	147:2 148:7	<b>concerning</b>	165:23
17:22 22:10	212:23	203:6	51:5	127:4	<b>complaints</b>	7:23	<b>consideration</b>
22:16,18	<b>City's</b> 9:2,2	<b>clearly</b> 31:23	<b>collectibles</b>	173:13,13	173:7,19	<b>concerns</b>	7:1 25:9

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

113:23	98:1,13,17	117:15	109:3	110:1,4,4,6	143:10,17	137:24	195:14
178:15	118:18,20	122:4	112:13,16	110:9,12,12	179:16	143:16	197:16,17
<b>considerati...</b>	124:21	123:17,19	113:13	110:13,14	185:9,19	152:4	<b>coverages</b>
184:6	<b>consumptio...</b>	123:22	174:9	110:21	197:2,21	155:20	43:11,13
<b>considered</b>	104:8	124:2,3	176:12	111:7	199:7	184:18,19	66:8 86:3
149:22,22	<b>contact</b>	185:23	179:19	112:21	200:19	187:18	136:7
181:17,22	119:14	<b>contracts</b>	192:4	113:4,12	211:15	204:1	<b>covered</b>
181:24	126:18	60:10	204:12	116:7,13	<b>council</b> 9:11	205:20	32:22 36:2
<b>considering</b>	127:4	209:23	210:8,14	119:23	17:15,16,19	206:20	132:6
177:5	<b>contained</b>	<b>contributing</b>	211:10,11	120:6,20	51:12 54:24	207:23	208:16
<b>consist</b> 6:5	216:7	129:18	216:10	121:21,23	55:3 80:5	<b>court</b> 5:11	<b>covers</b> 46:3
13:11	<b>contaminants</b>	<b>contributions</b>	<b>corrected</b>	123:7 139:4	94:15 96:5	130:21	<b>coworkers</b>
<b>consistent</b>	131:14	66:23	92:1	143:7,8	97:2 105:21	216:14	166:4
98:4,6	<b>Contamina...</b>	<b>control</b>	<b>correctly</b>	155:4 156:1	117:13,14	<b>covenant</b>	<b>cream</b> 160:18
102:13	131:10	113:11	210:7	156:5	165:1 184:5	44:22 45:1	<b>create</b> 83:21
152:6	<b>contemplate</b>	126:14	<b>correlated</b>	165:16	184:5,13,19	73:12,20	102:3 156:9
155:14	112:17	127:21	203:10	179:13	210:2	144:24	158:15,24
183:5,11	<b>contemplated</b>	128:10	<b>correlates</b>	181:15	<b>Council's</b>	151:14	159:1,3,5
<b>consists</b> 13:15	208:17	130:9	207:23	182:15,23	164:18	<b>covenants</b>	<b>created</b> 43:3
<b>consolidated</b>	<b>contention</b>	161:16	<b>corresponds</b>	184:13	<b>councilpers...</b>	22:7 25:12	83:21
189:1,2,5	145:10	216:20	40:23	197:6	96:5	139:7	130:23
<b>constant</b>	<b>context</b> 87:21	<b>controlling</b>	<b>corrosion</b>	200:11,13	<b>counsel</b> 2:21	151:11	133:5
164:16	172:15	126:2	126:14	200:18	4:9,19,24	<b>cover</b> 33:22	<b>creates</b>
<b>constantly</b>	<b>contingency</b>	<b>controls</b>	<b>cost</b> 8:16,19	203:6	38:19 94:1	41:9 42:22	126:16
164:3	146:12	130:2	13:7 19:23	211:22	105:16	43:4 44:15	161:14
<b>constituency</b>	<b>continue</b> 41:5	<b>conversation</b>	20:1,9	<b>costs</b> 13:16	107:8	44:17 71:12	<b>creating</b>
144:4	41:6 59:12	7:23 138:9	21:12 25:15	13:16,17	122:21	71:18,19,21	153:19
<b>constitute</b>	69:19 77:19	143:1 145:7	25:16 26:11	17:7 20:10	127:19	76:13 102:9	169:2
141:2	94:17 149:8	<b>conversations</b>	26:24 27:7	20:13 21:5	172:3	194:20	<b>credit</b> 22:9,15
<b>construct</b>	152:15	107:4	27:22 29:13	25:23,24	194:11	195:7,24	22:16,17
136:15	153:22	121:11	36:14 38:24	26:1,23	<b>County</b> 51:16	32:15 41:19	81:18 82:4
190:21	215:7	<b>conversion</b>	39:21,24	27:4,5,13	51:22 52:18	41:21,24	84:1 136:3
<b>constructed</b>	<b>continued</b>	79:13 138:2	40:4 53:16	28:3,4,5,6,8	52:19 53:3	42:1,10,19	137:2,5,11
190:22	53:11 74:3	<b>conveyance</b>	54:21 56:22	28:9,14	53:7 77:1	43:17,21,22	137:12
<b>construction</b>	77:15 79:24	126:10,15	58:16 59:10	46:1,2	<b>couple</b> 103:24	66:9 69:4	139:21,23
45:24 61:19	152:8	<b>convinced</b>	59:23 60:2	52:23 55:6	103:24	72:11,11,15	140:5,11,12
66:3 135:4	195:20	189:11	66:11 68:24	55:21,24	132:8 138:7	72:16,18,21	140:19,21
192:22	<b>continues</b>	<b>Cooperation</b>	74:9,19	56:2,10,24	142:19	73:6,15,19	140:23
194:18	41:2 85:3	188:15	75:24 76:1	59:3,7,15	153:6	73:21 86:3	141:2,6,6
195:1	121:14	<b>copper</b> 131:6	76:10,21,23	59:18,20,20	157:17	136:9	141:11,13
<b>consultant</b>	133:15	132:1,2,4	79:18 80:21	60:17 62:4	158:17	144:21	141:14
5:22 8:6	191:22	132:11	81:12,13	62:9 63:16	209:7	146:11	142:8,18,22
20:21	<b>continuing</b>	<b>core</b> 8:12	82:6,7,9	64:5 74:11	<b>coupons</b>	148:15	149:19,20
113:18	51:18 61:7	<b>corner</b> 99:16	83:9,17,24	74:12,13,17	38:17	150:22	150:8 151:5
211:3	69:16 77:18	<b>corporate</b>	85:22 86:8	76:14 80:18	<b>course</b> 12:6	151:12,14	151:8
<b>consultants</b>	79:6,23	160:10	86:19,23	81:3 90:22	17:12 18:10	152:9,11	155:14,16
5:16 13:1	196:23	<b>correct</b> 14:23	91:4 92:21	100:19,20	19:4,14	153:15	155:20,23
49:24 96:23	<b>continuously</b>	17:1,21	93:5 101:4	109:2,24	33:6 52:22	154:8	156:2,5
135:3	129:23	29:12 44:9	102:10	110:6,12,20	71:1 82:3	156:23	157:15,24
<b>consumer</b>	<b>contract</b>	47:16 48:15	107:14	111:8,11	121:14	157:22	175:11
143:9,10	51:18,19	63:4 94:12	108:11,16	116:24	125:10	158:23	188:5,11
<b>consumption</b>	52:1 53:10	94:18 98:15	108:20,23	120:24	126:23	159:2,5	213:5,7,9
77:24 78:5	117:12,13	100:18	109:21,21	124:4 126:2	134:8		213:10,11

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

214:1	98:2 112:14	95:14 172:9	177:10,10	102:12,17	38:16 41:19	<b>decide</b> 214:7	<b>definitive</b>
<b>credits</b> 141:1	118:2 124:6	<b>customers</b> 3:1	<b>daily</b> 11:7	102:20,22	41:21 42:9	<b>decided</b> 214:3	52:23
148:13	131:22	9:8,19 10:2	86:1 128:13	103:8 104:3	42:9,14	<b>decision</b>	<b>degree</b>
160:14	182:9	10:13,24	161:5	104:6,13,19	44:23 45:6	112:4	148:15
<b>Creek</b> 128:8	183:12	20:2,14	164:15	104:22	45:13,14	114:22	<b>Delaware</b>
128:9,14	<b>curve</b> 82:21	23:7 24:13	<b>Dan</b> 5:3	105:7,15	46:3,3,4,7	115:4 117:1	10:15 128:8
129:17	82:22 155:9	26:2 27:6	<b>Dasent</b> 4:8,8	106:9	46:13 66:9	<b>decline</b> 201:9	128:19,19
<b>crisis</b> 131:3	<b>Custom</b>	39:1 40:20	6:10 7:3,5	109:13	67:24 72:10	202:12	128:21,23
137:15	165:2	41:6,8 44:5	7:12,17	111:7,12	72:11,15,18	<b>declining</b>	<b>delayed</b>
155:4,14	<b>customer</b>	44:10 50:8	34:3,10	115:17	72:24 73:4	76:24 78:20	143:21
<b>criteria</b>	8:22 9:22	51:15 53:20	35:8 39:18	<b>day</b> 6:5 10:24	73:13,17	<b>decorative</b>	<b>deliberate</b>
102:23	26:5,6,7	54:2 77:10	54:16 85:2	11:8 43:19	82:20 83:5	18:16	136:21
<b>critical</b> 153:7	27:12,14	79:2,24	85:3,8	45:18	83:21,22,24	<b>decrease</b>	<b>delinquency</b>
153:17	50:7 55:12	87:6,13	127:14	118:18	132:23	53:17 55:20	175:21
160:16	73:5 74:20	93:9,19	134:5	133:6	134:17,19	55:20 60:7	<b>delinquent</b>
<b>crop</b> 160:18	76:12 78:5	97:4,21,24	167:19	141:10	140:21	77:3,5,14	118:14
<b>Crosby</b> 4:18	78:15,20	99:3,12	168:11,24	144:5 147:3	141:4,22	78:3,23	<b>deliver</b> 9:15
4:18	79:22 80:16	100:24,24	170:12	160:2	143:13	100:10	11:1 141:21
<b>cross</b> 177:13	87:2,14,20	101:1,12	173:23	167:14	144:21,21	107:24	<b>demand</b>
177:17	87:22,23,24	102:11	175:4	215:19	145:1 146:8	108:5,8,12	53:19 78:23
<b>cubic</b> 87:23	88:5,10,20	111:5 112:7	179:20	<b>days</b> 33:7,12	146:9,10,10	108:18	167:2
88:3	93:1,3	113:20	190:23	33:13 118:7	146:11,12	110:3,23	<b>demanding</b>
<b>cumulative</b>	95:19 97:2	117:5	191:10	125:22	148:3 149:7	202:9	175:18
46:23 47:9	99:17 100:5	123:14	192:10	151:18	149:11	<b>decreased</b>	<b>demands</b>
47:11 48:4	101:7	125:21	193:2,6	152:12	150:18	157:16	53:12
50:12	107:13	126:12,21	198:6 203:2	153:16	151:14	<b>decreasing</b>	<b>demograph...</b>
<b>Cuppler's</b>	109:22	171:19	203:15	166:24,24	152:8,11	60:7	151:15
116:10	118:15,19	172:4,23	<b>data</b> 24:1	<b>DC</b> 130:19,23	153:8,8,11	<b>dedicated</b> 9:3	<b>department</b>
<b>curiosity</b>	121:12	173:4,5	49:11,13	147:18	153:12,15	<b>deemed</b>	1:1 2:6,20
187:9	139:1,4	174:2,7,18	118:8,24	<b>de</b> 182:19	154:8,12	114:23	3:1 4:9,19
<b>Curious</b>	163:24	175:8 176:3	213:14	<b>de-leverage</b>	156:9,11,13	<b>default</b> 42:16	4:20,24,24
161:12	166:3,21	176:6,12,22	214:19	72:23 73:4	156:15,17	137:5 141:9	5:17 6:6,9
<b>current</b> 19:13	167:12,23	177:6	<b>database</b>	<b>deal</b> 53:2	156:22	141:10	6:21 7:4
25:3 44:24	168:9,13	178:12,13	49:19	160:1	158:24	158:2	8:10 13:2,4
45:6 73:13	169:23	178:18,22	176:24	164:13,14	159:3,10,15	<b>defend</b> 26:21	14:19 15:3
81:19 87:18	171:6 172:6	178:23	<b>date</b> 16:15	174:3	159:16,17	<b>defer</b> 45:20	17:11,17
91:12 92:7	172:11,15	180:4,9,13	128:24	<b>dealing</b> 53:22	160:2,6,8	<b>deficiencies</b>	20:10 22:17
92:17	172:16,19	180:19,23	195:20	172:11	160:20	32:9 196:1	23:11 25:1
114:12	172:22,24	183:16	204:3	<b>deals</b> 168:12	161:22	<b>deficiency</b>	25:4 26:17
118:1 122:5	173:18	184:7	<b>dating</b> 117:17	206:18	162:2,3,4	77:9	27:3 28:2
124:5 130:4	175:10	197:21	<b>Dave</b> 4:3	209:7,10	162:12	<b>deficit</b> 32:13	29:21 31:13
142:6 143:4	176:15,18	201:7,10	28:22 54:13	<b>dealt</b> 104:11	187:16,19	<b>define</b> 95:15	33:20 34:15
154:6	177:14	<b>customers'</b>	62:23 70:21	<b>Debra</b> 4:5	187:19	95:16,17	38:15 44:20
161:23	178:3,15	173:10	85:4,19	7:22 8:9	188:17	<b>defined</b> 31:23	48:19 51:19
182:9	179:9,19,24	<b>cut</b> 53:12	86:23 93:23	<b>Debra's</b> 13:3	196:4	86:19,22	52:17 54:24
203:12,17	180:1,7,14	54:2	190:11	<b>debt</b> 15:18,24	199:12	<b>definitely</b>	56:21 57:10
204:5,14	180:17	<b>cutting</b> 53:9	<b>David</b> 39:18	16:3,9,11	<b>debts</b> 162:8	72:6 171:8	57:20 59:6
207:8	181:18,20	147:19	<b>Davis</b> 5:15,15	16:11,15,16	<b>December</b>	171:14	59:8 61:8
213:11,24	182:1,5,11	<b>cyber</b> 125:6	54:16 94:5	16:24 17:3	131:11	190:9	63:16 65:21
<b>currently</b>	182:13,16	<b>cycle</b> 142:24	96:1,21,22	17:4,8,8	196:1,3	193:23	65:23 66:16
17:4 30:17	183:19		98:15 100:7	19:3,11	202:23	<b>definition</b>	69:3 72:14
80:2 81:17	202:8	<b>D</b>	100:14,18	22:3 23:15	203:11	199:24	74:12 75:9
87:19 88:5	<b>customer's</b>	<b>D</b> 188:7	101:3,24	37:7,11,12	205:5	203:22	76:23 79:19
		<b>Dahme</b> 5:1,1					

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

81:19 82:8	188:10,20	<b>depreciation</b>	<b>determine</b>	177:14	96:15 98:24	<b>displayed</b>	188:13
93:11,21	189:13	66:11 73:1	20:8 45:19	181:19	103:12	212:3	213:24
95:22 97:1	194:12	<b>Deputy</b> 4:16	95:13	185:10	107:14	<b>dispute</b>	214:3
108:18,22	196:2,20,22	4:21 111:18	104:17	186:1	112:12	170:23	<b>dollar</b> 192:8
112:20	197:5	<b>derivation</b>	114:5	191:17	183:12	174:19	<b>dollars</b> 84:5
113:4,15,19	198:13,18	77:22	<b>determined</b>	211:2	<b>discounted</b>	175:15,20	122:18
114:3	201:11	<b>derivatives</b>	102:19,20	212:21	99:15	176:5,17	<b>door</b> 25:6
116:21	205:9,13	142:1	137:11	<b>differently</b>	<b>discounts</b>	<b>disputes</b>	42:12 44:3
117:6 125:6	206:13	<b>describe</b>	<b>determines</b>	115:9	55:11,13,24	121:11	50:9
126:20	207:5,14	116:8	45:20	<b>difficult</b>	80:1 93:13	170:22	<b>dots</b> 10:22
127:19,22	208:2,11	134:13	<b>determining</b>	24:12 79:8	95:21 99:11	173:8	<b>double</b> 38:5
132:22	209:15,20	<b>described</b>	104:2	120:9	99:14 104:3	174:15,24	135:3
133:3,4	209:21	134:16	<b>develop</b> 42:9	<b>difficulty</b>	105:1 106:7	175:6	192:16
134:14	210:13,16	<b>design</b> 20:12	<b>developed</b>	160:13	165:3	176:11	<b>doubt</b> 94:23
135:12,16	210:21	21:5 27:22	49:2,14	164:16	183:14,15	<b>dissolved</b>	<b>downgrade</b>
135:20	211:1,8,8	27:22 38:22	<b>developing</b>	<b>digit</b> 188:7	183:15,17	128:21	81:2,4
138:21	211:16,21	39:2 95:11	26:24 29:5	<b>dimmed</b> 8:7	<b>discovered</b>	<b>dissolving</b>	187:10
149:17,18	211:23	100:22	101:4	<b>dip</b> 189:12	189:20	127:6,7	190:3
150:11,19	212:6 214:2	<b>designated</b>	<b>development</b>	<b>direct</b> 131:3,4	<b>discovery</b>	<b>distribution</b>	<b>downgrading</b>
150:21	215:14	174:6	98:3,5	216:20	107:4 134:5	74:20 75:11	188:5
153:3,20	<b>Departmen...</b>	203:11	109:16	<b>direction</b> 31:4	<b>discreet</b> 84:9	75:12,13,22	<b>draft</b> 97:2
154:3 155:2	29:4 30:10	<b>designed</b>	<b>devote</b> 170:15	81:9,10	<b>discretionary</b>	76:10,11,16	121:18
156:20	59:23	76:13	<b>dial</b> 91:21	156:21	37:22,23	126:10	128:17
157:8,16	125:15	188:18	<b>differed</b>	<b>directly</b> 7:11	<b>discuss</b> 41:24	<b>diverse</b> 151:6	129:8,9,14
158:13	137:24	<b>desired</b> 51:24	34:18	35:9 174:1	125:15	<b>diversity</b>	129:15
159:4,10	139:23	<b>desk</b> 85:6	<b>difference</b>	174:3	184:4,9	141:17	<b>drafting</b> 96:7
161:2 164:4	152:2 172:8	<b>despite</b> 92:18	75:16 125:6	186:24	<b>discussed</b>	<b>divided</b> 97:18	<b>drafts</b> 14:9
166:9,15,16	187:7,11	144:1 165:1	154:21	195:1	100:20	99:10	129:7
167:8 168:5	190:6	<b>detail</b> 20:5	179:23	209:21,24	163:9	<b>division</b>	<b>drainage</b> 11:6
168:21	211:22	23:10 36:8	181:24	210:2	<b>discusses</b>	207:7,17	<b>draw</b> 36:24
170:10	212:23	36:18 48:20	182:15,18	<b>Director</b> 4:14	172:9	<b>document</b>	68:11 73:16
171:4 172:5	<b>departments</b>	51:21 62:8	<b>differences</b>	12:24 30:16	<b>discussing</b>	63:12,22	90:2,4
172:10,12	9:3 50:19	63:12,13	90:2,9	117:19	154:2	71:11	<b>drawdown</b>
172:20	56:23 61:9	86:19,23	180:2	<b>Directors</b>	<b>discussion</b>	128:16	70:9
173:3,11,15	61:11,24	<b>detailed</b>	<b>different</b> 7:9	11:12	29:12 40:14	176:17	<b>drawing</b>
173:17,22	62:3	117:20	20:2 23:13	<b>directs</b> 34:6	83:16 84:10	204:18,22	199:2
173:24	<b>depend</b> 99:6	145:22	26:2,3,4,7	<b>disadvanta...</b>	84:15 85:13	207:15	<b>drawn</b> 68:13
174:6,11	<b>dependent</b>	182:5	27:6,7,12	97:4	91:20 98:8	212:4 213:3	70:14
175:10,12	187:16	<b>details</b> 54:18	27:13,15	<b>disagree</b>	115:21	214:16	<b>drift</b> 59:3
175:16	<b>depending</b>	62:20 63:17	39:1 83:14	171:2	137:20	<b>documented</b>	<b>drinking</b> 9:20
176:1,4,7,9	83:10 95:10	77:22 96:3	89:3 90:20	<b>disagreement</b>	138:16	176:24	10:14,20
176:13	145:4 213:8	97:8,9,11	93:16,18	171:16	139:13	<b>documents</b>	11:11,15,17
177:7	<b>depends</b> 15:9	97:16 99:6	95:6,10	<b>discharge</b>	162:23	20:20 36:6	12:12 41:7
179:14	103:8	100:1	98:1 103:9	12:1 143:20	168:20	63:8 158:20	80:8 125:18
181:17	119:10	102:13	103:10	179:1	183:23	214:10	125:21
182:23	<b>deposit</b> 42:24	106:2	105:10,13	<b>discontinua...</b>	184:3 187:8	<b>Dodd-Frank</b>	131:5,8,15
184:1,12	65:2 66:7	109:18	114:14	55:19	193:13	137:16	<b>drive</b> 17:7
185:10,15	66:19	169:12	122:6	<b>discontinued</b>	206:5	140:7	27:16 119:5
185:17,22	<b>deposit-to-r...</b>	184:16	142:14	195:21	<b>discussions</b>	<b>doing</b> 21:12	182:2
186:5 187:4	69:23	191:15	146:5 148:1	<b>discount</b>	109:17	39:23 65:7	<b>driven</b> 19:2
187:13,15	<b>deposits</b>	204:12	148:19,20	88:10,11	137:17,18	102:14	27:24 53:19
187:18,21	34:16,20	<b>detect</b> 117:24	156:4,9	93:13 94:9	<b>disingenuous</b>	157:12	56:4 58:18
187:24	46:13 68:1	118:13	159:3	94:16 96:13	122:2	158:8	62:3

