### AUSTIN WATER COST OF SERVICE RATE STUDY WHOLESALE INVOLVEMENT COMMITTEE APRIL 25, 2017 – 9:30 A.M. WALLER CREEK CENTER – ROOM #104 625 E. 10<sup>TH</sup> STREET, AUSTIN, TEXAS



### AGENDA

### For more information, please visit http://www.austintexas.gov/department/2016-cost-service-rate-study

**MISSION:** The purpose of the Wholesale Involvement Committee (WIC) is to examine the methodology being developed to determine cost of service for all customer classes with a primary focus on the retail customer classes, discuss the impacts of key cost of service factors, and advise the Austin Water Executive Team in their decision-making process.

MEETING GOALS: Discuss preliminary Water and Wastewater Cost of Service (COS) results.

### CALL TO ORDER

### 1. CITIZEN COMMUNICATION

The first 10 speakers signed up prior to the meeting being called to order will each be allowed a threeminute allotment to address their concerns regarding items not posted on the agenda.

### 2. DISCUSSION ITEMS

- a. Austin Water Forecast 2018-22
- b. Water and Wastewater COS Results
- c. Executive Team Decisions

### 3. COMMITTEE DISCUSSION

a. WIC Member Questions and Discussion

### 4. FUTURE AGENDA ITEMS

### 5. PUBLIC COMMENT

### 6. ADJOURN



## Presentation | WIC







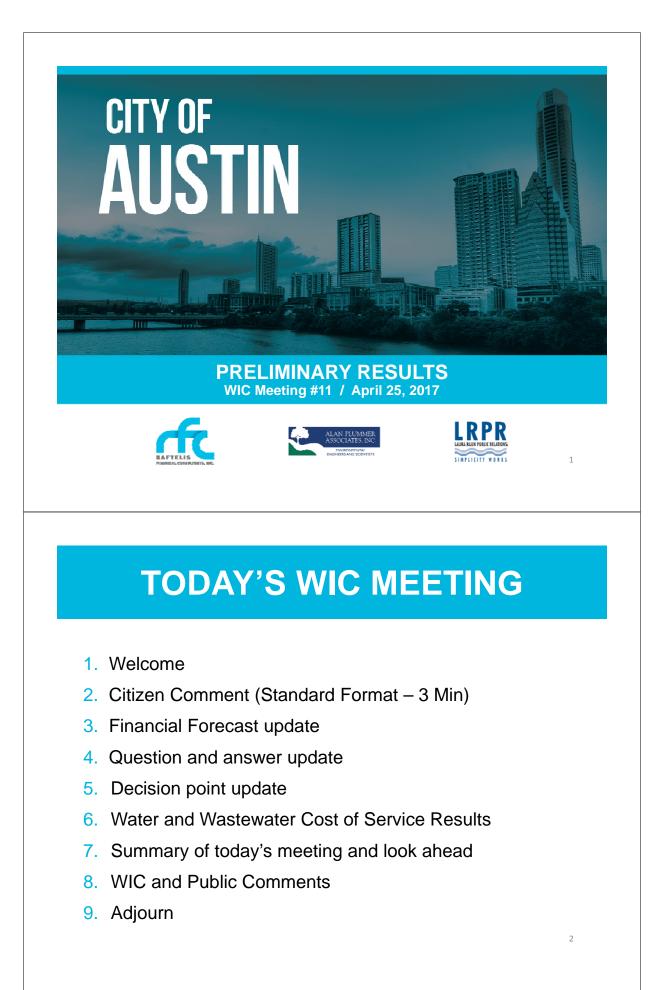
## Presentation | WIC

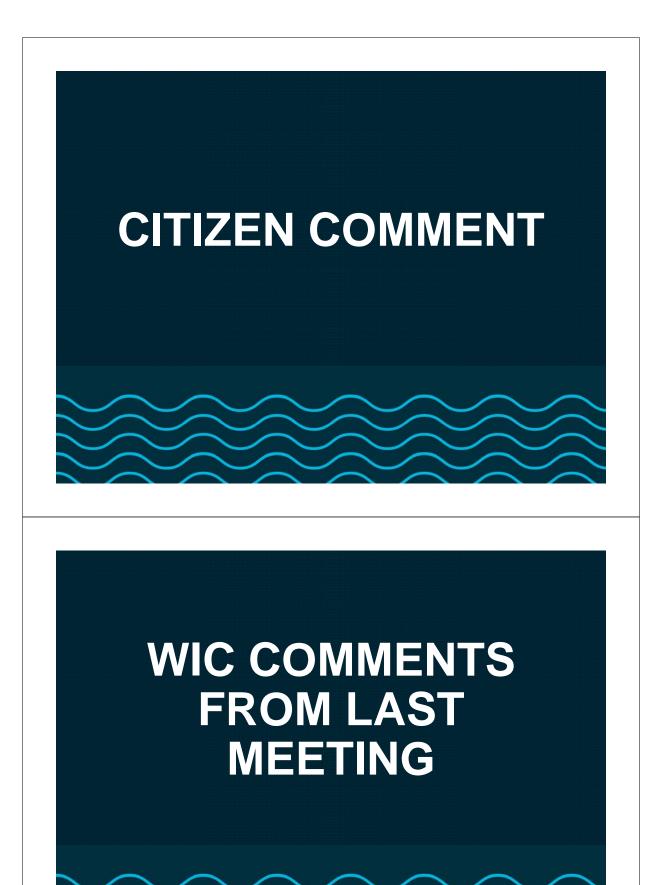
Presentation | WIC

Austin

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### Austin Water Financial Forecast Update

David Anders, Assistant Director



### **Executive Team Decisions**

lssue #	lssue	Decision
20	Modification of Fire Demand Meter Fixed Charges	AW will modify the fixed charges for fire demand meter charges by basing the fixed meter charge on the smaller meter size rather than the larger meter size.
21	Fire Protection Costs and Allocation to Customer Classes	AW will modify the fire protection allocation using revised meter equivalencies based on hydraulic capacity by meter type as identified in AWWA M6, Water Meters - Selection, Installation, Testing, and Maintenance
22	Elimination of Commercial and Large Volume Subsidy of Residential Customers	AW will recommend to eliminate the current commercial and large volume subsidy of residential water customers. However, based on levels of impacts to residential customers, AW will likely recommend a short-term transition of this subsidy.

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### AUSTIN WATER FINANCIAL FORECAST



Joseph Gonzales, Utility Budget & Finance Manager



Austin

**FATER** 



- Recent Rate Pressures
  - Severe drought
- Reduced water consumption
- Austin Water Response
  - Business model adaptions to stabilize revenues
  - Debt management strategies
    - \$40M in defeasance transactions in FY16 and FY17
    - Additional defeasance transactions planned during forecast period
- Stable rate environment expected throughout forecast period
  - No rate increase forecasted for 3 of 5 years

	2018	2019	2020	2021	2022
Water:	0.0%	2.0%	0.0%	1.9%	0.0%
Wastewater:	0.0%	2.0%	0.0%	1.9%	0.0%
Combined:	0.0%	2.0%	0.0%	1.9%	0.0%

Forecasted Rate Revenue Increases



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### **New COS Models Overview**

### • Preliminary Results:

- New models review ongoing; results subject to change
- Assumes 100% cost recovery for all customer classes
- New COS models reflect the Executive Team decisions

### <u>Cost Allocation Methodology</u>:

- Cost allocation methodologies used in the new COS models are similar to existing models
- Exception is the specific functionalization of non-rate revenues

### **New COS Models Overview**

- Outside City Adjustments:
  - Outside City adjustments are costs reallocated from outside city to inside city customers

### • Test Year Rates:

 Test year cost of service *rates* are adjusted uniquely by class within the COS models to reach class/customer cost of service due to an implementation delay

### • Cost of Service Transparency:

• A set of summary worksheets within the models provide different representations of the build-up of revenue requirements to arrive at class cost of service

### SUMMARY AND LOOK AHEAD

### RECAP OF TODAY'S DISCUSSION

- I. Financial Forecast Update
- II. Question and Answer Update
- III. Executive Team Decision Point Update
- IV. Water and Wastewater COS Preliminary Results