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<b>driver</b> 45:12 56:20 58:7 59:5	<b>economy</b> 143:2 156:4 <b>Econsult</b> 3:13 <b>Ed</b> 5:21 113:17 <b>edge</b> 147:19 <b>effect</b> 14:10 15:1 50:12 71:11 94:21 100:12 131:19 135:16 164:23	13:21 14:1 19:24 25:13 <b>elements</b> 13:11 23:9 23:13,17 <b>eligibility</b> 102:15,16 215:8 <b>eligible</b> 94:16 100:24 103:11 114:5,23 165:16 199:24 <b>eliminated</b> 108:4 <b>elimination</b> 121:5 <b>embedded</b> 28:4 <b>emergencies</b> 32:21 33:10 71:13,22 <b>Emergency</b> 93:15 <b>emissions</b> 130:17 <b>emphasized</b> 92:22 <b>employees</b> 211:8,24 212:1,6,7 <b>employees'</b> 121:14 <b>employers</b> 125:23 <b>enacted</b> 95:3 <b>encoded</b> 117:10 <b>encourage</b> 54:2 142:16 <b>encouraging</b> 152:3 <b>encumbrance</b> 16:10 <b>encumbran...</b> 16:5 <b>end-of-year</b> 24:1 <b>ends</b> 14:12 181:12 <b>energy</b> 59:9 60:15 131:2	186:3 211:2 <b>engineer</b> 17:13 <b>engineering</b> 18:7 <b>enhanced</b> 143:20 214:16,20 <b>enrollees</b> 215:6,7 <b>ensuing</b> 29:1 <b>ensure</b> 125:16,23 <b>enter</b> 60:23 159:14 209:22 <b>entering</b> 128:11,14 <b>enterprise</b> 145:16 <b>entire</b> 183:19 <b>entirely</b> 132:1 <b>entity</b> 29:20 209:22 <b>environment</b> 159:18,24 <b>environmen...</b> 11:14 21:1 80:5,6 143:15 212:19 <b>EPA</b> 98:4 128:8 129:22,24 130:13 131:11,16 183:5 <b>EPA's</b> 130:16 <b>equal</b> 76:19 <b>equitable</b> 139:4 <b>equivalent</b> 55:14 <b>Erin</b> 176:8 <b>ERT</b> 124:13 124:22,23 125:8 <b>ERTs</b> 117:9 124:16 <b>especially</b> 92:5 167:16 173:12 <b>essential</b>	148:14 <b>essentially</b> 13:13 33:1 52:19 72:2 140:12 <b>establish</b> 26:20 93:4 93:6 <b>established</b> 9:4 19:21 25:8 27:14 44:20 97:10 <b>establishing</b> 55:6 168:12 184:13 <b>estimate</b> 16:3 127:7 207:20 <b>estimates</b> 28:22,24 <b>et</b> 175:4 <b>evaluation</b> 37:11 130:7 <b>event</b> 189:22 <b>eventually</b> 117:9 <b>everybody</b> 2:14 4:12 14:13 21:19 85:6 142:22 152:22 189:8 193:20 194:6,8 <b>evidence</b> 194:4 216:6 <b>evidentiary</b> 193:18 <b>evolving</b> 118:11 <b>exactly</b> 20:13 21:10 25:15 102:1 113:22 120:9 124:18 170:8 <b>examined</b> 211:4 <b>example</b> 26:16 34:11 90:4 129:9 129:15	158:19 190:19 197:3 207:6 208:13 <b>examples</b> 128:4 <b>exceed</b> 43:6 73:22 <b>Excel</b> 145:2 <b>Excellence</b> 11:14 <b>excellent</b> 53:2 70:23 79:24 124:3 <b>excuse</b> 2:5 12:20 33:24 35:19 71:6 79:1 116:16 <b>executed</b> 210:10 <b>exempt</b> 82:20 <b>Exeter</b> 209:2 <b>exist</b> 166:10 <b>existence</b> 31:12,18 <b>existing</b> 17:3 48:10,11,23 50:3 75:11 75:13 97:7 98:1 123:22 215:6 <b>exists</b> 111:6 149:9 <b>expanded</b> 79:23 <b>expansion</b> 143:4 <b>expect</b> 102:11 103:19 124:5 193:23 <b>expectation</b> 192:6 <b>expected</b> 88:8 88:17,19 134:14 <b>expenditures</b> 23:15 38:11 64:12 <b>expense</b> 19:11 23:15 24:24 42:6 180:24	197:10,12 197:13 199:11,17 200:19,19 <b>expenses</b> 13:18,23 14:14 15:17 19:1 32:9 64:10,18 143:12 192:24 194:20,23 195:1,3,7 196:21,23 199:6 200:4 <b>expensive</b> 83:6 <b>experience</b> 59:13 108:19 134:1 <b>expired</b> 129:5 <b>explain</b> 14:8 158:12 189:18 <b>explanation</b> 177:3 <b>explicit</b> 37:3 <b>explore</b> 196:17 <b>express</b> 140:14,20 175:11 <b>extend</b> 123:18 165:20 199:20 200:24 <b>extended</b> 165:4 <b>extending</b> 125:8 <b>extensions</b> 124:2 <b>extensive</b> 123:11 <b>extent</b> 35:13 77:9 114:22 138:9 171:20 <b>external</b> 146:2 <b>extra</b> 113:5	<b>extremely</b> 92:17 165:14 <hr/> <b>F</b> <b>F</b> 216:3 <b>faced</b> 143:19 <b>facilities</b> 10:21 11:7 11:10,22 156:7 160:7 173:11 174:23 210:24 <b>facility</b> 12:5 82:10 156:8 160:23 <b>fact</b> 11:11 19:14 33:12 43:24 46:18 59:11 79:7 97:11 124:7 151:11 158:4,9 161:22 173:24 180:21 181:9,10 182:8 184:3 198:17 200:22 211:18 <b>factor</b> 50:11 71:2 82:23 133:4 179:24 180:9 182:8 182:12 203:10,16 203:18 204:16 <b>factors</b> 50:12 50:13 90:20 116:8 145:5 145:18 146:3 150:4 180:11,22 204:13 206:10 <b>facts</b> 151:2 <b>fair</b> 26:13,20 28:1 32:16 122:19 197:6 199:5
<b>E</b> 216:3 <b>earlier</b> 75:8 80:24 96:11 100:9,21 101:5 105:22 134:16 176:20 179:12 184:11 186:15 <b>earnings</b> 37:7 134:17 <b>easier</b> 147:1 <b>east</b> 147:13 <b>easy</b> 149:10 149:15 <b>economic</b> 142:20,24 146:1,2 155:3 <b>economically</b> 97:4	<b>efficiency</b> 54:1 <b>efficient</b> 78:21 <b>effort</b> 131:19 <b>efforts</b> 78:23 79:19 125:15 <b>either</b> 31:4 83:9 96:12 136:21 143:24 181:18,20 208:13 <b>elected</b> 66:23 <b>elective</b> 66:17 <b>electric</b> 120:18 123:8 130:17 185:10 209:10,16 209:18 <b>electrician</b> 60:20 <b>electricity</b> 60:11 <b>element</b>	<b>emissions</b> 130:17 <b>emphasized</b> 92:22 <b>employees</b> 211:8,24 212:1,6,7 <b>employees'</b> 121:14 <b>employers</b> 125:23 <b>enacted</b> 95:3 <b>encoded</b> 117:10 <b>encourage</b> 54:2 142:16 <b>encouraging</b> 152:3 <b>encumbrance</b> 16:10 <b>encumbran...</b> 16:5 <b>end-of-year</b> 24:1 <b>ends</b> 14:12 181:12 <b>energy</b> 59:9 60:15 131:2	<b>environment</b> 159:18,24 <b>environmen...</b> 11:14 21:1 80:5,6 143:15 212:19 <b>EPA</b> 98:4 128:8 129:22,24 130:13 131:11,16 183:5 <b>EPA's</b> 130:16 <b>equal</b> 76:19 <b>equitable</b> 139:4 <b>equivalent</b> 55:14 <b>Erin</b> 176:8 <b>ERT</b> 124:13 124:22,23 125:8 <b>ERTs</b> 117:9 124:16 <b>especially</b> 92:5 167:16 173:12 <b>essential</b>	148:14 <b>essentially</b> 13:13 33:1 52:19 72:2 140:12 <b>establish</b> 26:20 93:4 93:6 <b>established</b> 9:4 19:21 25:8 27:14 44:20 97:10 <b>establishing</b> 55:6 168:12 184:13 <b>estimate</b> 16:3 127:7 207:20 <b>estimates</b> 28:22,24 <b>et</b> 175:4 <b>evaluation</b> 37:11 130:7 <b>event</b> 189:22 <b>eventually</b> 117:9 <b>everybody</b> 2:14 4:12 14:13 21:19 85:6 142:22 152:22 189:8 193:20 194:6,8 <b>evidence</b> 194:4 216:6 <b>evidentiary</b> 193:18 <b>evolving</b> 118:11 <b>exactly</b> 20:13 21:10 25:15 102:1 113:22 120:9 124:18 170:8 <b>examined</b> 211:4 <b>example</b> 26:16 34:11 90:4 129:9 129:15	158:19 190:19 197:3 207:6 208:13 <b>examples</b> 128:4 <b>exceed</b> 43:6 73:22 <b>Excel</b> 145:2 <b>Excellence</b> 11:14 <b>excellent</b> 53:2 70:23 79:24 124:3 <b>excuse</b> 2:5 12:20 33:24 35:19 71:6 79:1 116:16 <b>executed</b> 210:10 <b>exempt</b> 82:20 <b>Exeter</b> 209:2 <b>exist</b> 166:10 <b>existence</b> 31:12,18 <b>existing</b> 17:3 48:10,11,23 50:3 75:11 75:13 97:7 98:1 123:22 215:6 <b>exists</b> 111:6 149:9 <b>expanded</b> 79:23 <b>expansion</b> 143:4 <b>expect</b> 102:11 103:19 124:5 193:23 <b>expectation</b> 192:6 <b>expected</b> 88:8 88:17,19 134:14 <b>expenditures</b> 23:15 38:11 64:12 <b>expense</b> 19:11 23:15 24:24 42:6 180:24	197:10,12 197:13 199:11,17 200:19,19 <b>expenses</b> 13:18,23 14:14 15:17 19:1 32:9 64:10,18 143:12 192:24 194:20,23 195:1,3,7 196:21,23 199:6 200:4 <b>expensive</b> 83:6 <b>experience</b> 59:13 108:19 134:1 <b>expired</b> 129:5 <b>explain</b> 14:8 158:12 189:18 <b>explanation</b> 177:3 <b>explicit</b> 37:3 <b>explore</b> 196:17 <b>express</b> 140:14,20 175:11 <b>extend</b> 123:18 165:20 199:20 200:24 <b>extended</b> 165:4 <b>extending</b> 125:8 <b>extensions</b> 124:2 <b>extensive</b> 123:11 <b>extent</b> 35:13 77:9 114:22 138:9 171:20 <b>external</b> 146:2 <b>extra</b> 113:5	<b>extremely</b> 92:17 165:14 <hr/> <b>F</b> <b>F</b> 216:3 <b>faced</b> 143:19 <b>facilities</b> 10:21 11:7 11:10,22 156:7 160:7 173:11 174:23 210:24 <b>facility</b> 12:5 82:10 156:8 160:23 <b>fact</b> 11:11 19:14 33:12 43:24 46:18 59:11 79:7 97:11 124:7 151:11 158:4,9 161:22 173:24 180:21 181:9,10 182:8 184:3 198:17 200:22 211:18 <b>factor</b> 50:11 71:2 82:23 133:4 179:24 180:9 182:8 182:12 203:10,16 203:18 204:16 <b>factors</b> 50:12 50:13 90:20 116:8 145:5 145:18 146:3 150:4 180:11,22 204:13 206:10 <b>facts</b> 151:2 <b>fair</b> 26:13,20 28:1 32:16 122:19 197:6 199:5



Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

214:4	<b>federally</b>	105:20	145:17	67:15 75:8	212:20,24	35:17 60:18	100:12
<b>fairly</b> 36:13	127:20	112:4	146:4 153:3	75:16,19	<b>focused</b> 187:7	77:11 99:23	216:7
166:22	<b>Federation</b>	117:13	154:22	192:9 196:6	212:22	112:5 184:6	<b>functional</b>
195:17	21:1	127:14	156:3,22	198:20	<b>Folasade</b> 1:13	186:22	27:15
201:9	<b>fee</b> 26:10	185:7	162:14	203:7,8,24	3:3	187:3	<b>functions</b>
<b>fairness</b>	<b>feel</b> 6:10,11	<b>finalized</b>	181:1 190:8	204:3,20	<b>folks</b> 2:17	213:15	125:7
170:2	6:19 140:1	109:19	<b>financially</b>	205:19	18:14 126:3	214:17	172:13
<b>fall</b> 91:1	141:7 200:3	128:18	154:10	<b>fiscally</b> 81:1	166:12	<b>forward-loo...</b>	<b>fund</b> 9:4
98:22 99:12	<b>feeling</b> 28:3	129:20	<b>financing</b>	<b>fish</b> 128:22	174:5	140:13	15:20 16:18
102:4	103:3	<b>finally</b> 21:3	159:20	<b>fit</b> 146:24	203:21	<b>forwarded</b>	32:5,6,7,10
148:16	<b>Feels</b> 215:17	22:11 99:5	<b>find</b> 78:11	<b>Fitch</b> 135:18	<b>follow</b> 108:9	34:2	32:19,19
154:7 168:1	<b>fees</b> 38:16,17	129:21	120:24	137:2	114:2 116:4	<b>found</b> 13:2	33:19 34:13
168:9	92:14,15	131:5	208:8	146:14	176:14,16	<b>four</b> 18:22	34:16,21
<b>falls</b> 99:15	<b>feet</b> 87:23	145:13	209:15	149:2,6	176:18	116:14	37:1,4,6,8
204:3	88:3	<b>finance</b> 14:19	<b>fine</b> 101:19	<b>five</b> 11:23	201:16	130:22	37:12,12
<b>fame</b> 183:8	<b>fence</b> 110:21	14:22 61:12	122:16	12:4 15:12	202:3	149:23	38:3,18
<b>familiar</b>	<b>field</b> 59:2	117:18	135:24	19:2 35:16	<b>follow-up</b>	166:23	42:4 43:10
12:21	173:19	207:7	<b>fire</b> 10:19	36:3 58:9	187:2	<b>fourteen</b>	43:19,19
173:10	179:21	208:21	75:2,3,3	130:22	<b>followed</b>	166:24	44:13,23
<b>families</b> 165:5	<b>figure</b> 8:4	<b>Finance's</b>	76:6,6,7	154:15	39:22	<b>frame</b> 40:24	45:3,9,12
<b>family</b> 104:10	28:7 32:1	30:16	<b>fires</b> 76:7	159:14	<b>following</b>	172:7,24	45:13,16,17
104:14	47:22 63:14	<b>financial</b> 5:6	<b>first</b> 2:15	161:11	55:8 63:24	<b>framework</b>	45:19,20,24
<b>far</b> 28:19	107:11,12	5:16 12:15	13:13 26:2	162:15	130:15	145:13,21	46:3,9,12
44:13 63:17	165:13,14	13:13 14:8	40:11 47:8	201:10	191:17	146:19	46:12,16
74:5 77:12	<b>figured</b>	17:1 19:1	49:8 55:10	<b>five-year</b> 67:9	<b>follows</b> 20:21	<b>Frances</b> 2:19	50:19,20
99:16	125:19	21:9,13,17	85:20 98:15	77:18 162:1	127:20	<b>Francisco</b>	56:21 61:18
132:18	207:10	21:18,20	100:11	<b>fix</b> 172:17	<b>foregoing</b>	189:17	64:22 65:8
144:11	<b>figuring</b>	25:7 29:4,5	112:10	<b>fixed</b> 9:9	216:9,17	<b>frankly</b>	65:8,13,18
171:16	119:12	29:19 30:19	116:20	52:23 86:16	<b>foregone</b>	152:13	66:3,3,5,6
183:22	120:11,12	34:19 39:22	117:19	119:8,13	109:1	<b>free</b> 6:11,11	66:13,18,20
212:12	<b>file</b> 185:11	40:3,16,23	128:5	141:23	<b>foresee</b> 96:14	6:19 140:1	67:4 68:8
<b>fashion</b> 26:4	197:1	41:9 42:16	130:24	143:10,12	<b>forever</b> 107:2	<b>frequency</b>	68:22 69:9
39:2	<b>filed</b> 88:8,21	46:17 47:1	147:20	159:15	<b>forget</b> 188:22	89:2 119:3	69:15,20,23
<b>fast</b> 122:4	130:24	49:23 52:2	148:22	168:21	<b>forgive</b> 63:2	<b>frequent</b> 90:6	70:3 72:1,2
152:22	<b>filing</b> 63:9	53:14 56:19	163:11,21	<b>fixing</b> 54:13	<b>forgotten</b>	90:7 161:4	73:23 74:12
<b>fault</b> 164:11	75:7,10	58:15 63:23	164:20	<b>fixtures</b> 54:11	6:17	<b>Friday</b>	74:13 76:5
164:11	77:22 83:13	65:16 67:2	165:19	78:22	<b>form</b> 43:16	130:24	76:6 77:3
<b>favorable</b>	89:1 97:13	67:6 72:6,6	171:14	<b>flex</b> 62:17	128:17	<b>fringes</b> 58:6,8	134:15,18
92:18	99:7,20	72:12,24	172:2	<b>flexibility</b>	131:16	<b>front</b> 166:13	134:19,19
<b>favorably</b>	117:4 120:5	73:24 74:1	185:13	141:18	134:5	192:2 195:5	134:20,22
91:12 92:5	130:3,6	74:6,8	187:6,23	154:22	<b>formal</b> 1:3	200:21	134:24
<b>favorite</b>	134:23	78:15 81:15	188:10	161:8	122:23	<b>fronts</b> 137:23	136:6 143:9
211:18	167:22	83:19 84:2	190:15	<b>Floor</b> 1:5	214:11	<b>frustration</b>	145:1
<b>features</b>	170:23	84:7 85:21	198:11	<b>flow</b> 23:12	<b>formalize</b>	103:3	150:18
77:24	172:8	85:22 92:20	204:14	31:21 32:1	177:21	<b>full</b> 5:4	151:13,23
<b>February</b> 1:2	179:15	93:5,7	209:14	37:15,24	<b>former</b> 3:9	140:16	154:5
131:12	203:11	96:22	213:5	54:10,11	<b>formula</b>	187:23	156:13,15
<b>Fed</b> 133:1	207:16	113:18	<b>fiscal</b> 10:23	67:20	207:13,21	194:13	156:15
<b>federal</b> 12:7	214:19	137:15	11:8 23:22	124:20	<b>forthcoming</b>	209:13	162:2,5,7,8
26:16 80:7	<b>filtration</b>	139:1	28:22 29:18	140:10	194:6	<b>full-time</b>	162:12
97:20,21	126:8	140:15	47:15 50:13	141:22	<b>forward</b>	112:18	186:6
99:4 120:16	<b>final</b> 25:13	141:18	61:14 62:19	<b>flows</b> 37:13	18:21 20:18	<b>fully</b> 9:7	187:17
127:23	28:23 72:12	144:20	62:24 63:3	<b>focus</b> 40:10	28:18,20	97:10	189:4,9

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

192:7,22,22	142:7 158:8	32:2,4	159:13,24	184:16	109:6,18	147:11	114:14
194:19,22	184:2,17	36:12,14	160:21	187:19	111:20	149:23	<b>groups</b> 118:5
194:24	<b>FY</b> 40:12	37:16,24	193:18	188:11,19	112:6	159:10	212:21
195:2,18	47:1 50:3	41:12,17	199:13	188:20	113:12	174:12	<b>growing</b> 73:5
197:19	55:15,15,16	42:5 43:23	215:3	189:16	117:9,16,24	194:9 209:5	79:2
210:18	56:15 57:5	44:18 50:5	<b>gives</b> 25:6	197:8 200:7	118:10	212:15,16	<b>growth</b> 143:2
211:24	58:23 59:4	50:17,18	63:16 78:2	205:11	119:18,23	<b>gotten</b> 136:10	<b>guarantee</b>
212:6	61:21,21	61:18 66:7	83:1 90:24	206:2	128:18	<b>Gould</b> 3:19	213:23
<b>fundamental</b>	69:17	70:24 71:10	91:4 145:22	<b>goal</b> 66:4	133:11	3:19	214:1
180:2	<b>FY14</b> 34:21	71:13 76:5	147:5	118:11,12	137:8,9	<b>Government</b>	<b>guarantees</b>
<b>Fundament...</b>	70:10	86:2 97:6	<b>giving</b> 33:1	119:15	138:8,10	120:17	141:5
21:12	<b>FY15</b> 23:24	127:18	<b>glimpse</b> 87:11	154:4	139:17	<b>Governor's</b>	<b>Guard</b> 58:20
<b>fundament...</b>	29:3,6	134:15,22	<b>global</b> 140:24	177:13	141:18,22	11:14	<b>guess</b> 79:3
146:1	34:21 64:20	134:23	<b>go</b> 2:12,16,16	178:2	142:5,9,10	<b>grade</b> 188:9	95:22
<b>funded</b> 9:7,10	70:12 93:20	139:6 142:5	6:12,14	205:10,17	143:4,16,18	<b>grandfathe...</b>	103:23
46:2 64:13	192:16	149:20	13:9 20:5	208:10	144:12,14	94:22	110:7
64:14 65:4	<b>FY16</b> 19:7	151:3	20:11 24:2	<b>goals</b> 205:9	147:14	<b>grant</b> 55:20	117:24
65:18 66:21	35:1 48:11	172:14	26:23 28:20	<b>goes</b> 6:19	152:12,13	58:19	165:11
73:13 90:16	48:13 64:17	180:10	32:11 36:9	21:8 25:22	152:14,16	120:16	187:6
153:13	64:21 89:14	186:6	36:17 39:10	37:6,14	154:16	<b>grants</b> 26:16	199:19
154:12	89:16	187:16	39:15,23	175:3	156:21	26:18 80:1	<b>guessing</b>
<b>funding</b>	<b>FY17</b> 47:3,20	188:1	40:6 41:16	<b>going</b> 2:12	158:10	108:3	104:4
58:17 64:6	57:5 58:22	197:14	43:8 44:16	5:8 6:8,8,10	162:18	<b>granular</b>	<b>guidance</b>
64:12,19,21	59:4,11	206:9	49:5 54:19	6:14,22,23	165:20	191:19	20:20 32:24
64:24 65:7	60:16 62:22	210:18	59:12,18	8:11 12:18	166:1,20	<b>graph</b> 26:22	33:7 91:1
65:15,21	68:13 75:5	212:3	63:7 74:11	13:6,23	167:9,12,18	64:4 67:19	129:22
66:17,19	75:21,22	<b>generally</b>	81:9,9	16:16,24	169:8 170:8	68:6 71:24	130:14
67:12	76:11 86:7	30:22	82:11 83:12	18:21 19:5	171:15	154:24	132:3
141:16	87:17 89:15	105:15	84:13 85:12	20:5,13,15	179:20	<b>graphs</b> 36:7	145:23
<b>funds</b> 31:22	112:9,18	141:12,14	88:9,12,17	20:18 22:1	185:15,19	48:20	<b>guideline</b>
32:14,20	134:15,24	142:4	90:20 91:23	23:4 24:10	185:21	<b>great</b> 21:20	21:2 146:23
45:10,11,11	197:10	173:21	95:23 96:9	24:19 25:7	191:15	78:13	<b>guidelines</b>
45:14,15	<b>FY18</b> 47:5,12	<b>generate</b> 25:5	106:2 107:5	25:13 30:6	196:16	133:20	21:4 98:4
46:11 67:20	55:16,22	174:24	107:16	33:11,24	200:16	154:4 194:9	132:16
70:5 142:5	56:17 60:21	<b>generation</b>	115:18	34:8 35:17	202:21	<b>greater</b> 11:24	191:18
189:13	60:24 68:15	130:17	117:14	36:2,4,17	206:15	199:23	199:22
192:20	86:7 108:19	<b>George</b> 3:19	123:8	37:2 39:5,7	207:20	200:22	200:5,21
194:18	132:12	<b>getting</b> 107:1	124:10	39:16,23	208:9	<b>green</b> 18:18	201:1
<b>funny</b> 64:17	<b>FY19</b> 69:16	145:9 167:7	125:7 129:4	42:23 44:3	211:17	64:8,9,11	
<b>further</b> 6:2		191:15	134:20	48:22,24	<b>gold</b> 12:2	64:15	<b>H</b>
7:3 115:13	<b>G</b>	<b>gist</b> 209:13	138:5,13,19	49:5,8	155:12	147:20	<b>habit</b> 155:3
115:14	<b>GAAP</b> 30:18	<b>give</b> 5:9 32:23	139:10,16	50:15 51:3	<b>good</b> 2:2 3:15	212:23	<b>half</b> 157:13
122:14	30:20	54:18,20	139:24	54:18,19	3:21,23 8:8	<b>greenhouse</b>	190:22
169:2,12	<b>gallons</b> 10:24	78:4,10	149:15	55:12 61:15	12:17 24:15	130:16	<b>hand</b> 33:8,13
170:13	11:8	120:13	154:2,2,4	62:9,10	40:20 85:11	<b>grew</b> 34:13	144:21
177:8	<b>gas</b> 102:16	128:3	154:20,20	64:2 70:9	95:24 96:21	<b>grey</b> 64:9,11	146:8
189:20	123:8	129:15	156:20,23	70:12 74:7	120:13	64:14 65:4	151:18,24
208:13	130:16	144:3 171:7	157:3	75:17 77:11	124:7	<b>greys</b> 67:22	152:13
213:12	<b>gathered</b>	193:7 207:6	158:10	84:12 85:6	128:24	<b>grid</b> 209:24	153:16
<b>future</b> 28:6	213:14	212:13	162:21	85:12 87:3	133:17	210:3	156:24
28:13 45:21	214:19	<b>given</b> 52:20	181:13	87:7 93:24	140:4	<b>group</b> 2:24	<b>handle</b>
127:23	<b>gear</b> 144:3	107:11	182:2	96:2 97:18	142:23	87:7 88:2	114:10,11
128:1 141:6	<b>general</b> 6:6	136:2	183:22	99:23 107:3	146:20,23	89:11 107:9	127:16
	25:11 31:23						<b>handled</b>