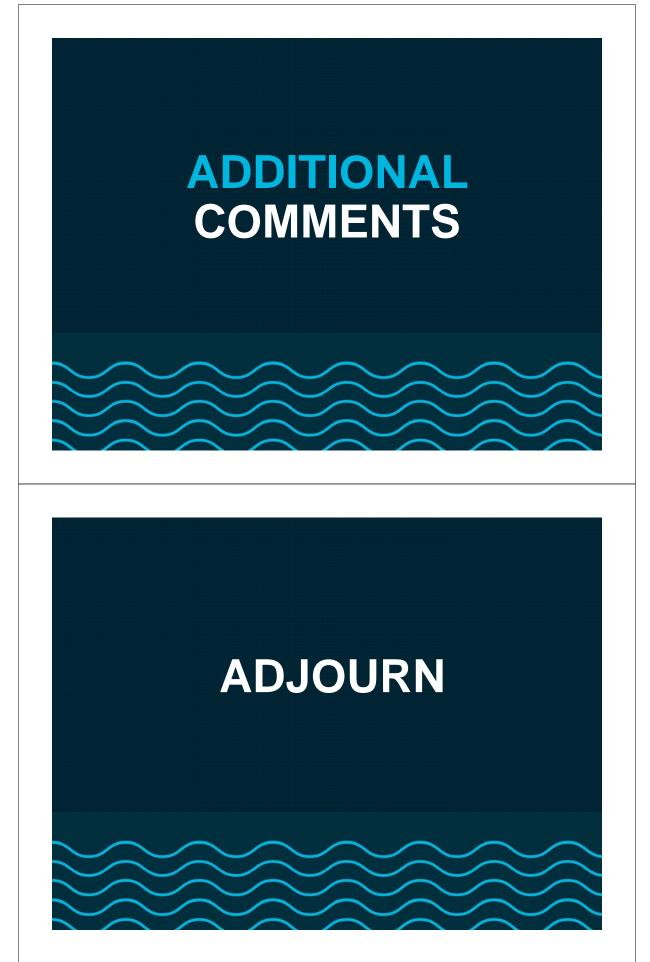
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### **NEXT STEPS**

- COS MODEL DISTRIBUTION/REVIEW SESSION
- **RESULTS QUESTIONS/COMMENTS**
- ADDITIONAL MEETING
- IMPARTIAL HEARING EXAMINER PROCESS

### **WIC - SCHEDULE & TOPICS**

Meeting	Day	Date	Objective
4	Tue	<del>27-Sep</del>	Orientation
2	Wed	<del>5-Oct</del>	Revenue Requirements
3	Tue	<del>8-Nov</del>	Revenue Requirements-Cont'd
4	Tue	<del>29-Nov</del>	Revenue Requirements-Cont'd
5	Tue	<del>13-Dec</del>	Water Cost Allocation
<del>6</del>	Wed	4-Jan	Decision Points
7	Tue	<del>17-Jan</del>	Decision Points
8	Tue	<del>31-Jan</del>	Wastewater Cost Allocation/Financial Benchmarks
9	Tue	<del>21-Feb</del>	Customer Assistance Program/Financial Benchmarks/Other Decision Points
<del>10</del>	Tue	6-Mar	Decision Point Recommendations
11	Tue	25-Apr	Overview of Results and Wrap-up
12	Tue	23-May	Overview of Results and Wrap-up (if necessary)







## Question & Answer Summary | WIC





# Question & Answer Summary | WIC

# Question & Answer Summary | WIC

ID	Class	Торіс	Requestor	Question	Status	
998	Multifamily	General Cost of Service	Marcia Stokes	Submitted: 03/14/2017 Please provide the number of irrigation meters by size and class. What is the reasoning for charging fire protection on irrigation meters? Wouldn't this result in a double charge, domestic meter plus irrigation meter? Are parks or golf courses with higher irrigation demands than building use treated differently?	Posted	P A cu p o th re au re th "ii
997	Residential	Allocation Methodologies	Grant Rabon	Submitted: 03/08/2017 Per the discussion at the March 6 PIC meeting, please provide the source documents used to develop the meter factors utilized in the water cost of service model to calculate the fixed charges by meter size (for those costs associated with meters).	Posted	P T tu ra d
994	Wholesale	Allocation Methodologies	Howard Hagemann	Submitted: 03/03/2017 In your formula for Class Max Day and Max Class Hour there is an Average Ay of Max Month and a System Average DAy of Max Month. What is the difference? Also, it was mentioned in one of the meetings that Austin Water currently uses a three year average. Is this for all factors in the formulas or only certain factors?	Posted	P V P u a fa
993	Residential	General Cost of Service	Lanetta Cooper	Submitted: 02/27/2017 Please describe what steps if any W or WW has taken to obtain grants and such other beneficial funding (like low-interest loans) for infrastructure improvement and for water reclamation and re-use projects. In your response, please itemize the current grant programs and any current reduced funding programs.	Posted	P A S (S is d th
992	Residential	General Cost of Service	Grant Rabon	Submitted: 02/24/2017 What is the credit rating goal, or target, desired by Austin Water (e.g., A, AA, AAA, etc.)?	Posted	P A IV ir S

### New questions submitted since last PIC/WIC

### Information not yet available

New responses posted since last PIC/WIC

Responses previously posted on website

### **Summary Response**

### Posted: 4/20/2017

Austin Water provided a summary of irrigation meters by customer class. The recovery of the costs of providing fire protection, including capacity, through fixed charges based on meter size was a decision made by Austin Water during the 2008 Cost of Service Rate study. This change from recovery through indirect volumetric charges was made in an effort to make recovery more equitable and increase revenue stability. The fire protection cost are recovered through all retail meters regardless of "domestic" or "irrigation".