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

56:13 102:2	<b>hearing</b> 1:2,3	122:24	96:5 97:2	49:16 98:17	207:4	120:8 127:2	186:16
106:11	1:12 2:2,3,4	123:15	144:13	195:16	<b>house</b> 121:10	140:4 147:5	<b>importance</b>
115:7	3:10 4:12	124:9,16	156:1	<b>historically</b>	172:18	154:16	92:22
174:17	5:7,24 6:3	125:1,11	177:20	38:14 90:16	207:8	198:15	179:13
<b>handling</b>	7:5,10,14	134:2 135:9	190:12	136:1,5	<b>housed</b>	201:11	<b>important</b>
133:4	7:15 8:1,5	136:11,17	211:14	158:13	176:13	<b>identified</b>	23:6 38:23
176:12	9:23 10:7	138:13,19	<b>helped</b> 52:22	173:22	<b>household</b>	42:4 207:9	106:18
<b>hands</b> 189:12	10:10 12:20	139:10,16	103:17	174:5 204:4	104:18,23	207:10	126:19
<b>handy</b> 78:7	14:2,7,16	139:22	<b>helpful</b> 5:8	204:5,7	105:5 150:7	<b>identify</b> 41:17	142:3
<b>hanging</b>	14:20,24	148:17	18:22 35:4	205:19,21	<b>households</b>	41:18	144:22
106:18	15:6,23	152:14	177:2	<b>history</b> 159:5	164:2,22	152:24	148:4 149:6
<b>happen</b> 62:12	16:21 17:6	162:19	<b>helping</b> 94:6	<b>hit</b> 18:19	<b>Housing</b>	<b>illegally</b>	151:9
65:22 105:6	17:18,24	163:2,8	96:2	<b>hoc</b> 172:4	74:24 76:4	118:17	152:18
105:14	18:11,13,15	164:6	<b>helps</b> 67:13	<b>hold</b> 24:19	<b>Huang</b> 1:14	<b>illustrate</b>	153:1
126:5 129:1	19:16 22:12	167:19	156:6	122:10	3:13,13	155:23	167:21,24
137:9 138:8	22:15,21	168:8,17	199:15	149:8	31:10 32:16	<b>illustrates</b>	178:12
138:10	23:20 24:3	169:5,13,16	<b>Henrietta</b>	<b>Holden</b>	32:23 33:14	26:23	189:23
<b>happened</b>	24:18 27:17	169:19	5:18	103:19	33:23 59:19	154:24	<b>imposed</b>
162:6	27:21 28:16	170:5,19,21	<b>hesitate</b> 35:14	<b>holder's</b>	60:4,9	<b>immediate</b>	31:15
187:20	28:19 29:10	171:12,23	<b>hey</b> 172:17	41:10	68:17 80:22	204:6	<b>improve</b> 9:6
<b>happening</b>	30:22 35:18	186:11,15	<b>Hi</b> 111:17	<b>home</b> 13:22	81:7 82:12	<b>impact</b> 8:21	18:9 65:9
14:12	39:10,15	191:12	206:8	23:3 93:15	82:18 83:5	19:13 22:17	65:10,21,24
<b>happens</b>	41:22 44:6	193:10,16	<b>high</b> 38:17	<b>homework</b>	84:11	24:13 40:15	65:24
33:16	47:8,14,17	198:1,12	60:12 90:24	122:23	102:15,18	40:16 54:22	136:22
152:20	47:21 48:3	199:14	98:2 142:4	<b>homogenous</b>	102:21	55:18,22,23	159:22
198:20	49:20 50:1	200:7,15	165:14	87:6	107:21	72:5 77:23	166:3,21
<b>happy</b> 19:19	52:15 53:4	203:20	190:13	<b>honest</b> 161:14	112:8 157:1	87:2,4,4,12	167:12
167:22	53:24 54:6	206:2	<b>higher</b> 69:11	<b>honesty</b> 194:6	158:10	87:16 92:22	169:23
179:9	57:6,12,17	209:17	71:4 83:24	<b>honoring</b>	<b>huge</b> 150:10	108:22	<b>improved</b>
<b>hard</b> 18:15	57:21 58:11	210:11	84:8 135:6	153:19	<b>human</b>	127:24	73:19
120:4	59:17 61:3	212:12	152:11	<b>honor</b> 193:22	207:15,18	131:2,3,4	<b>improvement</b>
174:18	75:6,15	214:23	154:6	214:3	<b>hundred</b> 51:3	132:7,15	38:9 40:24
200:23	77:7,21	215:11	155:18	<b>hope</b> 120:23	71:18 73:2	139:22	133:9 152:5
<b>harp</b> 153:22	78:6,12,18	<b>hearings</b>	156:5,17,22	152:21	119:24	143:5 171:2	190:4
<b>Harrisburg</b>	83:3,12	187:2	159:1	186:21	192:8	184:10	<b>improveme...</b>
2:23	84:12,18,23	<b>heavily</b> 97:12	166:14,14	<b>hoped</b> 165:15	206:21	<b>impacts</b> 48:1	16:19 56:12
<b>Harvey</b> 4:14	85:5,9,15	<b>hedge</b> 60:23	177:22,22	<b>hopeful</b>	<b>hundreds</b>	55:4	<b>in-house</b>
4:14 52:5	88:24 89:5	<b>Helbing</b> 5:13	<b>highest</b> 89:11	186:24	122:17	<b>implement</b>	115:2,7
<b>head</b> 119:19	91:17,23	5:13 212:16	149:18	<b>Hopefully</b>	<b>hungry</b>	56:5 116:15	<b>inaccuracies</b>
119:21	95:9 102:24	212:17	190:6	116:4	152:22	173:21	173:7
133:13	103:15	214:9,15	<b>highlight</b>	<b>hoping</b>	<b>hurdles</b>	<b>implementa...</b>	<b>inclined</b>
171:22	104:15	215:9	137:22	120:19	166:12	56:1 97:9	205:4
<b>heads</b> 54:11	106:14	<b>held</b> 1:11	<b>highlighted</b>	122:17	167:2	99:5,23	<b>include</b> 77:22
164:3	107:19	33:1 84:15	174:4	126:7	<b>hydrants</b>	100:1,15,22	80:23 93:1
<b>hear</b> 5:4 15:7	108:23	91:20	<b>highly</b> 153:9	177:24	10:19	106:6	144:19,24
20:23 110:8	109:4 111:2	115:21	<b>hinted</b> 184:11	<b>horizon</b> 62:24	<b>hypothetical</b>	111:13,22	149:20
168:6 184:2	111:10,14	138:16	<b>hiring</b> 15:21	127:24	104:10	131:23	151:10,22
186:24	113:17	139:13	62:22	128:7	124:10	200:24	153:4
194:10	114:1,13,16	162:23	112:17	129:20		<b>implemented</b>	<b>included</b>
209:8 210:4	114:19	193:13	<b>historic</b> 28:3	131:9 132:6	<b>I</b>	77:10	43:10,12
<b>heard</b> 18:14	115:12,15	206:5	142:6	132:9	<b>i.e</b> 95:21	109:15	73:21 74:15
18:19 24:16	115:18,24	<b>help</b> 33:9	<b>historical</b>	<b>hour</b> 6:14	<b>IAGA</b> 213:9	117:2	88:6 105:23
61:2 169:22	121:17	48:18 93:19	49:11,12,16	<b>hours</b> 166:23	<b>ID</b> 29:19	<b>impolite</b>	<b>includes</b>
					<b>idea</b> 108:21		

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

56:8,11	87:16,19	10:2 143:19	144:2 208:7	86:3 90:18	<b>interpret</b>	194:6 211:1	168:1,9,13
58:1 61:14	88:7,15	172:16	<b>infrastruct...</b>	139:7	91:2	<b>isolated</b>	168:14
61:20 63:12	109:24	174:23	161:18	<b>insurer</b>	<b>interpretati...</b>	108:10	170:2,3,15
65:18 66:4	110:4	<b>individuals</b>	<b>infusion</b>	140:15	130:13	110:8,13,20	172:12
76:6 183:18	151:20	31:24	189:6	<b>insurmount...</b>	<b>interpreted</b>	<b>isolating</b>	173:1,6
196:10	154:2 155:4	<b>industrial</b>	<b>inherent</b>	167:1	129:22	108:20	174:4,15,17
<b>including</b>	157:20	2:24 26:7	99:21	<b>intake</b> 111:4	<b>interrogatory</b>	<b>issuance</b> 17:5	174:23
36:15 68:3	162:10	173:3,18	<b>initial</b> 47:3	111:6	215:3	64:13,24	176:10,13
75:3 76:24	163:19,20	176:2,6	53:9 172:5	113:20	<b>interrupt</b>	162:11	176:23
126:22	163:23	177:6	<b>initiative</b>	<b>integrated</b>	9:24 14:3	<b>issuances</b>	177:16
160:12	164:21,24	178:13,19	177:11	8:24 9:13	14:21 22:13	83:14,15	178:5,14
197:7	165:20	<b>industries</b>	208:19	138:24	35:14 36:3	<b>issue</b> 14:3	179:6 182:2
<b>inclusive</b>	166:2 185:8	101:9	<b>initiatives</b>	<b>integrity</b>	41:23 89:1	42:16 53:21	<b>issuing</b> 22:3
135:2	<b>increased</b>	<b>industry</b> 13:1	208:15	208:12	140:1	64:20 82:20	83:8
<b>income</b> 13:23	47:13 55:24	20:17,19	<b>inline</b> 73:7	<b>intended</b>	<b>interrupted</b>	83:8,9 84:3	<b>item</b> 48:8
54:4 93:19	59:1 62:9	21:7 32:23	<b>input</b> 211:7	140:17	170:6	84:5 117:21	108:22
94:10,11,12	68:10 69:21	40:21 53:20	<b>inquire</b> 2:8	<b>intent</b> 106:13	<b>interrupting</b>	125:4	199:17,18
94:23 95:14	70:8 143:17	72:7 73:7,8	15:23	<b>intention</b>	14:5	126:13	<b>items</b> 15:17
95:15 97:18	144:5,6	74:18 98:6	<b>insert</b> 113:5	86:20	<b>interruption</b>	130:15	17:10 37:5
97:23 98:12	<b>increases</b>	101:8 146:2	<b>inserts</b> 113:3	<b>intentions</b>	19:17	149:13,13	51:13 80:14
98:23	19:8 40:19	155:6,7	113:9	211:7	186:15	150:10	<b>Itron</b> 118:3
102:15	46:22,23,24	191:17	<b>inside</b> 126:17	<b>interact</b>	<b>intimately</b>	152:19	
103:8,10,11	47:5,10	<b>industry's</b>	126:24,24	168:3	173:10	155:24	<b>J</b>
104:7,18	48:16 57:14	54:13	127:1	184:12	<b>introduce</b>	156:12	<b>Jagt</b> 4:3,3
105:5,17,18	57:15 58:3	<b>industry-wi...</b>	<b>inspection</b>	<b>interaction</b>	182:12	157:9 160:2	23:24 24:16
105:19	65:4 68:9	65:11	208:5,10	176:19	<b>introducing</b>	160:20	29:2 39:18
116:15,16	70:8,9	<b>inflation</b>	<b>inspections</b>	<b>interest</b> 37:7	182:14	168:6 172:7	39:20 42:1
150:7	72:14,19	59:18,21	208:12	46:6 107:8	<b>introduction</b>	172:15,16	43:12 44:8
164:14,22	74:2 76:23	60:2	<b>installed</b>	132:24	55:15 79:10	172:19,21	44:11,15
166:18	80:12,21	<b>inflationary</b>	117:19	134:17	79:12 80:2	172:22	47:11,16,19
183:6 197:3	82:10 88:20	61:1 62:1	<b>installing</b>	157:15	<b>introductions</b>	173:2 179:5	47:24 48:7
<b>incoming</b>	92:10 138:1	80:12	184:4	158:1	6:2	179:6	48:15 49:23
42:3	150:23	<b>inform</b> 16:23	<b>instance</b>	159:13,18	<b>invest</b> 189:19	183:22	50:2 51:7
<b>increase</b> 2:6	<b>increasing</b>	<b>information</b>	97:17 100:4	159:23	<b>investigated</b>	184:3	51:11 52:13
19:8,15	79:19,21	5:10 13:7	118:14	160:2,9	55:1	187:22	53:6 54:15
31:14,15	152:8	78:7 81:22	145:24	<b>interested</b>	<b>investment</b>	190:2	54:18 57:9
47:4,6,20	<b>incredible</b>	136:20	149:5 150:5	152:20	16:22 22:2	204:24	57:24 58:13
47:20,22	18:4 165:3	140:10,18	158:18	186:19	41:10	<b>issued</b> 16:11	59:22 60:6
56:3,6,15	<b>incredibly</b>	144:13	<b>instances</b>	<b>interesting</b>	121:19	16:12	61:7 62:11
57:2 58:1,2	158:7	147:4 148:8	36:23 101:6	123:16	141:2 188:8	159:19	63:4,7,19
58:4,5,6,8	<b>incremental</b>	177:23	<b>instantaneo...</b>	142:17	188:23	160:1	66:24 68:19
58:19 59:3	28:5 112:21	194:5	118:9,21	143:6	<b>investments</b>	164:24	70:18,20,22
59:10,14,16	<b>incurred</b>	<b>informative</b>	<b>instituting</b>	147:21	21:24	188:24	71:24 73:10
59:23,24	20:10	142:16	173:16	158:3	141:21	<b>issuers</b>	75:9,20
60:5 61:14	200:14	<b>informing</b>	<b>institutional</b>	173:20	<b>investors</b>	160:11	77:13 78:1
61:15,24	<b>independent</b>	96:8	189:16	<b>interfund</b>	137:8	<b>issues</b> 64:16	78:9,14,19
62:1 65:5,6	136:19	<b>infrastruct...</b>	<b>instrumental</b>	61:9,22	149:14	92:1 99:20	79:4 179:22
65:20 68:14	<b>index</b> 82:24	15:20 18:5	94:5 96:1	<b>Intergover...</b>	189:16	99:23	180:21
68:16 69:12	<b>indicated</b>	18:6 38:9	<b>insurance</b>	188:15	<b>invite</b> 103:17	106:17,21	181:8,21
70:13 71:2	144:8	59:1 79:20	22:6 25:11	<b>interim</b>	<b>involved</b>	117:7	182:18
71:3 79:5,6	<b>indications</b>	80:17 90:10	44:20,21	213:14	28:24 48:1	125:10	183:4,10
79:10,15,16	141:3	90:14	45:1 73:11	<b>interject</b>	55:7 130:20	147:15,15	192:12,13
80:11,16,18	<b>individual</b>	116:23	73:14,20	190:23	175:17	167:20,23	192:18
							202:14

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

204:12	16:22 25:23	145:5	213:16	90:12 92:15	<b>lease</b> 167:3,4	103:10	<b>little</b> 4:13
<b>James</b> 5:23	85:12 86:23	146:23	214:13,20	92:18 107:8	<b>leases</b> 167:4	151:15	8:10 20:18
<b>January</b>	90:6,17	147:9,17,24	215:1	139:2	<b>leave</b> 107:5	177:22	21:8 23:9
130:3	98:7,18	148:11,23		148:10	<b>leaves</b> 127:11	<b>leveraged</b>	36:18 64:17
145:12	107:23	149:14	<b>L</b>	151:6,6	<b>Lee</b> 1:14 3:13	73:3 90:17	64:18
<b>Jersey</b> 91:10	128:12	150:6,12	<b>labor</b> 123:2	152:5	<b>left</b> 67:21	153:9	117:23
<b>Joanne</b> 5:1	132:5 133:8	151:5,21	<b>LaBuda</b> 4:21	164:16	94:24	<b>liabilities</b>	122:22
177:10	136:8,9,16	152:2,12,17	4:21 15:5,8	165:8 173:3	105:21	146:12	144:9
<b>job</b> 146:20	136:16	152:19,22	15:8 16:8	176:2,5	<b>legal</b> 3:17,20	<b>liability</b>	145:15
207:11	138:8 140:4	153:1,4,5	17:1,12,21	<b>larger</b> 10:21	30:11,14	143:13	149:24
208:8	140:8	153:24	18:3,17,24	103:11	122:21	150:10,13	153:23
<b>Jon</b> 5:15	142:13	154:3,13,23	19:19 29:16	147:5,12	144:23	150:14	158:3
54:16,18	143:6 145:6	155:17,18	30:8,24	174:2,7	151:11	<b>lien</b> 158:17	174:10
94:5 96:1	146:23	156:14,22	31:11,20	<b>largest</b> 73:16	193:2	158:20,21	189:24
96:22	147:14,19	157:22	32:18 33:3	196:4	209:22	159:6	190:10,12
<b>Jon's</b> 55:5	149:15	170:1,9	33:17 34:15	<b>lasts</b> 200:22	<b>legally</b> 198:14	<b>life</b> 106:3	191:19
<b>Josie</b> 3:16	152:3	175:3,7	37:2 38:15	<b>late</b> 180:19	<b>legislation</b>	117:11	192:19
106:24	153:14	178:18	60:13 62:15	<b>lately</b> 130:15	105:3	124:14	201:4
206:8	157:20	182:19	62:18 63:5	<b>Laughter</b>	136:14	161:15,20	202:22,24
<b>July</b> 203:23	205:13	185:14	70:21,23	7:16 61:6	137:1	161:21	205:6
<b>jump</b> 72:20	<b>KING</b> 1:6	187:10	71:9 72:22	120:2	<b>let's</b> 20:18	162:11	<b>live</b> 125:23
<b>jumped</b> 69:17	216:13	190:16	82:15,20	139:19	23:8 84:13	200:24	<b>load</b> 128:13
<b>jumping</b>	<b>knew</b> 157:6	197:1	91:15 96:9	<b>launch</b>	115:18	<b>light</b> 71:17	185:22
96:20	192:14	199:18	96:18	177:24	139:16	<b>lights</b> 8:2,7	210:24
<b>June</b> 188:21	207:2	200:23	112:13	<b>law</b> 2:20 4:18	161:14	<b>likelihood</b>	211:3,5
204:1,2	<b>know</b> 2:4 7:1	201:13	122:1,19	4:23 164:9	162:21	141:10	<b>loan</b> 93:15
	9:10 15:10	208:1,3	134:9	166:16	168:17	<b>limit</b> 19:13	195:24
<b>K</b>	18:22 19:5	212:13	135:22	168:4 172:4	206:2	45:1 168:22	196:5,9,10
<b>Kathy</b> 5:5	20:12,14	<b>knowing</b>	137:13	172:5	<b>letter</b> 31:3	<b>limitation</b>	196:11
33:4 81:14	22:4 24:23	51:23	159:12	187:22	129:24	195:12	197:3
82:15,24	25:1,5	<b>knowledge</b>	160:19	<b>lawyer</b> 2:23	148:24	<b>limited</b> 7:20	198:21
116:10	27:21 29:8	174:22	161:13	194:10	149:1	99:3 170:14	<b>loans</b> 162:6
135:22	29:17 33:4	177:19	193:4	<b>lawyers</b> 124:3	160:14	179:5 180:5	<b>local</b> 12:7
160:22	36:1 40:13	<b>knowledgea...</b>	195:22	<b>laymens</b>	<b>level</b> 33:21	199:23	<b>LOCATION</b>
<b>keep</b> 52:18,21	51:1,20,20	36:13	196:10,13	60:19	53:13,13	<b>limits</b> 128:13	1:5
92:8 109:16	51:24 52:3	<b>known</b> 11:4	197:8,17	<b>lays</b> 14:22	55:11 78:2	170:7	<b>lock</b> 160:2
165:12	53:22 54:4	22:6	199:21	<b>lead</b> 7:7	90:9,13,24	<b>line</b> 48:8	<b>Locklear</b> 5:18
166:14	54:9 65:9	<b>knows</b> 138:10	200:20	125:17	97:20,22	108:22	5:18
184:2	78:14 99:23	167:17	201:15	126:13,18	98:1 99:4	154:7	<b>logical</b> 87:1
212:17	102:10	<b>Kreps</b> 5:20	202:4,7,13	126:19,20	103:9	181:11	87:12
<b>keeps</b> 127:3	105:6,14	5:20	207:5	127:4,5,7,8	125:17	<b>lines</b> 171:5	<b>long</b> 65:22
<b>key</b> 8:18	106:3 109:5	<b>Kumar</b> 4:1,1	208:20	127:9 131:6	157:10	<b>liquidity</b>	92:19
32:19 40:2	118:8,14	85:11,17,17	211:11,17	131:24	159:2,13	65:10,21	117:14
41:4 43:4,5	119:13,16	89:3,6 92:2	<b>lack</b> 147:16	132:2,3,10	182:18	82:10 84:2	127:21
43:23 45:11	119:22	94:11,18	<b>Lafayette</b>	143:17	186:4	141:3,21	130:9 131:2
49:6 51:23	120:6,7,9	95:5,24	209:6 212:9	185:22	188:23	146:8	132:9
56:18,20	122:7	107:16,22	<b>laid</b> 121:16	<b>lead-free</b>	190:14	148:15	136:16
59:5 68:23	123:23	107:22	<b>landlord's</b>	127:12	192:8 200:2	154:9 156:7	143:23
76:22 80:20	126:7,23	110:2,11	164:11	<b>leading</b>	<b>levelize</b> 23:1	160:7,23	146:9,12
144:9,20	128:17	191:16	<b>language</b>	121:10	24:11	<b>list</b> 36:1	159:14,20
146:6,13	135:12,16	200:8	105:10	171:18	<b>levels</b> 77:10	41:14 46:23	160:2 165:7
151:2	136:1,21	204:21	<b>large</b> 2:24 3:1	<b>leak</b> 172:18	89:3 97:24	80:14	207:2,2
152:24	141:20	205:1	10:19 11:4	<b>learned</b> 165:7	99:10,13	<b>lists</b> 140:19	215:8
<b>kind</b> 13:22			21:22 23:17				