### Posted: 4/20/2017

The equivalent meter ratios are calculated by using the maximum meter flow rated capacity of Class I meters. The turbine and fire flow meters were defaulted to the Class I ratio during the 2008 Cost of Service study which included a decision to not assign costs by meter size.

### Posted: 4/20/2017

Under the current peaking factor methodology, Austin Water uses a 3-year rolling average of Non-Coincidental Peak (NCP) factors in an effort to alleviate some volatility within each customer class. The calculation of the NCPs uses the 3-year rolling average of the customer class data and system demand characteristics to derive the peaking factors by customer class.

### Posted: 4/20/2017

AW has entered into a multi-year commitment from the State Water Implementation Revenue Fund for Texas (SWIRFT) to fund several eligible projects. Austin Water issued \$20.4 million of revenue bonds through this program during 2016 and is reviewing future issuance opportunities through the multi-year commitment.

### Posted: 4/20/2017

Austin Water's (AW's) goal is to maintain its current ratings assigned by the three credit rating agencies: Fitch, Moody's, and Standard & Poor's Global Ratings. AW's internal performance measure uses Standard & Poor's Global Ratings (S&P) "AA" rating as a benchmark for separate lien obligations.

ID	Class	Торіс	Requestor	Question	Status	
991	Residential	General Cost of Service	Grant Rabon	<b>Submitted: 02/20/2017</b> We understand Austin Water has participated in the AWWA performance indicators survey (Benchmarking Performance Indicators for Water and Wastewater: 2016 Edition). As a participant, Austin Water should have been provided a custom report that shows Austin Water's performance indicators against the aggregate data for all participating utilities in the same service category (water, wastewater, or combined systems). Please provide a copy of this report.	Posted	P D Ir CI A a
984	Residential	General Cost of Service	Lanetta Cooper	Submitted: 02/16/2017 Do you use a different income eligibility requirement than Austin Energy for your CAP customer bill discount program? If so,: a. What is your income eligibility requirement? b. How does Austin Energy implement that requirement?	Posted	P A re C
983	Residential	General Cost of Service	Lanetta Cooper	<b>Submitted: 02/16/2017</b> Please tell me the family size you relied upon for developing your MHI CAP amount (\$ 54,265-adjusted for CPI inflation) in your response to Question No. 833.	Posted	₽ A C (I M h
982	Residential	General Cost of Service	Lanetta Cooper	Submitted: 02/16/2017 You refer to MHI in response to Question No. 833. You provide \$ 67,831 for FY MHI for non-CAP customers. Please tell me the family size that you relied upon for developing your MHI non-CAP amount?	Posted	P A C (I M h
981	Residential	General Cost of Service	Lanetta Cooper	Submitted: 02/16/2017 In your response to Question No. 865 you identify a bad debt expense (Account No. 6802) and a commission on debt (Account No. 6804). Please explain what is a commission on debt and how, if at all is it related to bad debt. In your explanation, please address whether you received revenues relating to a commission on debt expense, and if so, how those revenues were treated for COS purposes.	Posted	P C a e o fi a b a

### New questions submitted since last PIC/WIC

### Information not yet available

New responses posted since last PIC/WIC

Responses previously posted on website

### **Summary Response**

### Posted: 3/3/2017

Data collection for the the 2016 American Water Work Association (AWWA) Benchmarking Performance Indicators for Water and Wastewater Utilities survey is currently underway. AW provided the results from the 2015 AWWA Benchmarking Performance Indicators for Water and Wastewater Utilities survey.

### Posted: 3/3/2017

Austin Water (AW) adheres to the same eligibility requirements that Austin Energy (AE) uses to enroll customers in the Customer Assistance Program (CAP). AE

### Posted: 3/3/2017

Austin Water (AW) used the most recent American Community Survey Median Household Information (MHI) as of 2015 for the Austin-Round Rock-San Marcos MSA. MHI for the area is based on an average household size of 2.47.

### Posted: 3/3/2017

Austin Water (AW) used the most recent American Community Survey Median Household Information (MHI) as of 2015 for the Austin-Round Rock-San Marcos MSA. MHI for the area is based on an average household size of 2.47.

### Posted: 3/3/2017

Commission on debt expenses include commercial paper administrative expenses, utility revenue bond commission expenses, arbitrage rebate administrative expenses and other administrative costs associated with AW's capital financing program. Bad debt expense represents the amount of customer uncollectible accounts receivable balances for a given year. Austin Water does not receive any revenues related to commission on debt expenses.

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ID	Class	Торіс	Requestor	Question	Status	
980	Residential	General Cost of Service	Lanetta Cooper	Submitted: 02/16/2017 Please answer the following questions that derive from the 2017 Water and Sewer Medians report by Fitch ratings. In your responses please use data points, if possible, from the same time period. Please also identify the time period relied upon in your answers. In answering these questions, please rely upon the Fitch ratings report's definitions for their meaning. a. What is your water treatment capacity remaining (%)? b. What is your sewer treatment capacity remaining (%)? c. What is your age of plant (in years) involving the water utility? d. What is your age of plant (in years) involving the wastewater utility?	Posted	Pr ag
979	Residential	General Cost of Service	Lanetta Cooper	Submitted: 02/16/2017 Please explain the inconsistencies in the levels of debt addressed in your answer to Question No. 942 and in your answer to Question No. 838. In addition to the timing (FY 2015 for Question No. 942 and FY 2016 for Question No. 838), please address whether different and/or additional source data were relied upon in deriving the different answers and what that source data were.	Posted	Po Th Au the Qu pri inf se an tol
978	Residential	General Cost of Service	Lanetta Cooper	<b>Submitted: 02/09/2017</b> What is the status of the Austin Energy promised review of the utility billing system costs allocation that was to occur during FY 2017. (reference, your response to Question No. 840) If the review has been completed, please provide a copy of that review.	Posted	Pc Au va of re in wi
977	Residential	General Cost of Service	Lanetta Cooper	<b>Submitted: 02/09/2017</b> Please provide both the budgeted and the actual costs incurred related to your utility- wide allowance fund for the following FYs: FY 2012, 2013, 2014, 2015, 2016.	Posted	<b>Рс</b> АV 20
976	Residential	General Cost of Service	Lanetta Cooper	<b>Submitted: 02/09/2017</b> Your response to Question No. 900, p. 4 reveals that the reclaimed water utility had an estimated 370 days of cash on hand, higher than the estimated days of cash on hand for WW or for the water utilities. Since the reclaimed water utility is currently being subsidized by the w and ww utilities, please explain how the reclaimed water utility can have days of cash on hand - especially greater than the w or ww utilities' respective days of cash on hand.	Posted	Pc Au inv Pr the res the

### New questions submitted since last PIC/WIC

- Information not yet available
- New responses posted since last PIC/WIC

Responses previously posted on website

### Summary Response

### Posted: 4/21/2017

Provided table with treatment plant information, including age and average remaining treatment capacity.

### Posted: 3/3/2017

The primary difference between responses provided by Austin Water for Question 838 and Question 932 is due to the specific information requested in each question. Question 972 requested the total current outstanding principal balance for AW, while question no. 838 requested nformation about how AW accounts for and calculates debt service coverage (DSC). The DSC ratio is based on annual debt service requirements (payments) and not AW's total outstanding principal balance.

### Posted: 2/17/2017

Austin Energy (AE) has submitted a Scope of Work to various firms and expects to receive proposals by the end of February. AE hopes to select a vendor to conduct the review of the Customer Care & Billing cost allocation model n early March. A timeline for the completion of this project will not be available until a vendor is selected.

### Posted: 3/2/2017

AW provided contigency budget and actuals for fiscal years 2012 - 2016.

### Posted: 4/20/2017

Austin Water (AW) does not collect data for water leaks nvolving residential customers, including CAP participants. Property owners are responsible for the service lines past the meter (private side) and internal plumbing, while AW is responsible for maintaining and replacing water mains hroughout the service area.