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<b>longer</b> 6:15 40:15,17,22 51:17 59:12 77:17 117:3 120:22 149:9 157:17	56:20 60:18 67:20 91:9 108:7 113:19 123:10 138:6 153:14 157:6 158:4 181:22 184:22 185:17 196:21 207:7	97:11 99:22 109:16 112:4 129:13 133:16 140:8 142:12 144:12 145:22 146:17 147:10,19 147:21 152:9 153:2 153:12 157:22 159:11 160:8 165:17 173:8 184:24 187:7 196:18 202:1 204:1 212:24 213:4	<b>lowest</b> 89:11 92:7 <b>luck</b> 124:7 <b>lucky</b> 26:17 <b>lumped</b> 185:23 <b>lunch</b> 6:23 <hr/> <b>M</b> <hr/> <b>M</b> 1:6 216:13 <b>M1</b> 20:23 <b>ma'am</b> 70:20 169:18 <b>Madam</b> 7:5 18:13 163:14 167:19 169:13 186:15 <b>main</b> 40:10 41:15 45:12 49:10 81:19 126:22 161:19 <b>mains</b> 10:18 <b>maintain</b> 9:5 37:4 67:4 69:24 93:7 126:11 136:6 156:3 161:1 197:20 <b>maintained</b> 192:7 <b>maintaining</b> 67:6 <b>maintenance</b> 23:14 62:10 141:20 <b>major</b> 101:3 116:8 127:21 128:3 130:3 130:6 133:4 163:18 188:3 <b>making</b> 40:13 46:10 80:24 103:4 109:11 135:15 162:17 <b>manage</b> 33:9 33:20 56:5	83:23 170:20 <b>manageable</b> 101:18 <b>managed</b> 34:17 <b>management</b> 5:6 9:16 81:15 123:6 142:2 144:22 146:4 151:7 174:2 <b>Manager</b> 5:2 <b>Manager's</b> 30:13 <b>manages</b> 13:4 <b>managing</b> 12:24 197:20 <b>mandate</b> 184:5 <b>mandated</b> 54:23 127:20 <b>mandates</b> 80:4 <b>mandatory</b> 71:8 <b>manner</b> 117:7 191:8 <b>manual</b> 20:23 175:3 <b>map</b> 10:21 11:6 <b>marginally</b> 143:5 <b>mark</b> 4:14 59:1 <b>market</b> 60:23 82:24 102:5 140:18 141:3,5 146:3 159:21 185:19 <b>marketable</b> 189:21 <b>marketplace</b> 188:11 <b>markets</b> 188:20,21 189:15	<b>Markus</b> 5:21 5:21 113:15 113:18 115:1,4 158:12 159:7 161:10 <b>Maryland</b> 157:4 <b>material</b> 31:2 142:13,14 146:18 <b>materials</b> 155:4 <b>math</b> 47:18 112:8 <b>matter</b> 134:3 161:21 178:3 187:9 216:9 <b>matters</b> 32:15 <b>maximum</b> 44:13 46:5 128:13 <b>Mayor</b> 9:10 <b>McCARTY</b> 4:5,5 7:8,22 8:8,9 10:3,5 10:9,11 52:19 54:3 54:9 57:13 57:19,23 116:2 118:2 119:1,4,8 119:19 120:3 123:9 123:21 124:12,18 125:9,14 127:13,16 132:10,19 133:12,22 135:7 138:21 175:1,19 176:20 178:17,23 179:3,8 184:17 208:1,18 <b>mean</b> 10:1 17:19 60:11 78:2 83:16	84:6 89:3 94:14 106:14 108:24 113:6 120:4 120:20 121:20 142:21 148:12 152:24 153:2 154:17 155:2,15 158:3,6 161:13 179:8 197:8 201:11 <b>meaning</b> 11:23 124:17 <b>means</b> 42:20 114:24 118:16 153:13 162:4 165:22 216:19 <b>meant</b> 121:5 191:8 <b>measure</b> 205:15 <b>measures</b> 112:22 141:8 174:13 <b>measuring</b> 72:5 124:20 <b>mechanism</b> 20:14 199:10 <b>median</b> 104:7 104:8 <b>medium</b> 98:2 146:22 <b>meet</b> 22:3,7,8 26:14 32:14 41:9,11 42:18,23 44:23 45:23 46:7,14,19 47:1 48:18 57:3 65:11 67:1,7,14	68:12 69:4 69:13,21 71:22 72:8 74:3 80:3 80:13,15,16 86:1 94:24 95:13 107:2 140:15 141:19 192:24 199:23,24 200:4 201:1 215:8 <b>meeting</b> 72:9 73:20 92:23 191:9 201:24 <b>meetings</b> 211:3 <b>meets</b> 97:3 139:6 <b>Melissa</b> 4:21 15:8 <b>member</b> 1:13 1:13,14,14 3:4,6,9 73:10 121:20 210:1 <b>members</b> 7:9 12:18 62:6 163:15 174:10 186:20 215:17 <b>memorialize</b> 35:23 <b>memory</b> 63:1 202:23 211:19 <b>mention</b> 160:4 179:4 <b>mentioned</b> 9:13 25:10 31:11,12 65:19 99:6 105:2 107:24 124:13 128:20 131:6,24 132:21 153:7 156:8
--	---	--	---	--	---	---	---

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

174:16	<b>middle</b> 104:7	107:12	64:13	<b>months</b> 96:24	144:3	83:24 84:1	167:18
175:4	149:1	120:16	<b>MMD</b> 82:24	97:13 100:3	<b>municipality</b>	87:14 91:16	181:23,23
176:20	<b>MIERZWA</b>	<b>millions</b>	83:2 155:6	203:16	145:20	93:3 106:15	198:8
179:13	209:5	122:18	155:8,9,11	<b>Moody's</b>	160:9	112:22	<b>new</b> 21:3
184:21	<b>Mike</b> 5:13	<b>mind</b> 16:2	155:12	135:18		117:12,14	49:13 54:17
208:14,19	212:17	92:8 109:16	157:1,3,8	144:15	<b>N</b>	117:15	54:22 80:3
<b>messages</b>	<b>miles</b> 10:17	184:2	158:4	148:23,23	<b>N</b> 216:3	119:11,11	80:13 83:7
113:10	11:1	205:24	<b>MMO</b> 150:16	149:3,12,14	<b>NACWA</b>	122:20,22	91:10 93:24
<b>messaging</b>	<b>million</b> 9:21	214:6	<b>model</b> 190:16	<b>Morgan</b>	11:20	123:4,5,12	94:14,14,17
113:14	10:6,12,23	<b>mindful</b>	190:21,24	209:6,6,10	<b>name</b> 2:3,22	123:16	95:2,20
<b>met</b> 46:1 64:8	11:8 16:11	158:9	191:1,16	210:5,20	5:4 8:9	124:13	96:14,18
64:12,23	17:4 33:19	<b>minimize</b>	<b>modeling</b>	211:6,14	12:23 81:14	147:2,4	97:2 107:15
135:13	37:9 38:16	31:14	200:10	212:8	85:15 96:21	154:9,15	108:11,15
139:8	38:18 47:4	<b>minimum</b>	<b>models</b>	<b>morning</b> 2:2	107:7	167:7,7	117:24
<b>meter</b> 86:17	47:7,15	41:17 67:3	190:14	3:15,21,23	163:15	169:1	123:3,4,5
116:22,22	52:13 55:14	68:21 69:18	<b>Modicum</b>	6:23 8:8	172:3 194:9	170:18,23	127:23
118:13	55:14,21,22	69:24 71:20	131:10	12:17 85:11	212:17	171:20	128:7,9
121:2,6,8	56:3,15	71:22 99:15	<b>module</b>	85:13 96:21	<b>names</b> 12:22	178:8	129:7,8,13
123:6	58:19,22,22	99:17 100:7	124:17	168:20	<b>naming</b>	206:11	129:15
124:17,19	59:3,4	112:24	<b>Monday</b> 1:2	194:8	191:18	207:4	130:1 132:2
124:20	61:20,21	150:16	<b>money</b> 22:4	195:12	<b>Nancy</b> 1:12	<b>needed</b> 24:10	132:3
126:23	67:4,7	<b>minimus</b>	25:5 34:24	<b>move</b> 13:12	2:3	69:9 165:6	136:11,13
127:1	68:13,15,20	182:20	42:22 43:16	38:20 39:4	<b>national</b>	207:8,12	136:15
182:11	68:21 69:8	<b>minus</b> 42:21	43:19 45:2	65:8,23	11:21 88:23	<b>needs</b> 6:24	161:19
<b>metered</b>	69:18,19	118:7	69:6 83:7	77:8 112:5	<b>nationally</b>	18:7 21:23	165:1
167:16	70:11,13,15	188:22	120:19	152:10	53:23 89:8	21:24 26:9	169:24
210:21	71:7,14,16	<b>minute</b>	133:17	184:6 186:9	<b>natural</b>	26:12,12	173:12,16
<b>meters</b> 10:1	71:16 74:21	107:16	156:14	197:18	159:15	41:20,21	182:12,24
77:4 88:3	74:23 75:1	<b>minutes</b> 1:3	166:1	<b>moves</b> 37:12	<b>Naval</b> 38:10	65:23 67:19	189:18
123:3,10,12	75:2,4,4	6:17 36:3	184:24	186:21	38:11	79:20 94:2	197:3
123:17	76:11,15	183:8	189:6 195:2	187:2	<b>near</b> 133:23	97:3 142:23	206:10,12
182:10	83:8 84:5	210:10	195:13	<b>moving</b> 56:18	133:24	147:23	208:14,19
183:24	93:21	<b>miscellaneo...</b>	196:15	65:20 67:8	<b>nearest</b> 88:18	191:9	215:6
184:22	100:11	13:20 25:4	197:18	72:4 117:4	<b>nearly</b> 71:15	207:21	<b>news</b> 130:15
210:23	101:23	68:3	<b>monies</b> 32:11	119:20	73:2	<b>negative</b>	149:24
<b>methodology</b>	108:1,5	<b>mission</b> 7:24	37:15	121:4	<b>necessarily</b>	137:5,12	<b>nexus</b> 26:10
190:11	110:15,16	8:12 138:23	194:24	125:14	107:2 142:9	150:9	<b>no-revenue</b>
<b>metric</b> 34:18	110:19,23	<b>misstate</b>	<b>monitor</b>	143:24	143:3	<b>negotiate</b>	180:18
<b>metrics</b>	112:9,9	211:20	126:11	156:22	157:21	52:17	<b>Nods</b> 171:22
144:18	119:23,23	<b>misstep</b> 33:5	129:12	184:8	175:17	<b>neighboring</b>	<b>non-payment</b>
152:24	119:24	<b>Missy</b> 45:10	131:13,18	196:16	<b>necessary</b>	91:8	180:19
212:2	150:16,17	140:7	132:3	<b>multi-year</b>	66:3 67:12	<b>net</b> 42:6,7,8	181:1,5
<b>Michael</b> 1:14	165:12,18	147:10	165:21	21:16	130:9	42:20 46:11	<b>non-recurre...</b>
3:7	165:18	<b>mistake</b>	<b>monitoring</b>	<b>multiplying</b>	194:20	55:21 66:10	196:23
<b>Michelle</b> 4:16	188:24	18:17 194:2	129:11	82:13	<b>need</b> 8:1	66:14 72:4	199:5
111:17	192:8	<b>misunderst...</b>	<b>monitors</b>	<b>municipal</b>	11:16 16:17	74:19 108:5	<b>non-residen...</b>
177:12	195:19	104:19	126:9	82:23	21:10,18,21	108:7 109:1	74:22 76:3
205:16	196:9,11	<b>mitigate</b> 19:8	<b>month</b> 118:3	143:23	22:2,24	109:4	76:17,18
<b>microphone</b>	197:4,22	23:5 24:13	129:24	173:21	24:24 28:11	<b>network</b>	183:3,14,16
169:15	198:2	33:9	196:2	<b>municipalit...</b>	35:16 40:14	119:9,13	<b>non-residen...</b>
<b>microphones</b>	199:16	<b>mitigation</b>	<b>monthly</b> 88:4	87:10 90:11	42:18 48:12	163:13,17	183:18
18:16	200:9,13	174:13	88:8,16	90:12 92:13	56:4 57:2	<b>never</b> 165:10	<b>non-revenue</b>
<b>mid</b> 104:5	<b>million-dollar</b>	<b>mix</b> 46:20	118:6	136:18	59:11 68:11	166:9	180:16,20

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<b>nonrevenue</b> 179:16	214:9	212:4	114:1,13,16	25:20 26:24	<b>online</b> 175:2	189:15	138:7
<b>normal</b> 215:6	<b>numerator</b> 43:10,13	<b>offers</b> 177:9	114:19	42:1 47:14	176:19	208:4	<b>outlook</b> 40:17
<b>Northeast</b> 129:16	<b>numerous</b> 74:11	<b>office</b> 56:13	115:12,15	47:21 51:10	<b>open</b> 113:22	<b>ordinance</b> 6:4	40:22 77:19
<b>Notary</b> 216:14	<hr/> <b>O</b>	60:14 123:6	115:18,24	60:9 95:8	<b>operate</b> 9:5	16:13 25:11	<b>outreach</b>
<b>notch</b> 11:16	<b>O</b> 216:3	200:11	121:17	102:21	<b>operating</b> 9:2	31:23 32:2	111:4,21
<b>note</b> 117:4	<b>O&amp;M</b> 42:6	211:2	122:24	104:9,21,24	13:16 42:6	32:4 37:17	<b>outside</b> 4:8
126:19	42:21,24	<b>Officer</b> 1:12	123:15	105:1 110:7	62:19 71:16	37:24 38:6	9:19 17:17
149:6	45:14 56:20	2:2,3 3:10	124:9,16	179:2	72:3 129:6	41:17,20	17:19
190:13	58:22 64:1	4:12 5:7,24	125:1,11	182:17	143:17	42:5 43:3,4	134:21
198:6	65:17 67:24	6:3 7:6,10	134:2 135:9	186:11,12	144:22	43:24 50:5	168:1,9
<b>noted</b> 216:6	69:1	7:14,15 8:1	138:13,19	191:24	162:7	66:7,15	169:15
<b>notes</b> 169:14	<b>oaths</b> 193:21	8:5 9:23	139:10,16	192:15	192:24	71:1,10,14	<b>outsource</b>
169:21	194:3	10:7,10	148:17	194:9	194:23	72:9 73:21	113:16,19
216:8	<b>objection</b>	12:20 14:2	162:19	204:23	195:1,2,24	74:3 97:7	113:23
<b>notice</b> 51:17	198:7	14:7,16,20	163:2,8	205:23	196:5 200:2	137:1 139:6	<b>outstanding</b>
52:20	<b>objection</b>	14:24 15:6	164:6	209:8 211:6	<b>operation</b>	148:6	16:6,12
214:11	198:7	15:23 16:21	167:20	212:8	23:14 62:16	168:24	17:4 149:8
<b>number</b> 24:5	<b>objective</b>	17:6,18,24	168:8,17	214:15	86:2 143:5	170:17	153:10
36:20 39:5	107:3	18:11,13	169:5,13,16	215:9,11	<b>operational</b>	197:9,11,14	<b>overall</b> 24:8
40:6 49:15	<b>objectives</b>	19:16 22:12	169:19	<b>Olanipekun...</b>	91:3 146:4	198:22	56:6 59:22
49:16 78:16	8:19 40:2	22:15,21	170:5,19	1:13 3:3,4	174:13	199:9	63:16 72:17
79:2,7	41:4,4	23:20 24:3	171:12,23	36:23 38:12	<b>operations</b>	<b>Ordinance[...</b>	108:12
89:17 93:12	<b>obligation</b>	24:18 27:17	186:11,15	50:21 51:10	4:15 62:10	44:19	148:10
101:12	58:3 149:20	27:21 28:16	191:12	52:11 66:22	141:20	<b>organization</b>	212:7
103:7	187:16	28:19 29:10	193:10,16	70:16,19	177:23	164:12,13	<b>overflow</b>
107:20	197:12	30:22 35:18	198:1,12	71:5 72:20	<b>opine</b> 31:3	212:20	130:2
108:10	212:4	39:10,15	199:14	95:1,8,20	<b>opinions</b>	<b>organizations</b>	147:15
112:10,11	<b>obligations</b>	41:22 44:6	200:7,15	96:4,16	140:12,13	93:14	<b>overflows</b>
131:7 178:3	15:2 56:8	47:8,14,17	203:20	98:9 100:4	140:14,20	<b>organize</b>	12:11
201:9	85:24 92:24	47:21 48:3	206:2	103:2 112:1	<b>opportunity</b>	188:14	<b>overlapping</b>
202:17	92:24	49:20 50:1	209:17	117:17	2:7,11,12	<b>organizer</b>	145:18
211:23	140:16	52:15 53:4	210:11	118:22	6:5 96:23	56:21	<b>overview</b> 8:17
<b>numbered</b>	141:19	53:24 54:6	212:12	119:2,6	136:16,24	<b>original</b>	13:6 36:11
116:4	<b>obviously</b>	57:6,12,17	214:23	<b>old</b> 38:16	187:3	66:11 71:21	39:21 54:21
<b>numbers</b> 29:3	36:7 38:14	57:21 58:11	215:11	132:23	<b>opposed</b>	106:13	63:8 132:5
29:24 30:2	135:12	59:17 61:3	<b>official</b> 138:3	<b>once</b> 25:8	125:7	<b>originated</b>	<b>overwhelmi...</b>
30:5,15	143:11	75:6,15	193:1	101:10,19	168:13	203:5	164:14
33:10 35:5	146:6	77:7,21	<b>officially</b>	118:3,18	176:14	<b>orthophosp...</b>	165:8
63:17 88:17	147:11	78:6,12,18	215:5	121:8,10	185:20	126:15	<b>owed</b> 189:7
102:6	151:16	83:3,12	<b>offline</b> 118:13	149:6,11	191:4 197:6	<b>ought</b> 35:22	<b>oxygen</b>
111:23	159:2	84:12,18,23	179:8 191:4	197:24	199:17	35:23	128:21
133:13,18	<b>occur</b> 62:21	85:5,9,15	<b>offset</b> 55:18	198:21	<b>option</b> 96:12	<b>outcome</b>	<hr/> <b>P</b>
135:2	197:10	88:24 89:5	137:20	<b>one-time</b>	107:13	97:12 99:7	<b>p.m</b> 139:18
184:20,21	<b>occurred</b>	91:17,23	<b>offsets</b> 108:6	200:23	<b>options</b> 95:15	131:1	215:20
188:7	60:22	95:9 102:24	<b>oftentimes</b>	<b>one-year</b> 46:5	123:22	144:14	<b>PA</b> 53:8,9
191:22	<b>occurs</b> 197:12	103:15	19:24 31:24	123:21	124:1	171:2	119:17
192:3,16	199:12	104:15	<b>oh</b> 24:21 83:7	124:1	<b>order</b> 22:2	<b>outflow</b> 61:19	<b>page</b> 35:5
201:7	<b>October</b>	106:14	112:3	<b>ones</b> 41:15	46:19 50:10	135:5	62:5 78:16
202:11	30:12 31:8	107:19	135:24	132:7	80:14 116:9	<b>outline</b> 112:9	81:8 104:3
206:11	130:4	108:23	194:2	<b>ongoing</b>	129:23	<b>outline</b>	140:3 144:9
	131:21	109:4 111:2	<b>okay</b> 7:14	16:18 78:23	130:4,8	136:13	147:5 148:9
	<b>odors</b> 134:1	111:10,14	10:7 20:11	136:17	163:9	138:4 151:1	149:16
	<b>offering</b>	113:17	21:16 24:15	153:19	189:10,14	<b>outlined</b> 49:4	151:1



Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

152:23	102:11	<b>pay-as-you-...</b>	<b>penny</b> 205:18	103:14	72:19 77:6	<b>Philadelphia</b>	163:3
154:23	211:9	73:6	<b>pension</b> 58:2	105:17,17	77:13,15	1:1,1,5 2:20	<b>picked</b> 38:17
203:6 213:7	<b>participating</b>	<b>payers</b>	58:2 150:9	105:18	110:15	2:24 4:9	<b>Pickens</b> 3:15
<b>pages</b> 203:1	103:5	161:23	150:9,18	150:12	120:5	9:12,18	3:16 103:23
<b>paid</b> 37:5	<b>particular</b>	164:10	152:17	154:4,20,20	131:12	10:6 14:18	106:5 206:8
45:14 61:12	23:9 26:22	185:1	196:3	156:15,20	150:22	15:9 29:20	206:9
166:6	39:9 105:4	<b>paying</b> 88:5	207:24	157:5,7,11	152:3	74:24 76:3	208:14,23
172:23	137:2 174:4	163:22	211:9,13,21	157:13,18	154:19	86:15,20	<b>picking</b> 76:19
180:3	178:15	180:6	211:23	157:19	161:4 162:1	87:9 88:1	<b>picks</b> 76:17
187:18	<b>particularly</b>	<b>payment</b>	<b>pension-to-...</b>	158:3,6,21	162:9	88:20 89:8	76:19 118:5
189:1,4	125:17	32:13 46:7	56:8	158:22,23	198:10	89:12,16,20	<b>picture</b> 16:1
207:24	186:19	99:2 114:9	<b>people</b> 5:8	164:2 165:5	214:5	89:22 90:12	26:22 28:6
<b>Palladin</b> 5:23	<b>parties</b>	116:15	9:21,24	168:19	<b>periodically</b>	91:1,5,6,8	<b>piece</b> 105:3
5:23	130:19,20	134:24	10:3,6,9,12	169:17	106:12	91:11 92:6	<b>pieces</b> 115:10
<b>panel</b> 7:18,19	<b>partnership</b>	135:4	18:23 27:23	170:22	<b>periods</b> 156:4	104:23	206:16,19
<b>paper</b> 78:11	11:13	172:12	39:16 91:21	185:8 203:8	<b>permit</b> 129:9	107:8	<b>piling</b> 166:14
115:10	133:17	175:14,18	121:15	203:12	129:15	150:11,11	<b>-pills</b> 181:7
156:10	<b>parts</b> 71:9	180:19	165:9 166:8	204:5,6,7,9	130:12	153:20	<b>pilot</b> 178:1
206:16,19	<b>party</b> 130:18	196:3,4	166:17,21	204:21	<b>permits</b> 12:1	160:13	<b>pipe</b> 126:17
<b>papers</b> 63:10	<b>pass</b> 136:2,10	<b>payments</b>	167:4,6	205:11,12	129:5,5,8	163:22	126:19
75:21 102:2	<b>passed</b> 38:6	37:18 45:15	168:5 171:1	206:21	129:14,19	164:3 166:5	127:5
<b>parallel</b>	55:2 80:4	46:10 61:17	174:1	213:8,9	<b>perpetuity</b>	172:4 176:9	<b>pipeline</b>
131:19	94:1,15	114:4,7,11	189:18	<b>percentage</b>	197:23	189:18,19	178:16,19
<b>paralleled</b>	166:9	134:14,21	206:11	95:13,16	198:3,7	189:21	<b>pipes</b> 126:20
137:17,18	<b>pattern</b>	<b>payroll</b> 190:1	207:4,19	100:23	<b>person</b>	194:11	127:8
<b>Pardon</b>	161:17,18	<b>pays</b> 150:17	212:14	101:1	163:15	200:6 202:1	<b>PJM</b> 210:1
111:10	161:22	180:14	<b>people's</b>	102:10	165:16	210:15	<b>place</b> 32:11
<b>parody</b> 162:3	162:11	198:19	165:21	104:3 105:5	<b>personally</b>	<b>Philadelphi...</b>	80:2 93:19
<b>part</b> 13:13	215:4	<b>peak</b> 11:22	<b>Pepsi</b> 179:3	107:1	21:20	15:12,12	98:17
18:24 19:4	<b>patterns</b> 26:8	<b>PECO</b> 120:15	<b>percent</b> 10:14	150:15	<b>personnel</b>	92:16	101:10,20
19:10 34:4	28:14	<b>PECO/Exel...</b>	10:16 11:24	154:6 165:9	39:8 56:2	149:19	129:4
60:13 76:19	<b>pause</b> 91:15	5:3	12:2 29:9	179:18	56:22,24	211:12	174:19
85:12 96:7	<b>pausing</b>	<b>peer</b> 147:2,13	30:5 31:9	180:20	62:4 80:11	<b>phone</b> 18:14	183:13
117:3	122:9	147:19	44:23 45:5	181:7	100:20	18:23 61:2	<b>placed</b> 22:5
120:17,22	<b>pay</b> 7:15 37:6	148:2,6	50:14,16,22	<b>percentages</b>	110:3,6,11	61:4 91:21	98:16 119:9
123:7,12	38:10 50:8	<b>peers</b> 33:11	51:3,3,4,7,8	165:4	112:10	121:11	<b>plan</b> 14:9,10
126:13	60:19 100:5	73:8 147:7	53:17 56:6	180:18	114:3,7,8	209:1	14:11,22
142:15	100:5	147:11,18	58:5,6	213:16,20	114:15	<b>phosphorous</b>	15:10,13,14
143:12	120:17	147:23	59:13,16	214:7	168:5 176:3	128:11,14	15:18 17:9
167:3	150:15,17	148:2	60:11,17,19	<b>perfect</b>	<b>persons</b>	<b>phrase</b>	17:13 18:1
175:13	154:2,2,4	<b>PennFuture</b>	62:1 65:6	206:22	104:10	211:18	18:6 19:1,3
185:4,12,13	154:20,20	5:14 212:18	65:20 66:10	<b>perform</b>	<b>perspective</b>	<b>Physical</b>	19:4 21:16
194:16	156:20,23	212:19	66:14 67:1	208:11	92:4 93:9	194:24	24:8 34:3
207:16,17	160:24	<b>Pennsylvania</b>	67:8 69:11	<b>performance</b>	162:14	<b>physically</b>	34:19 39:22
211:12	161:8 162:4	1:5 91:9,10	71:18 73:2	11:22 72:8	172:7 173:1	16:10 126:5	40:3,16,23
214:11	162:12	119:17,18	73:12,17	91:3 142:6	<b>PFM</b> 33:4	126:8	46:17 47:1
<b>participants</b>	164:15	188:14	76:18,20,20	205:9,15	116:11	<b>PICA</b> 15:13	52:2 53:14
2:11 7:18	165:21	<b>PENNVEST</b>	77:5 82:17	<b>performing</b>	<b>PGW</b> 149:21	19:2 30:16	56:19 58:9
140:18	167:18,20	16:14	83:10,10	172:13	<b>PHA</b> 74:23	58:10,13	58:15 59:9
163:4,10	180:19	161:11,13	94:16 96:13	<b>period</b> 17:5	76:20	188:14,17	64:6,13
212:18	196:4	161:15,20	97:21 98:21	23:11 40:8	183:15	188:18	65:3,16
215:15	197:22	161:24	99:4 102:3	47:3 65:5	<b>phased</b>	<b>pick</b> 147:17	67:2,6 70:6
<b>participate</b>	199:12	162:2,6,9	102:9 103:6	65:22 67:9	121:15	149:10	72:12,13

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

73:24 74:1 74:6,8 78:15 85:21 85:23 86:4 86:4 92:19 92:20 93:5 111:22 127:21 130:7,9,16 138:22 154:18 156:22 181:2 211:9 211:13 <b>planned</b> 46:22 48:16 48:17 59:8 70:7 <b>planning</b> 13:13 14:8 16:22 17:2 17:5,22 21:9,13 25:7 62:24 63:23 65:5 68:7 162:1 168:23 205:14 <b>plans</b> 12:15 14:22 15:19 99:2 <b>plant</b> 129:14 129:16 133:24 <b>plants</b> 10:20 11:2,5 125:24 127:12 128:15 <b>platinum</b> 11:23 12:4 12:5 <b>play</b> 104:14 <b>please</b> 6:11 7:1 33:11 63:2 85:9 125:15 134:13 140:1 165:19 198:6 <b>pledge</b> 188:1 <b>plumbers</b>	208:8 <b>plumbing</b> 126:24 <b>plus</b> 17:5 25:3 42:21 64:24 66:19 71:22 109:1 112:9 118:7 <b>point</b> 6:20 35:15 39:20 41:16 54:7 54:20 61:1 68:19,23 74:7 77:9 81:10 89:21 104:5 110:8 110:10 114:3 115:16 120:23 122:13,17 125:12 145:7,10 147:4 149:17 153:6 157:11,15 159:4 160:22 161:3,6 177:4 183:4 183:10 184:23 192:11 193:21 198:17 208:24 <b>pointed</b> 28:23 73:11 74:10 78:19 <b>pointing</b> 181:9 <b>points</b> 82:1,3 82:5,12 <b>poised</b> 159:14 <b>policies</b> 21:6 72:14 <b>policy</b> 80:10 129:22 130:13 135:15 182:2 186:3 <b>political</b>	144:4 <b>Pollen</b> 131:16 <b>pollen-form...</b> 131:18 <b>pollutants</b> 126:6 <b>poor</b> 163:22 166:17 <b>Poor's</b> 149:1 149:4 160:5 <b>Popowsky</b> 1:13 3:5,5 33:24 34:7 34:11 35:7 35:19,24 36:22 43:9 52:3 60:10 71:6 79:1 94:8 100:9 100:16,23 101:21 102:7 107:9 119:16,22 120:15 121:20 122:16 184:11 <b>population</b> 10:4,5 98:22 164:17 201:5 <b>portion</b> 47:19 61:13,22 78:15 108:3 110:2 132:21 201:21 <b>portions</b> 66:5 135:4 <b>position</b> 65:9 65:24 146:3 146:10 173:16 186:22 207:18 <b>positions</b> 56:5 62:21,23 80:13 110:14 115:1 206:13,14 207:6,10,14	208:2,5 <b>positive</b> 136:3 137:12 142:9,22 143:2,5 151:8 156:16 <b>positives</b> 151:5 <b>possible</b> 34:6 46:15 123:18 132:1 137:6 <b>postage</b> 113:5 <b>posted</b> 134:8 <b>potential</b> 98:20 143:13 <b>potentially</b> 22:3 132:7 <b>poverty</b> 97:20 97:22 99:4 150:7 165:4 165:5 <b>power</b> 56:22 59:6,7,8,10 59:20 60:17 60:24 185:9 185:18,20 185:23 209:11,16 209:18,20 209:21,23 210:2,7,14 210:20 <b>PowerPoint</b> 7:6 <b>Prabha</b> 4:1 85:17 190:11 <b>practice</b> 40:21,21 98:6 126:16 147:18 160:1 195:16,23 <b>practices</b> 65:11 73:8 146:18 <b>pre-water</b> 127:11 <b>predates</b> 38:4 38:15	<b>predominant</b> 20:22 21:7 87:24 <b>predomina...</b> 9:18 16:12 19:2 <b>preliminary</b> 29:3 119:12 120:10 122:2,8,11 122:15 124:11 128:23 186:17 <b>prepare</b> 56:16 <b>prepared</b> 115:7 170:10 171:3 <b>present</b> 5:3 6:6 7:3,8 13:6 39:17 47:12 151:16 177:8 <b>presentation</b> 1:1 2:5 6:14 6:20 7:6,9 7:21 8:7 13:3 31:21 34:5 35:3 35:12 44:16 54:19 64:4 75:23 81:21 83:1 116:6 116:10 122:23 134:16 136:8,20 138:6 139:21 140:1 179:12 203:1,3,7 208:16 215:18,20 <b>presentations</b> 85:1 116:7 116:14 136:12 137:19 140:9 148:1	190:17 <b>presented</b> 17:15 49:7 56:24 63:8 63:14 64:23 67:2,3,16 76:12 77:4 89:14 136:12,23 204:19 <b>presenter</b> 39:19 <b>presenting</b> 46:18 89:12 <b>presently</b> 128:6 <b>presents</b> 64:6 67:19 <b>pressure</b> 161:23 <b>pressures</b> 143:19 161:14 <b>pretty</b> 20:20 36:11 51:4 52:23 60:12 97:12 99:13 118:9,20 124:7 148:12 152:6 154:17 159:10 160:17 196:2 <b>prevents</b> 126:17 <b>previously</b> 125:20 <b>price</b> 60:18 141:4 155:8 160:24 161:7 186:5 <b>prices</b> 157:9 186:4 211:4 <b>pricing</b> 23:5 <b>primarily</b> 2:7 53:19 62:3 86:16 212:22 <b>primary</b> 58:7 76:15 200:12	<b>principal</b> 46:6 161:17 <b>principle</b> 43:23 <b>principles</b> 30:23 36:12 74:18 191:18 <b>printed</b> 113:1 113:2 <b>prior</b> 112:12 135:6 162:6 204:6,8,8 204:14,15 <b>private</b> 75:3 <b>privilege</b> 201:17 <b>probability</b> 141:9 <b>probably</b> 18:3 19:17 113:6 149:21 168:1 170:22 185:4 188:16 202:23 204:24 <b>problem</b> 133:21 143:12 161:24 174:14 <b>procedural</b> 134:3 195:23 <b>procedure</b> 210:1 <b>procedures</b> 176:15 <b>proceed</b> 85:10 <b>proceeding</b> 17:2 19:6 33:18 34:17 34:20 35:17 168:2,10 193:21 207:17 <b>proceedings</b> 213:19 214:8 216:6	<b>proceeds</b> 37:20 46:2 189:1 <b>process</b> 20:16 33:16 39:22 49:7 69:2 90:8 113:24 114:11 117:8 126:4 126:14 144:16 145:14 147:24 148:5 153:5 170:21 175:14,18 186:21 195:20 <b>processes</b> 90:7,19 <b>processing</b> 114:9 115:9 <b>Procurement</b> 210:16 <b>product</b> 141:21 <b>products</b> 156:6 <b>Professional</b> 1:7 <b>profile</b> 145:16 145:17 185:22 210:24 <b>profiles</b> 146:5 186:1 211:4 211:5 <b>prognosis</b> 140:17 <b>program</b> 41:1 54:22,23 55:1,6,15 55:19 56:1 56:6,13,16 56:19,22 57:8 62:8 64:5 80:3 83:23 86:2 87:15 90:16 92:18 93:15 93:15,16,17 93:18 94:1 94:2,4,6,14
--	--	---	---	---	--	--	---

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

94:17,21	77:8,11,11	157:13	96:3 117:5	92:12	113:10	114:7 116:8	51:12 65:13
95:2,4,11	77:14	158:8	118:8	<b>pulled</b> 44:13	161:19	116:12,17	80:20 85:7
95:12,21	154:11	<b>projects</b>	125:21	<b>pumping</b>	<b>PW</b> 118:4	116:18,19	99:24 101:4
96:2,3,7,14	158:2 181:6	153:13	133:14	10:18,22	<b>PWD</b> 63:11	120:21	103:18
96:19 97:3	207:2	207:8	134:22	<b>punish</b> 81:11	98:20	121:18	104:1
97:6,9,11	<b>projected</b>	<b>prolonged</b>	139:21	<b>purchase</b>	101:17	125:5,14	106:15
97:15,17	16:16 17:5	208:12	140:18	60:2 185:8	177:1 180:4	127:15,17	115:14
98:4,19,22	17:8 46:19	<b>Promise</b>	142:12	210:10,15	<b>PWD's</b> 63:19	127:19	116:3,5
99:6,21	46:24 47:4	212:16	144:13	<b>purchased</b>		134:10,11	125:12,13
100:12	48:18 49:15	<b>promised</b>	145:6 161:1	60:17	<b>Q</b>	135:11,14	132:18
101:6,20	50:4 53:18	183:7	<b>provided</b>	<b>purchases</b>	<b>qualify</b>	135:23	134:4 135:8
106:19	55:13 56:19	<b>properly</b>	26:12 36:21	59:7,8	101:12	137:14	135:10
107:10,14	58:15 59:15	175:11	44:20 50:18	60:15,21,24	<b>qualifying</b>	138:5 147:6	162:20
107:15	61:13 64:5	<b>properties</b>	51:17 55:12	<b>purchasing</b>	99:2	149:24	163:4
108:4,11,16	64:10,15	127:8	61:11,23	60:11	<b>qualitative</b>	157:6	171:13
108:17,21	67:6,15	<b>proportion</b>	62:2 65:1	<b>purpose</b> 14:1	146:16	163:19	186:21,23
109:15,23	70:5 72:10	25:19	75:1 76:5	28:10 31:18	<b>qualitatively</b>	164:20	187:2,4
110:5,9,13	74:5 76:14	<b>proposal</b>	93:21 94:4	31:19 36:16	145:4	165:19,24	191:5
110:18,20	77:19 78:20	106:1	185:2 191:1	38:22	<b>quality</b> 11:15	166:20	205:24
111:4,6	83:15	116:15	200:5	195:14	53:2 126:11	167:11	209:3,7
113:2	110:15	<b>proposed</b>	204:17	<b>purposes</b>	128:7	169:8,10,11	212:11,13
115:11	196:22	8:20,21	207:16	69:14 104:2	130:12	170:11	213:1,23
116:16	207:2	47:13 70:6	<b>provider</b>	105:24	141:6 142:3	178:6	215:3,15,16
137:23	<b>projecting</b>	70:8 72:13	209:24	199:6,9	<b>quantifiable</b>	179:14,21	<b>quick</b> 40:1
164:19	100:10	74:1,2	<b>provides</b> 6:4	208:4	116:24	181:16	103:24
165:1,2,10	157:14	75:14 88:7	33:7 46:5	<b>pursuant</b> 9:4	<b>quantify</b>	182:22	<b>quickly</b>
165:10	165:17	91:13 92:3	63:15 67:12	<b>pursue</b>	134:13	183:21,24	166:23
169:3	180:22,24	92:9,17	71:14 130:8	115:13	<b>quantitative</b>	185:7,9,12	<b>quite</b> 199:2
174:14	206:15	128:9	139:1,4	<b>purview</b>	120:21,24	187:6	203:9
178:20	<b>projection</b>	131:11,21	142:21	168:1	121:1	193:17	209:13
182:24	19:11,11,12	138:22	<b>providing</b>	170:17	<b>quarterly</b>	194:14,17	<b>quotations</b>
184:14	28:13 40:15	163:20	38:24 64:21	<b>push</b> 139:17	30:13 121:9	198:2	210:9
187:17	42:2 48:1	213:10	73:14 74:14	<b>pushing</b>	161:5 211:3	199:16,22	<b>quote</b> 202:18
197:3,23	48:10,23	<b>proposing</b>	130:2	112:6	<b>quest</b> 2:6	201:22	<b>quotes</b> 151:2
212:24	49:1,9,10	47:6	138:23	<b>put</b> 20:7,15	<b>question</b> 6:12	202:5,7	
213:5,10,11	50:2 53:15	<b>proprietary</b>	<b>provisions</b>	25:24 43:15	6:16 14:17	203:5 206:9	<b>R</b>
213:24	55:23 57:1	191:1	37:3 144:23	43:19 46:2	14:22 25:14	209:12,13	<b>R</b> 216:3
214:1,16,21	57:4 61:15	<b>protect</b> 93:9	<b>public</b> 3:18	78:10 80:6	33:14 35:2	209:14	<b>radio</b> 117:10
215:4,7	61:16,20,22	128:22	3:20,22,24	96:6 101:10	35:6,22	213:12	118:23
<b>programs</b>	63:15 67:17	164:10	5:1,5 36:16	103:13	50:22 51:20	214:15	119:3
12:14 54:1	67:20 68:2	191:10	75:3 76:6,7	111:21	59:19 60:4	<b>question's</b>	<b>Raftelis</b> 5:15
54:4 57:2	68:9,24,24	<b>protection</b>	81:15	134:5 145:2	62:5 68:6	40:5	5:19,20
58:19,20	69:1,16	75:3 208:7	112:15	147:3	70:4,24	<b>questioning</b>	49:23 94:5
64:7 79:22	70:1 71:24	<b>proud</b> 11:11	138:2	160:21	80:22 81:5	163:9	96:22
80:1 92:19	72:7 73:24	12:6	168:15	166:13	83:4 87:1,8	<b>questions</b> 5:9	<b>rainy</b> 43:19
93:12,20,22	75:20 77:2	<b>provide</b> 8:24	191:3	167:2	87:12	6:7,22	45:18
93:23 95:6	77:13,17	20:1 21:21	196:18	175:20	101:21	19:20 21:11	<b>raise</b> 125:3,5
101:7 183:6	78:4 134:23	41:5,7	212:10	184:7	103:1	24:14,19	137:2
183:12	181:7	49:14 53:2	216:14	<b>puts</b> 45:1	104:20	31:10,15	153:22
<b>project</b> 16:6	<b>projections</b>	55:13 62:12	<b>published</b>	161:22	107:18	34:1,9 35:3	162:18
23:24 29:1	34:23,23	62:13 69:22	131:17	<b>putting</b> 25:21	108:6,14	35:8,15	173:2,6
42:5,7,8	51:13 53:16	75:7,10,21	<b>pull</b> 45:4	95:17	109:10	36:1,21	176:16
55:11 70:12	69:4 85:23	79:23 80:15	62:11 78:9	103:19	111:3	39:6 43:7	188:18
					113:18		<b>raised</b> 167:20