ID	Class	Торіс	Requestor	Question	Status	
975	Residential	General Cost of Service	Lanetta Cooper	Submitted: 02/09/2017 What research, if any, have you performed or received concerning water leaks involving your CAP customers? In your response, please provide any studies, reports, memos and such other written information prepared by or provided to you that address this issue.	Posted	P ir P th re th
974	Residential	Customer Demand Characteristics	Lanetta Cooper	<b>Submitted: 02/09/2017</b> Without disclosing the identity of the customers please provide the workpapers relied upon by you in developing the peaking factors referred to in the previous question regarding CAP customer peaking factors.	Posted	P A F
973	Residential	Customer Demand Characteristics	Lanetta Cooper	Submitted: 02/09/2017 The December 13, 2016 report provided the W/WW PIC at p. 22 (slide No. 35) revealed that residential CAP customers had higher retail peaking factors. Please explain how the values were derived. In responding to this question please address how billings, if at all, were utilized in developing the peaking factors.	Posted	PCc"CD "CDP CCbm
972	Residential	Allocation Methodologies	Lanetta Cooper	<b>Submitted: 02/09/2017</b> According to our October 5, 2016 meeting, the Texas PUC disallowed Green Water treatment plant capital costs. According to COA answers to a request for information (Question 920) the COA has no outstanding debt service obligations for this plant. Is the Green Water treatment plant decommissioned? If so, how are the costs relating to the Green Water treatment plant to be addressed under a ROR methodology. Specifically include addressing whether the treatment plant will be listed as a capital asset for purposes of deriving a ROR.	Posted	P T d g tł n (I

### New questions submitted since last PIC/WIC

### Information not yet available

New responses posted since last PIC/WIC

Responses previously posted on website

### **Summary Response**

### Posted: 3/2/2017

Austin Water (AW) does not collect data for water leaks involving residential customers, including CAP participants. Property owners are responsible for the service lines past the meter (private side) and internal plumbing, while AW is responsible for maintaining and replacing water mains throughout the service area.

### Posted: 3/2/2017

Austin Water provided working papers used to populate the FY 2017 Cost of Service model to calculate peaking factors for retail customer classes.

### Posted: 2/17/2017

Currently Austin Water uses the following method for calculating customer class peaking factors: "Class Peak Day Factor" = ((Class Peak Month Demand/Class Average Month Demand) X (System Peak Day Demand/System Peak Month Demand))

"Class Peak Hour Factor" = ((Class Peak Month Demand/Class Average Month Demand) X (System Peak Hour Demand/System Peak Month Demand))

Customer billing data for each class is extracted from the Customer Care and Billing system, (CCB) on a monthly basis and is used to populate the Utility's Cost of Service models.

### Posted: 2/17/2017

The Green Water Treatment Plant (GWTP) is decommissioned and the asset was removed from the general ledger at the time of decommissioning. Because the GWTP is no longer "used and useful", the plant would not be included as a capital asset under the Rate of Return (ROR) methodology.

ID	Class	Торіс	Requestor	Question	Status	
971	Residential	General Cost of Service	Lanetta Cooper	Submitted: 02/09/2017 For the FY 2017 Reclaimed Water utility's COS, what was the amount of debt allocated to residential customers, if any? What was the debt-service coverage ratio you relied upon for the FY 2017 reclaimed water utility? In providing the answer, please do not include the estimated revenues transferred from the water utility and the wastewater utility in calculating the debt service coverage. Please identify the estimated revenues transferred from the water utility for FY 2017.	Posted	P A re su d tr fr b fu W
970	Residential	Customer Demand Characteristics	Lanetta Cooper	<b>Submitted: 02/09/2017</b> Please provide the billing frequencies for the CAP water utility customers for the following fiscal years: FY 2014; FY 2015; FY 2016; and FY 2017. Please provide the billing frequencies by the consumptions levels used to set the various tariffed rate levels for the residential customer class if possible.	Posted	P R ir c y fr a
969	Residential	General Cost of Service	Lanetta Cooper	Submitted: 02/09/2017 What was the debt-service coverage ratio you relied upon for the FY 2017 water utility's COS? What was the debt-service coverage ratio you relied upon for the FY 2017 wastewater utility's COS?	Posted	<b>P</b> A 1 U
968	Residential	General Cost of Service	Lanetta Cooper	Submitted: 02/09/2017 For the FY 2017 wastewater utility COS, what was the amount of debt included in the utility's COS?	Posted	P A re m
967	Residential	General Cost of Service	Lanetta Cooper	Submitted: 02/09/2017 For FY 2017 wastewater utility COS, what was the amount of debt allocated to residential customers?	Posted	P A in re \$
966	Residential	General Cost of Service	Lanetta Cooper	Submitted: 02/09/2017 For FY 2017 water utility COS, what was the total amount of debt included in the water utility's COS?	Posted	P A ir \$

### New questions submitted since last PIC/WIC Information not yet available New responses posted since last PIC/WIC Responses previously posted on website

### **Summary Response**

### Posted: 2/17/2017

Austin Water does not allocate Reclaimed debt to residential customers as the Reclaimed utility does not serve residential customers. The FY 2017 targeted debt service coverage for Reclaimed Water is 0.88x. Reclaimed debt service coverage only includes revenue collected in the Reclaimed water fund does not include Transfers In from the Water and Wastewater funds. The FY 2017 budget includes a transfer of \$3,400,000 to the Reclaimed fund which is an equal transfer of \$1,700,000 from the Water fund and the Wastewater fund.

### Posted: 2/17/2017

Response provided historical actual bill frequency information by block for Customer Assistance Program customers for FY 2014, FY 2015, FY 2016, and FY 2017 year to date. Also provided forecasted residential class bill frequency information for the FY 2014, FY 2015, FY 2016 and FY 2017 used set rates for those years.

### Posted: 2/17/2017

AW's FY 2017 budget targeted debt service coverage of 1.61x for the Water Utility and 1.82x for the Wastewater Utility.

### Posted: 2/17/2017

Austin Water's budgeted Wastewater debt service requirements included in the FY 2017 Cost of Service model were \$93,805,347.

### Posted: 2/17/2017

Austin Water's FY 2017 Wastewater Cost of Service model included a debt service allocation of \$32,724,872 to the residential customer class. This amount includes \$29,779,150 for non-CAP residential customers and \$2,945,721 for CAP residential customers.

### Posted: 2/17/2017

Austin Water's budgeted Water debt service requirements included in the FY 2017 Cost of Service model were \$109,112,808.

ID	Class	Торіс	Requestor	Question	Status	
965	Residential	General Cost of Service	Lanetta Cooper	Submitted: 02/09/2017 For FY 2017 water utility COS, what was the amount of debt allocated to residential customers for the water utility?	Posted	P A in re \$:
956	Residential	General Cost of Service	Grant Rabon	Submitted: 01/04/2017 Please provide the recently released 2017 Fitch medians report.	Posted	P A S
951	All Classes	General Cost of Service	Lanetta Cooper	<b>Submitted: 12/29/2016</b> "You" in these questions refer to Austin W/WW and its employees including the general manager, officers and consultants. "PIC" means Public Involvement Committee. "COS" means cost of service. "COA" means City of Austin. 1. How much O&M costs are related to the COA water utility's transmission mains? 2. How are the O&M costs related to the COA water utility's transmission mains allocated among the customer classes. In your response please include the \$ amount of costs assigned to each customer class, the methodology(ies) the utility relied upon in allocating the O&M costs among the customer classes, and the FY the utility used for its data. 3. How much of the O&M costs identified in No. 1 above are attributable to the "extra capacity costs" incurred by the COA water utility? In other words if the transmission main was constructed and maintained to handle only "base capacity" usage, what O&M costs would be avoided?	Posted	P T C A P W

### New questions submitted since last PIC/WIC

### Information not yet available

New responses posted since last PIC/WIC

Responses previously posted on website

### Summary Response

### Posted: 2/17/2017

Austin Water's FY 2017 Water Cost of Service model included a debt service allocation of \$41,328,905 to the residential customer class. This amount includes \$37,432,948 for non-CAP residential customers and \$3,895,957 for CAP residential customers.

### Posted: 2/14/2017

Austin Water provided link to 2017 Fitch Ratings Water and Sewer Medians Report.

### Posted: 1/11/2017

The FY 2017 Cost of Service (COS) model includes O&M costs for water Transmission Mains totaled at \$16,424,157. Austin Water allocates these costs in accordance with the Principles of Water Rates, Fees and Charges (American Water Works Association M1 Manual).