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

184:1	144:24	26:21 28:1	160:18	<b>really</b> 18:15	<b>receivable</b>	38:24 90:21	53:17 65:14
213:23	151:12,19	30:10,19	163:19	23:6 29:8	51:2	183:12	180:3 181:1
215:4	151:23	31:14 32:22	188:6	32:19 35:12	<b>receive</b> 12:5	<b>recovered</b>	<b>reflecting</b>
<b>ramp</b> 100:19	152:7,14	33:22 39:2	189:11	36:16 38:22	25:20 26:17	183:19	67:24
<b>range</b> 179:17	155:9 156:6	40:11,17	<b>ratings</b> 66:1	51:23 52:21	44:4,10	<b>recovering</b>	<b>reflection</b>
<b>ranges</b> 72:18	157:2,3,10	45:4 48:10	82:11 83:17	70:24 72:22	50:14 51:5	45:5	83:18 156:2
<b>rate</b> 1:2 2:6	158:1 159:8	48:11,11,16	83:18 84:6	83:23 85:20	99:12,17	<b>recovery</b>	<b>reflects</b> 50:6
6:4 8:17,17	159:11,15	48:24 50:3	116:9	86:14,15	114:4 174:6	139:4 143:7	50:17 51:8
8:22 9:9	159:16,17	53:3 71:19	139:22	87:21 89:19	188:22	143:8	53:15 57:9
13:1,18	159:18,23	75:14 76:13	140:11	89:24 93:1	<b>received</b>	182:15	58:16 59:22
19:8,8,15	159:23	83:11,15	141:3	101:5	11:13,20,23	<b>recycling</b>	61:16,23,24
20:11,15,21	160:6,8,9	86:14,18,21	148:18,19	120:13	30:18 116:3	11:3	62:2 68:24
25:3,12	160:20	86:22 87:2	148:20,23	122:22	147:7	<b>redial</b> 91:16	69:1 72:2
27:16,22,22	161:14,23	89:14 90:19	149:3,17,19	138:9 143:3	<b>receivers</b>	<b>reduce</b> 73:4	77:5 134:6
32:5,7,18	162:9,10,18	91:12 92:21	155:23	145:22	119:9	<b>reducing</b>	<b>regard</b> 77:23
33:2,16,18	163:20,23	103:9 124:6	157:20	146:14,16	<b>receiving</b>	130:16	98:6
34:12,12,16	164:10,19	136:5 155:7	159:22	146:22	12:4 206:17	<b>reduction</b>	<b>regarding</b>
34:17,19,21	164:21,24	158:7	190:5,6,9	147:23	<b>recognize</b>	51:14 53:8	100:1
38:10,22	165:20	159:13	<b>ratio</b> 41:24	153:16	50:8 59:11	53:15,19	103:20
40:13,19	166:2	160:3 161:4	42:1 148:4	155:20	199:11	54:12 77:20	135:20
41:11 42:12	168:13,16	169:24	153:8,14	160:5,16	<b>recognized</b>	201:5	178:12
42:21 43:3	170:14,16	170:1,4	<b>ratios</b> 81:3,8	174:21	58:10,12	<b>reductions</b>	<b>regardless</b>
43:9,15,18	172:15,21	173:13	144:20	178:2 179:6	<b>recollection</b>	53:7	94:22
43:20 44:12	173:6	174:16,16	146:6,7,8	184:9	190:8	<b>reevaluated</b>	<b>regiment</b>
45:2,17,22	174:24	187:24	146:13	185:14	<b>recommend...</b>	214:18	177:22
46:21 47:3	180:15	197:22,24	153:17	187:5 200:2	140:17	<b>refer</b> 15:4	<b>regional</b> 92:4
48:18 51:18	182:3,6,9	198:5	154:7	200:10	153:24	41:2 102:1	101:16
63:9 67:11	182:14	<b>rating</b> 22:10	<b>reach</b> 175:10	202:1	<b>reconciliati...</b>	103:22	102:14
68:4,7,11	184:6,7,9	22:15,16,18	<b>read</b> 2:9 37:3	208:20	208:22	138:3	<b>regionally</b>
69:6,8,14	184:19	33:3,6	72:23	211:23	<b>reconnected</b>	<b>reference</b>	91:7
69:20 70:2	185:1,5	81:10 84:4	116:19	<b>rearages</b>	167:1	35:4 147:4	<b>register</b>
70:8,8 72:2	188:23	84:8 135:13	121:9,10	180:18	<b>record</b> 39:11	149:18	124:21,22
73:17,21	190:11,15	136:2,12	135:17	<b>reason</b> 24:4	49:12 84:13	202:14	<b>Registered</b>
74:2 75:13	190:24	137:4,16,19	137:21	64:19 92:11	84:16,19,24	<b>references</b>	1:7
81:23 83:24	192:6,21	138:6	142:16	202:12	91:18,21,24	78:11	<b>regulation</b>
86:3,6,15	194:17,21	139:23	146:17	<b>reasonable</b>	96:6,9	<b>referred</b>	132:12
86:18 87:12	195:17	140:5	151:4 153:4	21:15 26:10	115:19,22	105:11	213:17
87:12,16,19	196:19	142:12	179:15	26:20	116:1 122:7	200:10	214:14
88:7,13,20	197:19	144:9,11	199:21	<b>reasons</b> 24:5	134:6	<b>referring</b>	<b>regulations</b>
89:1 92:7,9	198:18	145:8,9,10	<b>readers</b> 121:6	69:7 123:1	138:14,17	8:15 195:23	80:6 132:14
93:6 95:10	210:6,18	145:18,18	<b>reading</b>	157:23	138:20	<b>refinancing</b>	143:16
95:13 97:12	213:2,13,14	145:19	116:22,23	<b>rebooked</b>	139:11,14	132:23	207:9
99:7,19,24	213:19,22	146:7	118:3,8	196:6	139:17	<b>reflect</b> 26:9	213:18
101:12,19	214:4,8,18	147:24	121:2,7	<b>rebuild</b> 69:23	162:21,24	52:2 53:7	<b>regulatory</b>
105:22	214:19	148:1,13	123:6	<b>recall</b> 48:22	163:9 191:3	53:13 58:2	8:12 12:9
116:2 117:3	<b>rated</b> 81:24	149:7,9,9	<b>reads</b> 118:5	83:1 201:17	193:11,14	60:1 65:17	15:21 26:14
120:5	142:4 149:7	149:11,14	<b>ready</b> 7:2	<b>recalls</b> 187:11	193:17	77:20 79:16	57:3 58:18
135:14,15	149:11,18	149:21,23	<b>real</b> 81:16	<b>receipt</b>	206:3,6	84:6 115:1	58:21 80:15
136:4,6,11	155:13,13	150:2,2,5	101:5	114:23	211:20	150:6 180:8	127:15
136:17,19	155:20	151:3,21	151:13	<b>receipts</b> 44:2	<b>recording</b>	180:12	<b>reimburse</b>
138:1,4,22	188:2	152:24	<b>realize</b>	44:2 50:5,9	124:21	181:2,11	61:18
141:13,23	<b>rates</b> 8:20,21	155:23	120:22	181:3,10	200:13	203:8	<b>reimbursed</b>
141:24	9:9 21:5,6	156:17	209:11	203:8	<b>recover</b> 20:13	<b>reflected</b> 44:3	195:9

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<b>reinvestment</b>	107:1 143:7 79:21 143:24	2:23 5:13 30:1 64:11	8:13 13:15 15:21 16:7	<b>residential</b>	73:18 26:5 74:20	57:16 64:7 64:22 67:14	42:11,20,20 43:6,14,14
<b>reiterate</b>	<b>remedial</b>	<b>representat...</b>	19:22 22:5 22:7,9	76:3,16,17 87:5,20,22	<b>restored</b>	67:17,22,23 68:9,12,14	43:17 44:2 44:2,4,9,24
195:11	129:11,19	163:12,17	23:18 24:23	88:19 92:3	<b>restructure</b>	68:16 69:10	45:7,13
<b>related</b> 6:13	<b>remember</b>	173:19	25:10,12,18	98:21 183:3	165:22	69:12,21	46:11 47:4
38:4 112:21	6:16 126:21	178:4	26:15,18	201:7,10	<b>result</b> 47:12	71:2,2	47:6,13
134:12	184:15	<b>representat...</b>	27:1,3	202:10,17	70:6 74:19	74:21 81:24	48:9,9,10
140:21	190:24	176:16	41:10,11,13	<b>residual</b> 32:6	95:10,21	85:23,23	48:12,13,17
167:24	<b>remind</b> 35:11	177:18	41:15,18	32:10 37:1	99:19	86:9 92:23	49:10,11
168:14	193:20	<b>represents</b>	42:23 43:2	37:4,6,13	152:14	97:1 100:10	50:3,4,6,9
172:21	<b>remove</b> 126:6	45:17 64:10	45:23 46:14	37:13,17	188:4	107:9,24	51:15 55:10
174:1,15	126:7	64:14,15	46:15,20	38:1,1,3,8	<b>resulted</b>	133:9	67:17 68:2
176:10	<b>renegotiate</b>	66:20	47:2 49:1,3	38:18 46:9	<b>resulting</b>	108:18	68:3,4,10
208:5	124:4	<b>reproduction</b>	49:9 57:3	46:12,12,15	<b>resulting</b>	109:22	69:21 73:13
<b>relates</b>	<b>renew</b> 18:5,9	216:19	64:1,2,23	65:1,13	75:13 99:11	110:1,2,3	73:22 75:11
172:23	123:22	<b>reps</b> 177:18	65:17 67:14	66:2,12,18	99:11	110:22	95:22 102:4
185:7	124:1	182:3	67:18,23	66:20,23	100:19	111:18,19	108:24
<b>relationship</b>	<b>renewal</b>	<b>request</b> 92:9	68:12 69:22	70:3 72:1	<b>results</b> 8:18	112:16,19	154:7
52:20	16:18 22:1	122:13,20	72:9 80:7	134:19,20	8:19 16:23	113:4 114:3	180:23
121:23	59:1	138:22	80:15,17	192:7,22	36:19 39:7	114:10,17	181:2
136:17	<b>renewals</b>	139:9	85:24 90:18	194:18	39:24 40:4	114:18	187:24
150:1,3	129:6	162:10	94:14,24	<b>resource</b>	74:6,8	117:20	<b>review</b> 40:1,2
171:7	<b>rent</b> 164:15	169:10	128:1 129:4	207:18	129:12	121:6,12	40:3 45:9
<b>relative</b> 48:5	<b>repair</b> 9:5	<b>requested</b>	129:7,8,13	<b>resources</b>	<b>retail</b> 9:20	128:1	48:19 49:5
118:1	18:5	68:10,14,16	130:13	207:16	20:4 27:9	132:22	55:9 64:1
140:19,20	<b>repeat</b> 12:22	71:3 86:7	132:23	<b>respect</b> 21:3	50:23 53:16	133:2,10	67:13 69:3
170:3	194:13	88:14 138:1	133:10	36:18 75:18	53:18 86:10	141:17	70:24 74:7
<b>relatively</b>	202:4	<b>requests</b>	139:8	98:23	86:11,21	143:11	74:8,10
79:7	<b>rephrase</b>	40:13	143:20	100:22	180:11	144:6,22	76:21 115:2
<b>release</b> 29:21	119:2	<b>require</b> 64:7	148:5	101:11	204:20	151:20	175:5
31:6	185:16	129:10	181:13	109:20	<b>retain</b> 214:4	155:5,11	214:12
<b>released</b>	<b>replace</b> 117:9	139:3	189:3 215:8	111:7	<b>retirees</b> 212:1	164:5	<b>reviewed</b>
29:18,24	123:12,17	<b>required</b>	<b>requires</b>	122:12	<b>retires</b> 212:2	172:10	48:21 66:8
30:12,13	124:13	37:22 66:6	11:17 45:22	125:17	<b>revenue</b> 4:15	173:6,9	70:2,7 74:5
31:8 62:19	184:22	66:9,15	66:10	164:5,6	4:17,17,19	174:17,20	106:11
62:22	<b>replacement</b>	71:12 80:13	129:16	168:19	13:14,19	174:21	131:22
144:15	16:18	130:6	131:17	<b>respond</b> 6:7	19:11,22	175:13,16	214:6,10
145:13	<b>replacing</b>	131:13	144:5	<b>response</b> 52:6	22:24 23:18	175:21	<b>reviewing</b>
<b>releases</b>	160:13	134:18	<b>reserve</b> 13:17	62:14	24:9 25:1	176:1,6,14	122:12
29:22	<b>report</b> 29:19	210:9	37:8,11,12	171:11	25:17 27:1	177:12,16	<b>reviews</b> 46:14
<b>relevant</b>	30:13	<b>requirement</b>	45:18 46:5	180:6	27:3 38:1	181:4,13,14	<b>revised</b>
170:1	168:12	42:19 43:5	46:7,13	<b>responses</b>	40:19 41:12	182:20	128:22
<b>rely</b> 97:11	<b>reported</b> 1:6	44:12 54:21	134:17,19	34:5 215:2	42:19,22	187:22	131:8,16
143:9 194:1	174:11	55:4,10	162:2,5,8	<b>responsibility</b>	45:6,11,13	188:4	<b>revision</b>
<b>remain</b> 106:7	<b>reporter</b> 1:7	69:10 71:23	162:12	176:5 177:6	46:19,22,22	194:22	131:9
168:14	5:11 216:14	73:12,20,22	<b>reserves</b> 19:5	<b>responsible</b>	46:24 47:2	205:3	<b>RFC</b> 49:14
<b>remainder</b>	216:21	74:4,22	19:7,13	139:5	48:19,23	<b>revenues</b>	49:21
126:24	<b>reports</b> 49:13	86:4,9	31:11,13,16	172:11	49:1,2,9,17	13:18,20	<b>right</b> 189:8
<b>remained</b>	135:18	92:23 133:2	31:21 32:4	178:20	52:12 54:21	25:2,3,4	<b>right</b> 8:11
79:14	137:16,21	145:1 162:2	32:24 72:3	<b>responsive</b>	55:3,3,10	32:8,10	25:1 27:5
<b>remaining</b>	137:21	162:5 181:4	145:1	174:12	55:18,21,23	34:18 37:4	41:15 43:11
60:19	151:3	181:12,14	<b>reset</b> 161:4	<b>rest</b> 52:6	56:7 57:13	42:3,3,5,7,8	44:15 48:7
<b>remains</b>	<b>represent</b>	<b>requirements</b>					

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

57:23 62:13	<b>rolling</b>	207:23	<b>scope</b> 98:18	81:21 89:12	95:3 96:11	44:24 45:6	199:13
62:13,17,18	203:16	<b>sales</b> 49:17	<b>scorecard</b>	92:6 93:12	107:13	46:3,4,4,7	203:6 207:9
68:1 81:9	<b>room</b> 2:16	77:3,6	144:16,17	97:19 98:3	158:17,20	46:13 50:18	207:22
82:18 83:2	17:13 31:5	<b>sample</b>	145:3,8	99:13	183:14,17	51:19 66:9	209:24
94:20,20	137:18	132:13,15	146:15	100:16,18	<b>seniors</b> 94:16	67:24 68:3	<b>services</b> 3:17
103:18	158:23	<b>San</b> 189:17	147:1	103:9	<b>sense</b> 26:12	72:10,11,15	3:20 8:12
112:8	<b>roughly</b>	<b>sanitary</b>	153:20	109:15	32:17 48:4	72:18 73:13	9:1 19:12
113:11	103:12	74:15 76:1	<b>scores</b> 144:17	118:10,20	110:24	73:18 74:9	25:20 37:11
116:18	157:1	179:7	<b>Scott</b> 4:23	137:9	120:19	74:14,14,16	41:8 45:14
119:4 120:3	188:24	<b>sat</b> 165:13	127:16,18	141:23	159:16,17	75:14,24	56:10,22
120:14	204:3,9	<b>save</b> 84:4	186:2	142:11	160:19	76:2,9	58:16 61:11
124:9,12	<b>rounded</b>	133:16	209:19	146:23	162:14,17	79:24 80:16	61:23 62:2
132:19	88:18 89:17	184:24	<b>Scout's</b>	148:4,9	<b>sent</b> 39:6	85:22 86:8	75:1,1 76:4
156:21	<b>rounding</b>	<b>savings</b> 109:5	193:22	155:17	204:2	86:10,12,19	76:4 79:23
157:2,5	204:24	109:7,11,20	<b>screen</b> 95:7	160:11	<b>sentence</b>	86:23 92:21	110:6,12
158:20	<b>RPR</b> 1:6	121:13,14	<b>script</b> 190:2	162:17	210:12	93:5 100:21	117:22
159:23	216:13	121:22,24	<b>seating</b> 7:20	163:22	<b>separate</b> 27:5	110:1 116:7	118:1
171:21	<b>RSF</b> 71:12	123:3,13	<b>second</b> 19:23	168:18	71:17 92:12	116:13	134:22,24
179:2	195:24	<b>saw</b> 100:20	112:10	169:3 170:7	186:4	117:5,6	138:24
183:13	196:5	165:2 184:3	163:23	181:4,14	209:22	133:1	164:8 165:8
184:20	<b>rule</b> 45:1	213:2	165:24	182:5	210:17,18	134:17,19	173:4,11
185:3	128:12	<b>saying</b> 35:21	171:15	190:13	<b>separately</b>	142:22	177:23
188:22	130:21,23	52:8 98:11	204:15	199:12,15	102:18,20	143:13	<b>session</b> 39:4
192:17	131:10,10	175:19,22	<b>secondary</b>	206:1	179:15	144:19,21	<b>set</b> 29:22
206:18,18	131:12,15	175:23	141:5	209:14	185:14	145:1	30:10,19
209:5	131:15,16	192:16	<b>section</b> 36:10	213:4	<b>September</b>	146:11	32:3,20
<b>right-hand</b>	131:17,20	198:5	38:21 87:3	<b>seeing</b> 29:11	215:5	148:14	38:7 53:10
99:16	132:2	<b>says</b> 123:2	116:14	72:7 77:2	<b>series</b> 31:15	150:18	86:14 98:23
<b>rights</b> 163:11	136:13	161:20	164:17	95:6 118:18	50:11	151:7,14	99:1 105:16
164:9	<b>rules</b> 127:24	193:1 203:7	<b>sections</b> 7:19	177:5	<b>seriously</b>	152:8,11	128:13
<b>rising</b> 137:23	130:22	213:9	39:9 116:6	186:18	125:22	153:15	136:4,5
159:18	131:7	<b>scattered</b>	<b>sector</b> 141:12	215:13	<b>serve</b> 9:3,17	154:8	155:7
<b>risk</b> 89:24	136:24	208:3	141:15	<b>seen</b> 53:21	27:6 50:17	156:13,15	161:17
101:17	<b>run</b> 166:8	<b>scenario</b>	142:18,21	79:5 190:16	151:6	156:23	186:3 205:9
140:23	<b>runaround</b>	96:14 143:6	143:23	196:21	180:11	162:2,8,12	210:2 211:4
141:6	174:8	206:22	144:8 146:3	<b>segments</b> 7:8	<b>served</b> 124:3	163:24	<b>sets</b> 30:9
145:16,17	<b>running</b>	<b>scenarios</b>	<b>sectors</b>	<b>segue</b> 172:6	<b>service</b> 3:1	166:3,21	<b>setting</b> 8:17
146:2,5	110:17	137:6	142:14	<b>selected</b>	8:16,19	167:7,12,23	20:16 55:1
160:9,10,10	<b>S</b>	<b>scenes</b> 106:22	<b>security</b>	147:8	13:8 15:19	168:9,13	55:5 90:19
160:16	<b>S&amp;P</b> 145:12	<b>schedule</b>	125:6,9	<b>self-generat...</b>	15:24 16:3	169:23	<b>settled</b> 113:21
<b>risks</b> 18:4,8	<b>safe</b> 11:13,17	210:6	141:4,17	37:21	16:9,15,16	171:6,8	192:5
101:18	12:12 41:5	<b>schools</b>	<b>sedimentati...</b>	<b>self-imposed</b>	16:24 17:3	172:5,6,9	<b>settlement</b>
140:12	41:7 80:7,8	183:18	126:8	71:7	17:8,9 19:3	172:15,16	192:10
<b>river</b> 10:15	112:23	<b>Schuylkill</b>	<b>see</b> 6:18 8:3	<b>sell</b> 189:10,15	19:23 20:1	172:19,22	<b>sewer</b> 49:17
10:17 126:1	125:21	10:17	10:20 11:6	<b>sending</b>	20:9 21:12	172:23,24	50:17 61:19
128:8,19	126:15	<b>Schwarz</b> 4:23	14:9 17:3	124:22	23:16 25:15	173:18	76:1,8 88:6
<b>Rob</b> 8:5	131:5,7	4:23 127:16	19:6 27:18	<b>sends</b> 124:23	25:16 26:11	176:13,15	89:8 92:6
<b>Robert</b> 3:23	175:11	127:18,18	28:5 34:24	<b>senior</b> 41:19	26:24 36:14	176:18	135:5
<b>rock</b> 174:18	<b>safety</b> 125:16	186:2,2	54:10,12	42:9,9	37:8,12	178:5,16	142:23
<b>role</b> 140:6	<b>salaries</b>	209:19,19	55:20 65:3	72:11,14	39:1,21,24	179:13	147:15
<b>roll</b> 111:24	207:24	210:8,14,23	68:8 70:13	88:11,11	40:4 41:5	180:1	174:15
112:12	<b>salary</b> 58:4	<b>science</b> 27:24	72:13 73:15	93:13 94:9	41:19,21	187:19	176:11
123:23	207:10,20	<b>Scoop</b> 37:8	74:1 78:16	94:10,22	42:9,14	196:4	180:7,10

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

204:16	92:6,11	23:11 40:23	<b>solids</b> 133:3,6	194:16	106:10	83:19 84:2	<b>standards</b>
208:6,6,12	93:1,2,3	77:19 86:4	<b>solution</b>	195:15	108:20	139:2	12:7 20:19
<b>sewers</b> 11:1	102:6	<b>size</b> 33:15	176:2	196:15	111:20,23	141:17	21:7 32:23
<b>share</b> 97:16	107:14	99:22	<b>Solutions</b>	201:3,5	141:12,15	156:3	128:7,9
148:21	110:21	104:10,14	3:14	205:9	179:9	<b>stabilization</b>	183:5 201:2
187:19	114:10	104:23	<b>solvency</b>	<b>sound</b> 49:21	185:22	32:5,7,19	<b>standpoint</b>
211:22	133:5 136:8	144:20	21:18 93:7	81:1	204:13	33:19 34:12	88:16
<b>sheds</b> 11:6	137:13	181:18,20	<b>solvent</b> 127:6	<b>sounded</b> 30:4	210:6 213:1	34:13,16,21	172:14
<b>sheet</b> 62:13	150:8 162:7	182:11	<b>somebody</b>	30:4	<b>specifically</b>	42:13,21	180:17
<b>shift</b> 64:2	173:17	<b>skilled</b> 12:13	61:4 114:22	<b>sounds</b> 47:9	34:8 86:5	43:9,16,18	<b>stands</b> 49:21
74:7	174:13	<b>skipping</b>	161:1 167:2	61:3 125:2	87:17 108:2	43:20 44:12	74:23 91:5
<b>shifts</b> 31:2	175:16	201:3	167:7,15	171:15	109:22	45:3,17,22	<b>start</b> 6:9 7:22
202:8	193:17	<b>slide</b> 7:23	194:1	<b>source</b> 49:10	126:13	46:21 48:18	12:22 13:11
<b>shock</b> 40:20	<b>sides</b> 27:10	13:9 21:8	<b>somebody's</b>	192:23	164:23	67:11 68:5	27:1,2
<b>shopping</b>	93:2 177:19	38:20,21	167:1	193:8	167:13	68:8,11	118:15,18
149:15	<b>signal</b> 118:23	40:7 41:18	<b>somewhat</b>	<b>sources</b>	168:12,15	69:6,8,14	151:22
<b>short</b> 24:11	124:22,23	45:8 46:18	6:15 132:23	128:16	170:16	69:20,23	154:5
161:15	<b>signed</b> 191:5	48:21 49:4	<b>Sonny</b> 1:13	141:16	178:11	70:3 72:2	186:13
162:11	<b>significance</b>	49:7 54:15	3:5	<b>Southwest</b>	202:9	73:17 136:6	191:15
212:17	33:7	55:8,9	<b>Sonny's</b>	133:23	<b>specifics</b> 38:6	151:13,23	196:6 197:2
<b>short/long</b>	<b>significant</b>	56:24 61:7	103:3	<b>space</b> 56:14	<b>specs</b> 207:11	182:4,6	<b>started</b> 48:6
146:10	29:6 90:1	63:24 67:13	<b>sorry</b> 7:13	155:17	<b>spectrum</b>	192:6,21	202:18
<b>shot</b> 212:14	99:14	67:16 70:1	8:14 9:24	<b>Spahr</b> 4:11	89:13	194:18,21	<b>starting</b>
<b>show</b> 62:20	154:18,21	75:23 80:19	12:21 14:3	38:19 193:5	<b>speed</b> 106:17	195:18	140:3
77:17	201:9	81:21 97:19	14:20 15:6	193:7	<b>spend</b> 21:10	197:19	155:19
181:24	<b>significantly</b>	99:9 100:9	18:20 24:18	194:10	120:18	198:19	202:24
<b>showed</b> 101:4	30:6 82:10	107:17,21	24:21 30:3	<b>speak</b> 4:13	144:11	<b>stable</b> 79:8,14	<b>starts</b> 23:22
<b>shower</b> 54:11	90:20	107:22,23	30:24 41:22	16:9,9,10	147:10	154:10	<b>startup</b> 56:16
<b>showing</b> 36:6	155:18	109:23	69:9 71:6	31:1 33:4	153:2	<b>staff</b> 57:5,10	<b>state</b> 12:7
89:16,18	<b>similar</b>	<b>slides</b> 8:15	82:17 88:24	54:16 60:22	170:24	62:6 80:18	58:14 80:7
110:23	102:22	41:2 49:4	104:19	118:12	<b>spending</b>	110:14	127:24
<b>shows</b> 23:12	145:14	138:7	105:7	141:10	65:15 69:5	112:18	131:20,20
89:10 99:9	172:6	<b>slight</b> 60:7	180:15	179:9	143:22,24	153:3	131:22
108:10	176:10,15	187:13	186:16	192:11	<b>spent</b> 122:17	163:16	157:4 164:9
110:2,4	214:15	<b>slightly</b> 135:6	194:13	207:7	152:9 154:1	164:4 166:5	187:21,22
145:8	<b>simple</b> 25:21	144:1 192:3	201:4,14	208:21	198:11	166:8,17	188:13
149:16	145:21	212:20	203:20	<b>speakers</b> 39:8	<b>spiel</b> 156:19	176:12	<b>state-appro...</b>
212:5	162:13	<b>slow</b> 190:4	<b>sort</b> 25:1	<b>speaking</b>	<b>spike</b> 155:16	<b>staffing</b> 56:5	15:14
<b>shut</b> 118:14	<b>simply</b> 20:7	214:23	36:11 72:4	15:10 30:9	<b>spiked</b> 155:21	56:7,14	<b>stated</b> 65:16
118:19	20:15	<b>Sludge</b> 11:4	105:9	62:23 82:15	<b>spits</b> 145:3	57:2,4,14	80:24
164:10	<b>simulation</b>	<b>small</b> 148:24	106:21,22	103:13	<b>spoke</b> 67:10	57:15 58:1	205:18
166:15	102:8	148:24	146:11	126:12	<b>spoken</b> 104:4	63:15	<b>statement</b>
180:5	<b>single</b> 165:15	161:11	147:22	169:22	<b>spread</b> 81:24	206:10,24	29:17 63:11
<b>shutoff</b> 117:8	167:14	<b>smaller</b> 33:15	151:1,17	194:4	155:5,11,18	<b>stages</b> 119:12	63:19 138:3
<b>shy</b> 14:4	188:3,7	173:5	152:1 153:6	211:19	157:16,24	120:10	169:10
<b>side</b> 11:1,19	<b>sit</b> 14:13	<b>Smith</b> 58:20	153:18	<b>special</b> 38:8	<b>spreads</b> 81:18	<b>standard</b>	196:21
13:17 20:24	<b>sitting</b> 31:5	<b>snapshot</b>	173:18	<b>specialist</b>	82:4 155:15	20:17	213:6
24:24 25:1	127:3	87:18	174:8 177:5	163:12	<b>spreadsheet</b>	128:21	<b>statements</b>
27:11 45:18	<b>situation</b>	<b>social</b> 165:8	178:1 183:1	<b>specialized</b>	145:3	130:12	29:4,5,22
64:19 67:21	102:3 158:1	<b>sold</b> 188:23	184:8	178:14	<b>spring</b> 132:13	149:1,4	29:24 30:11
68:2 69:10	184:8	<b>solder</b> 126:18	185:12	<b>specific</b> 32:3	178:1	155:12	30:15,17,19
69:12 86:16	<b>six</b> 23:21	127:5,9	186:17	34:18 45:3	<b>stability</b>	160:5	31:8 72:24
86:17,21	<b>six-year</b>	<b>solid</b> 51:4	190:20	62:20 81:16	21:18,20	173:20	190:8 193:1

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

193:19	191:21	77:15 78:8	186:7	106:12,16	146:22	129:11,19	105:7
<b>states</b> 130:21	204:17	110:15	200:16	108:13	153:9	140:24	110:13
141:1	<b>strange</b>	125:3	<b>suite</b> 149:19	135:2 148:7	154:10,21	145:16,20	121:20
<b>stations</b> 10:18	200:18	129:16	<b>sum</b> 203:14	160:17	176:18	154:19	146:21
10:22	<b>streamline</b>	<b>stupid</b> 198:15	<b>summary</b>	164:19	179:1 182:4	160:17,23	147:10
<b>Statistic</b>	117:7	<b>style</b> 190:18	36:6 78:10	168:4	200:10	161:2 162:7	152:9,22
215:1	<b>Street</b> 1:5	<b>subaccount</b>	<b>summer</b>	169:11	201:1 208:7	167:5	159:1
<b>statistics</b>	<b>strength</b> 84:7	38:7	132:14	176:21	208:12	184:18	160:23
214:21	141:19	<b>subcommitt...</b>	<b>supervision</b>	178:2 191:2	<b>system's</b>	207:3	175:1,7
<b>statute</b>	142:2	117:21	216:21	193:3,9	66:12	<b>taken</b> 39:13	191:7
168:11	144:20	<b>subject</b> 12:9	<b>supervisors</b>	195:10	<b>system-wide</b>	70:17,18	202:16,17
<b>stay</b> 96:13	178:24	192:11,13	166:11	197:19	179:17	84:21	203:15
<b>stayed</b> 130:22	<b>strengtheni...</b>	192:24	<b>supplemental</b>	198:16	<b>systems</b> 9:6	118:13	<b>talks</b> 144:9
<b>steady</b> 77:6	128:20	195:5	63:10,20,21	199:2 202:6	13:5 146:22	134:4	207:18
190:4	<b>strictly</b>	<b>subjecting</b>	<b>supplied</b>	203:5,9	147:6	159:19	213:7
<b>stenographic</b>	180:14	215:14	10:16	213:4	148:10,13	163:6	<b>tap</b> 126:12
216:8	<b>stringent</b>	<b>submission</b>	<b>supply</b> 10:23	<b>surface</b> 90:5	174:22	164:23	<b>tape</b> 87:20
<b>step</b> 34:22	127:23	112:14	125:16	90:6		169:8	<b>target</b> 67:7
49:8 70:21	129:3	<b>submit</b> 15:13	151:9	<b>surprised</b>	<b>T</b>	171:14	71:7 95:18
160:23	131:21	<b>submitted</b>	<b>support</b> 56:1	80:23	<b>t</b> 88:17 216:3	186:7	105:16
170:13	<b>strong</b> 43:21	17:14 34:19	56:14 58:24	<b>Susan</b> 4:18	216:3	193:21	<b>targeted</b>
<b>stepping</b> 8:11	79:5 84:9	58:13 154:1	110:19	<b>suspect</b>	<b>table</b> 2:16	216:8	68:21
35:5 96:11	146:21	<b>subordinate</b>	112:22	202:24	31:6 63:14	<b>takes</b> 131:18	<b>targets</b>
<b>steps</b> 49:6	<b>stronger</b>	83:22	156:21	<b>sustain</b>	72:1 99:8	144:2	105:10
<b>Steve</b> 17:14	154:10	156:11,12	<b>supported</b>	138:23	155:22	<b>talk</b> 5:9 7:11	<b>tax</b> 29:19
<b>stick</b> 18:2	<b>strongest</b>	158:16,21	55:5	<b>Sustainabili...</b>	190:18,19	20:18 81:1	82:20
<b>stood</b> 165:13	140:22	158:24	<b>supportive</b>	60:15	201:13	87:3,4,5,7	114:10
<b>stop</b> 52:24	149:22	159:6	212:22	<b>switch</b> 7:19	212:2,5	87:11,14	<b>taxes</b> 9:9
167:11	<b>structural</b>	<b>subscription</b>	<b>supports</b>	120:17	<b>tables</b> 17:2	89:22,23	<b>team</b> 7:9
<b>storage</b> 9:16	32:13	101:11	139:3	183:23	191:19,20	92:20 94:7	142:2 166:7
10:22	172:19	103:9,14	<b>supposed</b>	<b>switching</b>	191:20,21	117:23	174:1 175:5
<b>stormwater</b>	<b>structure</b>	<b>subsequent</b>	8:13 27:19	8:13 116:21	191:21	122:13	206:1
9:14 21:4	82:9 83:21	101:19	117:1	<b>system</b> 9:14	<b>Taony-Fra...</b>	136:7 140:4	<b>technical</b> 8:6
49:18,18	86:15 97:6	<b>subsequently</b>	118:16	16:19,20	129:17	145:10	42:15 99:20
50:18 58:21	141:22	70:14 76:13	140:13	18:7,8,9	<b>tad</b> 214:24	153:23	187:1
74:16 76:1	148:3	<b>substantial</b>	<b>suppress</b> 45:4	21:22 25:17	<b>tailored</b>	158:12	<b>technically</b>
76:14,18	156:10,11	123:13	<b>Supreme</b>	25:19 26:3	164:21	162:15	37:6 191:16
79:10,12,16	156:17	195:17	130:21	27:4,5 47:2	<b>take</b> 13:14	166:11,12	<b>technologies</b>
86:21,22	158:16	<b>subtracting</b>	<b>surcharge</b>	52:6,9	16:4 19:22	167:15	12:14
88:6 89:9	159:4,10	47:23	175:8	56:12 64:3	20:3,7	170:7	<b>technology</b>
92:11,12,14	162:4 172:9	<b>success</b>	178:18,21	65:10 67:19	21:13,15	171:17,19	118:11,23
92:15,16	177:9	189:23	<b>sure</b> 2:13	67:22,23	22:2,23	<b>talked</b> 19:3	119:6 122:5
128:16	182:10,15	<b>successful</b>	12:23 16:8	68:13 69:1	23:8,13	85:19,22	126:1
129:9,10	<b>structures</b>	121:7	21:9,24	78:24 79:22	24:7,11	86:8,24	<b>telephone</b>
138:24	156:9 159:3	133:16	22:24 24:9	83:19 84:3	25:9,17	105:12	91:24
173:12	<b>studies</b> 18:7	<b>sudden</b>	24:12 34:7	84:7,9 97:5	27:2 28:6	128:2	<b>tell</b> 8:9 13:3
174:2,12,14	23:11 36:14	150:21	36:8 41:9	100:22	35:22 41:3	153:18	34:8 119:20
174:15	<b>study</b> 8:18	<b>sufficiencies</b>	42:10,13,18	110:17	43:15 46:17	192:19	119:21
175:2,6,11	13:10 21:13	139:2	43:8 46:6	123:5,6	48:23 69:9	197:20	123:9 126:3
176:3,10,11	36:18 39:6	<b>sufficient</b>	71:5 78:14	126:10,10	84:19 86:9	201:4,22	133:15
176:23	39:24 40:8	35:21	80:24 82:15	126:15	90:3 93:3	205:5	193:22
179:4,5,7	40:9,10	<b>suggest</b> 79:6	82:24	129:10,18	101:2 106:3	<b>talking</b> 33:18	<b>telling</b> 193:23
180:4,9,10	41:3 74:9	<b>suggests</b>	101:17	144:18,19	114:4,7	87:17,22	<b>temporary</b>



Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

124:10	215:2	167:5	143:3,18	180:11	171:3,8	25:17 41:21	56:23 61:8
<b>ten</b> 9:2 10:12	<b>testing</b>	177:15,24	146:16	186:4 188:5	175:13	42:19 43:5	61:10,12,22
146:18	123:11	182:3	147:22,23	190:22	178:1	43:6 50:23	65:14,18
161:4	184:24	189:14	149:24	192:5	187:20,23	51:5,7	68:1 198:18
<b>tenant</b> 163:12	<b>thank</b> 6:3 7:5	202:21	150:16	204:13	188:6,13	72:11,17	<b>transition</b>
163:16	10:7,10	207:1	151:24	205:7 210:9	189:9	73:22 74:12	96:1
164:9,12	12:17 18:11	<b>things</b> 2:8	152:5,19	<b>thresholds</b>	190:16	74:13,15,15	<b>translate</b>
<b>tenants</b> 164:1	19:16 22:21	17:7 24:11	153:1,21	105:8 169:1	193:13	75:2,4	142:10
164:13,14	24:3 30:24	28:14 54:12	154:4,23	169:4	196:16,16	76:10	<b>transmission</b>
166:5,13,18	33:23 35:7	80:23 95:18	155:22	<b>throws</b> 148:3	203:21	128:10,12	52:6,9
167:14	36:22 38:12	114:20	156:20	<b>Thu</b> 3:21	206:5 214:2	131:16	<b>transmitters</b>
<b>tenants'</b>	39:3 53:4	123:24	158:8 159:9	<b>tier</b> 98:9,13	214:5	143:8	117:10
163:11	63:18 78:18	126:5,6	159:18,21	104:5,7	<b>timely</b> 117:7	182:20	<b>transparent</b>
<b>tend</b> 166:17	84:11 111:1	130:5 133:2	166:9	105:4,16,17	<b>times</b> 27:7	201:16	144:17
<b>term</b> 40:15	138:12	142:19	171:17	105:18	40:6 42:14	204:19	145:15
40:17,22	139:20	143:14	176:1 177:4	<b>tiers</b> 97:18,23	67:10 121:8	211:24	<b>trash</b> 129:17
59:13 60:19	163:14	144:7	177:20	98:12,16,23	150:22	<b>totally</b> 160:6	129:18
77:17 92:19	171:23	147:22	178:7	99:1,9,13	151:12	<b>touch</b> 31:20	<b>Treasurer</b>
117:14	172:2	153:21	179:12	106:1 169:3	<b>timing</b> 60:22	<b>touched</b> 19:1	135:13
127:21	179:11	155:3	183:7 185:7	<b>tightly</b> 83:23	<b>TMDL</b>	106:22	<b>Treasury</b>
130:9 131:2	183:20	170:18	189:8	<b>tilted</b> 183:2	128:13	107:23	82:21,22
132:9	185:6	208:9,15,21	190:11	<b>Tim</b> 163:11	<b>today</b> 7:7,23	<b>tough</b> 196:2	<b>treat</b> 9:14,15
143:24	186:11,13	213:1,21	195:22	163:15	18:23 28:7	<b>tour</b> 189:16	126:1 169:9
146:9,10,12	190:7	<b>think</b> 2:15	196:16	<b>time</b> 18:15	34:4 35:20	<b>track</b> 182:3	<b>treated</b> 11:8
159:15	191:24	5:7 7:2	197:2,3	20:8,24	41:16 97:17	196:15	166:22
<b>terminate</b>	201:20	13:21 18:8	201:15,23	21:10 27:2	106:16	<b>tracking</b>	<b>treatment</b>
52:1	202:13	18:24 21:19	201:24	30:12 35:21	122:14	79:13	11:2,5
<b>terms</b> 6:6	204:23	23:2 26:4	202:18	39:13 40:24	133:11	<b>trailing</b> 77:17	126:2,14
37:16,23	208:23	34:11 36:5	203:11	43:18 60:7	161:23	<b>trails</b> 52:6	127:12
44:1 81:12	212:9 215:9	38:22 52:9	205:23	65:22 84:15	163:17	113:16	128:15
86:1 89:8	215:13,16	53:8 63:1	208:21,24	84:21 86:10	170:10	<b>train</b> 177:17	129:14
91:3,12	<b>Thanks</b> 50:1	63:11 65:12	211:18	91:20 94:23	171:13	<b>training</b>	<b>tremendous</b>
96:11 173:6	<b>theft</b> 117:21	71:19 83:3	<b>thinking</b>	95:24 102:4	186:19	177:22	36:7 121:13
180:17	117:24	103:5,16	115:8 134:3	102:9 110:8	187:4	<b>Tran</b> 3:21,21	133:6
185:2,15	<b>theme</b> 143:21	104:11	153:3 171:5	110:10	188:16	<b>transaction</b>	<b>trend</b> 137:10
190:15	143:22	105:11,15	<b>thought</b>	111:24	190:5	157:19	142:11
191:8 200:4	146:6	106:9,20	97:10 140:3	115:13,21	201:24	<b>transactions</b>	<b>trends</b> 81:17
213:16	<b>themes</b> 151:5	107:5	169:22	121:7	211:18	155:8	142:7
215:4	153:6	108:19,24	190:24	122:22	<b>toilets</b> 54:11	<b>transcript</b>	152:15
<b>Territory</b> 3:2	<b>theory</b> 159:12	112:3 113:6	204:24	125:2,13	<b>told</b> 6:9 62:6	35:20	<b>tried</b> 101:16
<b>test</b> 73:15	<b>thereabout</b>	114:20	<b>three</b> 10:19	131:17	124:7	216:10,18	121:9
79:9 132:11	104:11	119:20	11:4 13:11	138:16	<b>tons</b> 130:20	<b>transfer</b>	152:23
<b>tested</b> 94:11	<b>thereabouts</b>	120:15	18:22 23:17	139:13	<b>tool</b> 162:4	37:22,22,23	<b>tries</b> 155:22
94:12	202:19	121:4 122:9	67:10 79:4	140:16	<b>top</b> 11:16	66:2,5,10	<b>truck</b> 118:3
114:24	<b>thieves</b>	122:11,14	79:9 97:18	144:12	13:12 25:8	66:20 67:11	119:4
<b>testers</b> 20:4	166:19	122:19,20	98:12 121:8	147:10	93:23 94:3	134:18	<b>trucks</b> 124:23
<b>testimony</b>	<b>thin</b> 126:16	122:22	124:18	152:8,9	95:3,5	176:4	<b>true</b> 170:13
63:10,21,22	<b>thing</b> 2:15	124:12	128:3	153:2 154:1	119:19,21	177:13	179:22
83:13	22:23 23:4	132:6,20	132:11	160:22	133:13	194:22	182:5
103:20	38:14 68:23	133:3	148:12,19	161:3,6	<b>topic</b> 19:18	<b>transferred</b>	214:20
142:15	79:8 89:21	136:15	148:20	162:23	162:20	66:12,14	<b>trust</b> 37:19
154:1	106:24	137:7,10,13	153:16,21	163:6	<b>total</b> 10:5	67:5 194:24	37:20 38:2
214:22	142:23	142:17	162:16	170:14,24	23:18 24:24	<b>transfers</b>	192:4

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

<b>truth</b> 193:22 193:24	198:10 213:1	150:6	<b>unregulated</b> 131:9,13	210:6	193:6 194:9	140:5,24	<b>wanted</b> 35:24
<b>try</b> 6:16,18 23:1 26:9 26:20 52:17 54:1 65:6 95:12 97:24 116:17 144:16 145:14 151:1 169:15 183:8	<b>two-way</b> 123:5 <b>type</b> 75:7 78:5 86:12 118:23 177:15,24 179:24 207:21 <b>types</b> 27:12 27:14 82:9 93:16,18 182:16	<b>understand</b> 23:2 30:4,7 81:16 96:17 102:8 108:13 121:1 136:24 170:9 172:14 178:8,12 198:24 210:12 211:14	<b>unusual</b> 158:7 <b>update</b> 77:16 133:8 <b>upfront</b> 61:17 <b>upgrade</b> 142:10 <b>upper</b> 168:22 <b>uptight</b> 140:9 <b>urban</b> 147:12 <b>urge</b> 171:4 <b>usage</b> 26:7 77:1 78:20 88:3 89:4 95:17 97:24 98:2 99:10 99:13 104:8 143:9,10 201:4,22 202:15,17	<b>USTRa</b> 164:5 164:8 166:9 166:22 167:9,13,24 <b>usual</b> 194:1 <b>usually</b> 149:2 158:2 210:9 <b>utilities</b> 14:15 24:6 41:13 53:21,22 59:2 87:10 89:10,14,23 90:2 91:8,9 92:15 101:15,16 102:14 119:17 139:5 142:19 143:19,23 148:10 164:16 173:20,21 <b>utility</b> 40:18 41:12 45:12 46:20 65:10 72:3,23 73:4 74:19 80:6 81:1 90:3,21 92:23 93:2 93:8 101:9 121:3 136:9 139:2 141:15 142:21 143:9 164:8 168:15 172:14 196:19	<b>valid</b> 122:20 214:8 <b>value</b> 66:11 66:14 73:1 <b>valves</b> 10:18 141:24 159:8,11,16 159:17,23 160:6,8,20 <b>variation</b> 181:23 <b>variety</b> 24:5 <b>various</b> 7:8 7:18,19 16:1 17:2 27:13 77:23 118:5 130:5 169:1,3,4 192:20 <b>vary</b> 182:13 <b>Veatch</b> 4:2,4 4:7 30:1,9 34:23 39:19 63:20 85:3 85:18 107:23 179:20 191:11 213:6 <b>vendor</b> 119:10 124:5 <b>vendors</b> 120:12 133:18 185:2 <b>verbal</b> 167:3 <b>verbally</b> 135:20 <b>versa</b> 22:20 <b>version</b> 105:20,22 <b>versus</b> 33:1 84:4 147:15 212:1,7 213:13 <b>vet</b> 191:3 <b>vetted</b> 213:18 <b>vice</b> 22:20 <b>view</b> 6:15 24:11 89:19	<b>violate</b> 191:14 <b>virtue</b> 114:23 <b>visitors</b> 12:18 <b>voice</b> 169:15 <b>volume</b> 59:21 60:1,3,5,6 86:18 <b>volumes</b> 49:17 53:18 <b>vote</b> 130:22	52:21,24 67:3 95:1 102:2 106:1 106:16,24 109:14 117:4 163:18 165:12,14 187:10 190:10,12 194:15,17 196:15,18 198:16 214:2
<b>trying</b> 15:24 16:2 21:14 25:16 30:6 31:1 38:23 54:7,7 61:4 71:20 81:8 93:4,7 95:23 96:17 103:6 122:10 152:10 166:24 191:10 209:14	<b>typical</b> 87:20 87:21 88:4 88:19 91:14 121:10 136:18 148:12 <b>typically</b> 20:4 87:5 148:20 148:22 149:3	<b>understand...</b> 114:6 123:4 168:20 169:7 172:21 192:21 210:7 211:7	<b>use</b> 13:7 16:23 19:5 20:15,18 21:7 26:3 28:3,10 31:19 32:12 32:14 38:3 53:10,11 68:7 87:20 90:5,8 102:22 105:10 118:24 119:7 158:2 158:14 165:11 166:1 169:15 182:8 192:20	<b>utility</b> 40:18 41:12 45:12 46:20 65:10 72:3,23 73:4 74:19 80:6 81:1 90:3,21 92:23 93:2 93:8 101:9 121:3 136:9 139:2 141:15 142:21 143:9 164:8 168:15 172:14 196:19	<b>valid</b> 122:20 214:8 <b>value</b> 66:11 66:14 73:1 <b>valves</b> 10:18 141:24 159:8,11,16 159:17,23 160:6,8,20 <b>variation</b> 181:23 <b>variety</b> 24:5 <b>various</b> 7:8 7:18,19 16:1 17:2 27:13 77:23 118:5 130:5 169:1,3,4 192:20 <b>vary</b> 182:13 <b>Veatch</b> 4:2,4 4:7 30:1,9 34:23 39:19 63:20 85:3 85:18 107:23 179:20 191:11 213:6 <b>vendor</b> 119:10 124:5 <b>vendors</b> 120:12 133:18 185:2 <b>verbal</b> 167:3 <b>verbally</b> 135:20 <b>versa</b> 22:20 <b>version</b> 105:20,22 <b>versus</b> 33:1 84:4 147:15 212:1,7 213:13 <b>vet</b> 191:3 <b>vetted</b> 213:18 <b>vice</b> 22:20 <b>view</b> 6:15 24:11 89:19	<b>wait</b> 6:11 103:20 <b>waiting</b> 111:21 <b>walk</b> 102:12 <b>want</b> 2:15 5:12 8:9 13:11 19:22 20:2,7 21:4 21:17 22:23 22:24 23:4 23:5 24:7 26:1 33:5 35:14 36:3 40:18 41:6 41:8,11,16 42:10,13 43:7 81:23 83:20,21,22 83:23 84:8 84:8 106:2 115:13 120:10 122:6 125:1 125:4 127:6 134:6 142:11 147:11,12 147:17 148:7 153:5 160:4,15,17 171:17 175:14 183:22 203:5 205:11,21 211:20 215:13,16	<b>warmer</b> 132:13 <b>wasn't</b> 52:21 106:5 107:10 122:3 137:20 186:16 191:7 203:9 213:4 <b>Wasser</b> 147:18 <b>waste</b> 166:23 178:19 <b>wastewater</b> 9:1,6,14 10:11,24 11:2,5,7,19 13:5 16:13 16:20 20:24 26:5 27:4 41:7 74:14 75:24 76:10 101:8 128:15 133:5 138:24 143:18 178:24 179:7 <b>wastewaters</b> 191:20 <b>watching</b> 194:8 <b>water</b> 1:1 3:9 4:5,9,17,19 4:22,24 5:2 5:16 6:4 9:1
<b>Tuesday</b> 172:18	<b>Uh-huh</b> 192:18	<b>unexpected</b> 32:21	<b>useful</b> 114:21 117:11 161:15,19 161:21 162:11 <b>user</b> 27:16 <b>users</b> 2:24 25:18 <b>uses</b> 26:5 46:15 78:21 87:22 155:7	<b>utilization</b> 98:10,14 <b>utilize</b> 60:14 <b>utilized</b> 30:1 125:24 <b>utilizes</b> 172:10 <b>utilizing</b> 19:12 70:5	<b>vague</b> 16:1 <b>Valarie</b> 4:10	<b>W</b>	
<b>turn</b> 8:2 12:16 163:17 212:11	<b>ultimate</b> 178:2 <b>ultimately</b> 90:22 136:4 137:11	<b>unforeseen</b> 32:21 33:10 71:13,22	<b>unfunded</b> 127:20 150:9,12,13 152:17	<b>unfunded</b> 127:20 150:9,12,13 152:17	<b>vague</b> 16:1 <b>Valarie</b> 4:10		
<b>turns</b> 129:17	<b>unaccounted</b> 179:16	<b>unfunded</b> 127:20	<b>unique</b> 101:5 101:9	<b>unfunded</b> 127:20			
<b>twelve</b> 203:16	<b>unaudited</b> 180:15	<b>unfunded</b> 127:20	<b>unit</b> 29:21 163:12,16 178:19 206:18	<b>unfunded</b> 127:20			
<b>two</b> 11:22 27:8 32:3 37:19 40:11 66:4 71:9 85:20,21 86:6 93:1 123:21,24 124:1,1 125:24 135:18 149:3 162:16 163:18 165:7 177:11,14 185:12	<b>unaudited</b> 29:5 30:1 <b>uncertainty</b> 137:22,24 <b>unchanged</b> 144:1 <b>uncollected</b> 51:9 181:14 <b>uncollectibles</b> 181:18 <b>undergoing</b> 185:20 <b>underlie</b> 105:4 <b>underlying</b> 84:7 145:19 146:1 150:2	<b>unfunded</b> 127:20	<b>unit</b> 29:21 163:12,16 178:19 206:18 <b>United</b> 141:1 <b>units</b> 130:17 <b>universal</b> 127:5 <b>universe</b> 140:22,23 <b>unknown</b> 137:3,4 <b>unpaid</b> 181:7	<b>unfunded</b> 127:20			
	<b>unaccounted</b> 179:16	<b>unfunded</b> 127:20	<b>unique</b> 101:5 101:9	<b>unfunded</b> 127:20			
	<b>unaudited</b> 180:15	<b>unfunded</b> 127:20	<b>unit</b> 29:21 163:12,16 178:19 206:18	<b>unfunded</b> 127:20			
	<b>unaudited</b> 29:5 30:1	<b>unfunded</b> 127:20	<b>unique</b> 101:5 101:9	<b>unfunded</b> 127:20			
	<b>uncertainty</b> 137:22,24	<b>unfunded</b> 127:20	<b>unit</b> 29:21 163:12,16 178:19 206:18	<b>unfunded</b> 127:20			
	<b>unchanged</b> 144:1	<b>unfunded</b> 127:20	<b>unit</b> 29:21 163:12,16 178:19 206:18	<b>unfunded</b> 127:20			
	<b>uncollected</b> 51:9 181:14	<b>unfunded</b> 127:20	<b>unit</b> 29:21 163:12,16 178:19 206:18	<b>unfunded</b> 127:20			
	<b>uncollectibles</b> 181:18	<b>unfunded</b> 127:20	<b>unit</b> 29:21 163:12,16 178:19 206:18	<b>unfunded</b> 127:20			
	<b>undergoing</b> 185:20	<b>unfunded</b> 127:20	<b>unit</b> 29:21 163:12,16 178:19 206:18	<b>unfunded</b> 127:20			
	<b>underlie</b> 105:4	<b>unfunded</b> 127:20	<b>unit</b> 29:21 163:12,16 178:19 206:18	<b>unfunded</b> 127:20			
	<b>underlying</b> 84:7 145:19 146:1 150:2	<b>unfunded</b> 127:20	<b>unit</b> 29:21 163:12,16 178:19 206:18	<b>unfunded</b> 127:20			

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

9:4,6,12,13	128:5,7	208:2,11	<b>weak</b> 151:15	32:8 45:2	191:8	158:11	23:21 28:13
9:20 10:14	129:2,21	210:17	<b>weaker</b>	69:20	197:14	202:11	29:1 34:14
10:15,18,20	130:11,12	211:1,24	146:22	<b>withdrawal</b>	<b>workshop</b>	203:19	40:11 44:19
11:11,13,15	131:6,8,15	212:6,6,23	151:13	45:22	203:2	<b>year</b> 11:12	54:10,13
11:17,21	135:15	<b>waters</b> 90:6	<b>weakest</b>	<b>withdrawals</b>	<b>world</b> 137:4	12:3 15:13	59:24 67:15
12:10,10,12	138:24	126:2	140:22	46:21 48:17	<b>worst</b> 137:6	17:14 19:3	73:18 75:8
12:12 13:1	139:23	212:23	<b>wealth</b> 150:7	68:4 71:1,3	<b>worthiness</b>	20:8 21:15	79:4,9,9
13:5 16:12	142:5,21,23	<b>watershed</b>	<b>weather</b>	<b>withdrawn</b>	140:21	27:2 28:20	86:6 94:21
16:19 20:22	143:22	128:11,15	132:13	68:15	<b>wouldn't</b>	28:21 37:10	106:6 132:8
21:1 26:5	147:14,16	<b>way</b> 6:7 19:24	<b>website</b> 30:16	<b>witness</b>	100:16	42:12 43:22	132:11
27:4,11	148:10	20:2 24:2	30:16 134:8	103:19	104:14	45:3,19,21	133:11
30:9 31:13	149:16,18	25:21,24	<b>Wednesday</b>	<b>witnesses</b>	107:2	45:21 47:3	135:6,17
37:5,24	150:2,11,21	26:6 28:1	31:6	186:23	<b>wrap</b> 55:19	50:10,13	142:11
38:15 41:7	151:8 153:3	28:12 48:7	<b>week</b> 30:14	<b>woefully</b>	108:4	51:16 52:14	143:1
44:19,23	153:20	53:2,11	<b>weekly</b> 161:5	71:17	114:11	53:17 55:21	150:22
45:9,19	157:8 159:4	72:22 73:3	164:1 166:3	<b>wonder</b>	165:1 183:8	58:6,9,20	152:3,10
49:17 50:17	161:19	121:18	<b>weeks</b> 130:22	184:12	206:12	59:4 62:1	154:15,15
51:14,18,18	164:4,4	134:7	<b>WEF</b> 21:1	185:21	<b>WRB</b> 168:3,6	62:17,24	154:19
52:9 53:1	166:8,15,15	144:14	<b>weighed</b>	201:21	176:16,22	64:8 66:13	155:10
53:11,22	166:16,19	164:22	185:18	<b>wondering</b>	176:23	67:4,7	157:17
54:1,24	167:1,8,16	172:23	<b>weighs</b> 72:5	108:15,16	177:1	69:22 73:15	158:17
56:7 57:10	167:17	188:8,12,12	<b>weight</b>	135:17,19	206:15	73:16 82:4	159:14
57:13,15,19	168:16	191:3,11	193:18	182:22	<b>write</b> 5:10	83:2,9 84:5	161:11,16
59:6 65:8,8	172:8,10,12	199:10	<b>welcome</b>	<b>word</b> 87:21	<b>writeup</b>	87:18 106:6	161:20,22
73:23 74:12	173:5,9,11	<b>ways</b> 13:12	22:22	<b>words</b> 17:19	146:15,21	112:2,11	162:15,16
74:12,13,14	173:20,22	93:6 99:9	<b>went</b> 45:10,10	18:1 22:16	151:18	121:10	162:16
74:19 75:1	173:24	105:13	52:4 86:5	28:4 48:5	<b>writeups</b>	122:7	173:14
76:8 77:1,3	174:11,16	129:3 170:3	94:21	210:5	144:8 148:1	125:23	177:12
77:5,12	174:17	187:1 202:1	155:15	<b>work</b> 2:20	151:17	132:12	181:21
78:23 80:8	175:20	<b>we'll</b> 169:11	159:20	25:21 49:7	<b>written</b> 34:5	133:17	190:22
80:9 81:19	176:1,9,10	<b>we're</b> 6:8,23	206:10,19	75:21 78:10	71:10	142:6,8	198:11
86:16 87:23	176:11,13	35:5 38:23	<b>weren't</b> 165:4	94:6 96:24	132:21	147:20	200:17
88:3,5 89:8	176:14	98:19	<b>west</b> 147:16	102:2 122:2	142:13	154:17	201:10
90:3,3,4,5	177:16	111:20	<b>wholesale</b>	122:3 153:5	146:17	155:9 157:4	204:14
90:21 93:11	179:14,16	112:14	9:19,22	153:5 165:7	<b>wrong</b> 63:2	158:4 196:7	205:7
93:21 95:22	180:5,7,10	116:2 117:8	10:13 20:3	201:17	81:10 122:7	196:9 197:7	<b>yield</b> 155:8
96:24 97:1	180:13,14	119:11	27:9 51:15	207:11,21	174:21	197:12	<b>York</b> 189:18
101:8	180:14,16	134:18	86:11	<b>worked</b> 21:23	192:3	198:3,20	<b>Yup</b> 110:24
111:18	180:16	152:12	191:21	<b>worker</b>		199:13,20	
112:16,19	186:6	158:1	<b>wholistic</b>	163:16	<b>X</b>	200:23	<b>Z</b>
112:19	187:11,13	162:17	108:18	<b>workforce</b>		203:7,8,13	<b>zero</b> 118:19
113:4	187:15,17	164:12	172:22	12:13	<b>Y</b>	203:24,24	151:14
117:20	187:20	166:6	<b>wide</b> 53:20	<b>working</b> 2:23	<b>yadda</b> 194:2	204:3,6,8	
118:15	188:10,20	180:22,24	182:4	5:16 63:1	194:3,3	204:14,14	<b>0</b>
119:17	189:12	192:15,16	<b>Williams</b>	97:14 99:22	<b>Yard</b> 38:10	204:15,20	<b>0</b> 100:5
121:2,6	191:20	196:13,16	176:8,8	100:2	38:11	205:10,11	<b>0.35</b> 82:17
125:16,18	194:11	210:1	<b>willingness</b>	112:14	<b>yeah</b> 14:12	205:14,14	<b>0.6</b> 53:17
125:21	195:24	211:12	140:15	117:18	47:24 54:5	205:20	58:22 59:3
126:3,17,19	196:2,5	<b>we've</b> 47:12	<b>winning</b>	120:12	75:9 78:12	<b>year-by-year</b>	60:8 77:5
126:22	204:16	66:8 70:2	11:10,20	125:23	83:5 103:23	25:6	<b>0.6/0.7</b> 82:23
127:3,4,5,7	205:3	85:13	<b>Wissahickon</b>	177:11	105:9	<b>year-to-year</b>	<b>0.7</b> 56:17
127:10,11	206:12	159:19	128:8,9,14	185:3 194:7	106:20	47:10	59:3 110:18
127:19	207:5,14	193:16	<b>withdraw</b>	<b>works</b> 30:20	111:14	<b>years</b> 11:24	157:19
					133:19		<b>0.8</b> 56:17

Philadelphia Water Department Presentation Rate Board Hearing  
February 22, 2016

110:19	156:15	107:11	2 73:2 84:4	2019 72:17	131:13	<b>50,000</b>	116:18
<b>0.9</b> 157:18	<b>10-cents</b>	108:1	105:17,17	<b>2021</b> 47:1	157:4 158:4	206:20	131:12
<b>08</b> 155:15,17	88:18	165:12,18	140:3	50:4 55:16	204:1	<b>50.60</b> 88:12	152:23
155:19	<b>10-year</b> 157:5	<b>16.1</b> 55:14,16	153:10	55:17 56:17	<b>30,000</b>	<b>53.07</b> 88:12	204:6
<hr/> <b>1</b> <hr/>	157:7	100:10	204:7	57:5 58:23	201:13	<b>56,000</b> 98:20	<b>90</b> 44:23 45:5
<b>1</b> 66:10,13	<b>10.4</b> 135:1	<b>17</b> 19:9,13	<b>2.4</b> 56:3	59:4	<b>300</b> 188:24	103:3	73:12
76:20 84:4	<b>10.9</b> 75:4	31:15 47:5	110:15	<b>206</b> 70:13	<b>33</b> 70:1	<b>58</b> 10:14	157:12,18
116:5,6	<b>100</b> 11:24	47:13,15	<b>2.5</b> 104:10	196:10	<b>34</b> 81:8	<hr/> <b>6</b> <hr/>	170:22
155:9 158:6	12:2 50:15	48:21 49:4	<b>2.7</b> 55:21	<b>21</b> 40:7 57:4	<b>34.7</b> 47:4,15	<b>6</b> 63:14 87:22	213:9
203:23	69:11	49:7 55:9	<b>2.78</b> 157:5	62:6 69:17	47:23	116:5 147:5	<b>91</b> 188:21
<b>1.0</b> 41:21	<b>107</b> 73:17	62:19,24	<b>20</b> 38:16,18	110:19	<b>35</b> 82:1,12	148:9	<b>96</b> 50:14,22
42:19 43:1	<b>11</b> 116:17	63:3,24	60:19 65:5	208:2	<b>365</b> 125:22	<b>6.3</b> 74:24	51:4,7
<b>1.12</b> 58:22	125:14	67:16 70:14	65:20 67:1	<b>216.2</b> 76:11	<b>39</b> 68:15	<b>60,000</b> 127:8	203:8 204:9
<b>1.13</b> 72:18	190:19	72:16 75:16	67:8 154:3	<b>22</b> 1:2 56:5	<b>397</b> 11:8	<b>600</b> 87:23	<b>96.3</b> 204:21
<b>1.15</b> 158:22	<b>11:00</b> 84:19	88:12 89:19	154:15,20	57:8 62:7	<hr/> <b>4</b> <hr/>	<b>600</b> 87:23	<b>99</b> 29:9 30:5
<b>1.2</b> 41:20	<b>110</b> 33:19	91:13	155:10	62:22	<b>4</b> 51:8 83:10	88:3	31:9
42:14 136:5	68:21 69:8	110:16	161:16,22	110:14	105:18	<b>63.43</b> 89:18	<b>9B</b> 63:11,20
136:9	69:19 71:7	112:13	<b>20-year</b> 81:24	115:1	157:7	<b>65</b> 135:17	213:6
151:12	71:20	200:14,22	<b>20/21</b> 24:2	206:14	<b>4.20</b> 88:9	<hr/> <b>7</b> <hr/>	
152:11	<b>111</b> 68:20	<b>17/18</b> 120:6	<b>200</b> 58:17	<b>236</b> 10:23	<b>4.5</b> 83:10	<b>7</b> 52:13 76:20	
158:23	69:18 70:15	<b>179.6</b> 48:5,5	120:16	<b>24</b> 93:21	<b>4.9</b> 37:9	116:8	
197:21	<b>115</b> 192:13	<b>18</b> 19:9,14	130:19	<b>24/7</b> 125:22	<b>40</b> 82:2 154:4	149:16	
<b>1.21</b> 136:9	<b>12</b> 100:6	47:5,13	154:17	133:7	154:20	157:11	
197:21	<b>12,000</b>	59:14 68:18	<b>2007</b> 38:7	<b>25</b> 65:6,20	155:10	204:5	
<b>1.22</b> 72:19	206:19	68:20 70:14	<b>2008</b> 38:7	67:1,8	156:19	<b>70</b> 103:6	
197:21	<b>12:40</b> 163:3	72:16,21	160:11	94:16 96:13	<b>400</b> 33:12	157:11,11	
<b>1.24</b> 72:15	<b>13</b> 98:21	75:19,21	<b>2010</b> 201:8	203:6	<b>410</b> 202:19	<b>70.9</b> 47:6,19	
<b>1.25</b> 72:15	165:18	88:13	201:18	<b>25,000</b> 10:19	<b>42</b> 10:16	47:23	
<b>1.26</b> 72:16	213:7	101:23	202:9	<b>250</b> 33:12	<b>44</b> 82:5	<b>71.60</b> 88:9	
<b>1.3</b> 56:15	<b>13.4</b> 55:22	107:12	<b>2012</b> 192:4	83:8 154:17	<b>440</b> 202:19	<b>75</b> 103:14	
110:16	108:5	108:1,2,5	<b>2013</b> 157:17	<b>26</b> 62:7	<b>45</b> 6:16 71:14	<b>75.50</b> 88:17	
112:9 197:4	110:23	110:19,23	215:6	107:21,22	71:16	<hr/> <b>8</b> <hr/>	
197:22	<b>130</b> 121:6	134:15	<b>2015</b> 12:3	107:23	150:16	<b>8</b> 52:13 75:2	
198:2	<b>14</b> 144:15	135:1	51:16	150:17	195:19	151:1	
199:16	<b>140607</b> 169:2	200:14	128:10	<b>264.2</b> 75:4	196:9,11	<b>8.5</b> 135:1	
200:9,13	<b>15</b> 10:23 11:9	<b>18.6</b> 55:14,16	131:22	<b>27</b> 56:24 62:6	<b>46</b> 76:18,19	<b>80</b> 60:17	
<b>1.35</b> 72:16	11:12 23:22	100:10	151:3 160:1	<b>28</b> 61:7	104:3	102:3,9	
<b>1.4</b> 158:21	28:22 29:18	<b>185</b> 70:11	<b>2016</b> 1:2 50:3	<hr/> <b>3</b> <hr/>	<b>47</b> 164:2	157:12	
<b>1.5</b> 150:21	67:4,7	<b>18th</b> 1:5	71:15	<b>3</b> 58:5,6 62:1	<hr/> <b>5</b> <hr/>	213:8	
<b>1.6</b> 9:21 10:6	183:7 192:9	<b>19</b> 68:13	131:19	84:5 105:17	<b>5</b> 59:13 60:11	<b>800</b> 71:16	
10:12 56:3	<b>15/16</b> 24:2	72:21 75:19	145:12	105:18	157:13,13	<b>83</b> 74:23	
110:14	<b>150</b> 97:21	122:8	<b>2017</b> 40:12	116:7	158:3 185:8	<b>84</b> 203:12	
112:9	99:3 165:5	<b>1929</b> 190:2	47:1 56:15	131:21	189:24	205:6	
<b>1.8</b> 61:20	168:19	<b>1974</b> 187:15	61:21	204:7	<b>5/8</b> 53:20	<b>85</b> 204:4	
153:11	169:17	187:20	100:17	<b>3,000</b> 10:17	77:3 78:3	<b>85.5</b> 205:7	
<b>1.9</b> 16:11	<b>1515</b> 1:5	188:2	130:3	<b>3,700</b> 11:1	87:23 88:2	<b>86</b> 204:5	
17:4 72:24	<b>156</b> 74:21	<b>1986</b> 158:6	131:14,23	<b>3.19</b> 88:15	<b>5:00</b> 2:13,13	205:11	
<b>1:00</b> 139:18	<b>157.2</b> 76:15	<b>1989</b> 71:10	132:12	<b>3.3</b> 59:16	2:14	<b>87</b> 205:12	
139:18	<b>16</b> 19:15	<b>1990</b> 188:2,3	<b>2018</b> 40:12	<b>3.5</b> 58:19	<b>50</b> 103:6,13	<hr/> <b>9</b> <hr/>	
<b>1:45</b> 163:3	31:14 64:23	<b>1991</b> 188:10	47:23 55:15	61:21	119:23	<b>9</b> 56:6 116:17	
<b>10</b> 116:12	70:14 72:15	<b>1993</b> 71:11	61:21 69:18	<b>3:00</b> 215:20	127:8		
119:23	87:18 91:13	<b>1996</b> 121:5	100:13,14	<b>30</b> 83:1 94:21	161:20		
154:15,23	101:22	<hr/> <b>2</b> <hr/>	109:14	103:6 118:7			