ID	Class	Торіс	Requestor	Question	Status	
950	All Classes	Allocation Methodologies	Marcia Stokes	Submitted: 12/29/2016 Cost allocation: Please provide by meter size and customer class, the number of fire demand aka fire service meters which are 8x2"FD, 10x2"FD and 12x2"FD. In addition, for each fire service meter size and class, please provide how many meters are within each DOMESTIC USE equivalent meter size of 2",3",4",6"or 8". DOMESTIC USE equivalent meter size can be found by retrieving the CRF (capital recovery fee) paid and reverse lookup the service units and corresponding equivalent meter size. For example in 2007, a fire demand meter with domestic use of 8 service units which is equivalent to a 2" PD meter paid a \$5600 CRF in DDZ zone or \$12000 in a DWPZ zone; 16 service units (3" meter equivalent) paid a \$11,200 CRF (DDZ) or \$24,000 CRF (DWPZ); 25 service units (4" meter equivalent) paid a \$17,500 CRF (DDZ) or \$37,500 CRF (DWPZ), 50 service units (6" meter equivalent) paid a \$35,000 CRF (DDZ) or \$75,000 CRF (DWPZ).	Posted	Pc Au an av
949	All Classes	Customer Demand Characteristics	Marcia Stokes	Submitted: 12/29/2016 COS Model and Cost Allocation: Please provide the external pivot table 'C:\Rates and Charges\COS\FY 2009-10 & COS Study\Water\[Meter Size Pivot.xlsx]Sheet1' which is referenced in the COS model provided under: spreadsheet "Water Option_01 Budget submittal, Characteristics worksheet, Table 58, Equivalent Meter schedule, Equivalent Fire Services Column. Also, explain the methodology and formula used for the overridden values of equivalent fire services for 8", 10" and 12" meters changed May 7, 2012 by Michael Castillo.	Posted	Pc Th 20 co to me att Th res the fix
948	All Classes	General Cost of Service	Lanetta Cooper	<b>Submitted: 12/22/2016</b> (Question received via email on 12/22/16) 2. Does the COA W/WW department have a fiscal policy(ies) relating to debt levels, including debt equity ratios? If so please list each such policy.	Posted	Pc Au de de

New questions submitted since last PIC/WIC

Information not yet available

New responses posted since last PIC/WIC

Responses previously posted on website

### Summary Response

### Posted: 04/20/2017

Austin Water provided a listing of 520 fire service meters and capital recovery fee amount paid for the meter if available.

### Posted: 1/11/2017

The equivalent meter analysis was completed as part of the 2009 Cost of Service Study by the previous COS rate consultant (Red Oak). This analysis was prepared in order to determine the average monthly adjusted consumption by meter size. An external pivot table is provided in the attachment as referenced in the FY 2017 COS model. The overridden values included in the COS model, are the result of an executive decision to implement adjustments to the 8", 10" and 12" equivalent meters in order to reduce the fixed cost allocations.

### Posted: 1/5/2017

Austin Water does not have a financial policy related to debt levels. Response provided a listing of Austin Water's debt related financial policies.

ID	Class	Торіс	Requestor	Question	Status	
947	All Classes	General Cost of Service	Lanetta Cooper	Submitted: 12/22/2016 (Question received via email on 12/22/16) You" in these questions refer to Austin W/WW and its employees including the general manager, officers and consultants. "PIC" means Public Involvement Committee. "COS" means cost of service. How do you derive your level of budgeted revenues for purposes of setting water and wastewater rates for the FY budget year? (In other words, what calculations, assumptions, formulas, and such other methods do you rely upon in deriving the amount of revenues you estimate will be realized during the budget FY). In your explanation, please address how the calculated revenues are normalized, if at all, for weather.	Posted	Pre An pr cc cc ex pr cr tre m (i. in fis
944	All Classes	General Cost of Service	Lanetta Cooper	Submitted: 12/19/2016 General fund transfer A. How is it considered in the COS? B. Should the current General Fund formula continue to apply to all revenues or should some revenues arising from certain costs be exempted because the costs incurred relate to the public good such as conservation lands or from costs related to excess capacity	Posted	Po Th av ye M of W Fu cu
943	All Classes	General Cost of Service	Lanetta Cooper	Submitted: 12/19/2016 How are grants and such other non-rate revenue infusions addressed in COS?	Posted	Pe Ne gr
942	All Classes	General Cost of Service	Lanetta Cooper	Submitted: 12/19/2016 How is debt accounted for? A. d/s coverage ratio i.) What are the bond covenant requirements ii.) What are the COA financial policy requirements iii.) How is the COA's bond covenant requirements related to the general fund transfer, if at all? B. debt/equity ratio	Posted	P A m re TI th ca co in

### New questions submitted since last PIC/WIC Information not yet available New responses posted since last PIC/WIC Responses previously posted on website

### **Summary Response**

### Posted: 1/27/2017

Austin Water (AW) analyzes several factors when projecting the level of budgeted water and wastewater revenue. Historical monthly usage patterns of water consumption and wastewater flows by customer class are examined in order to weather-normalize the future demand projections. Adjustments are made to the demand projections to account for water conservation policy changes affecting customer behavior. Monthly growth trends by customer class are analyzed and adjustments are made to account for any known and measurable changes (i.e. new account growth, annexations, commercial or ndustrial expansion projects, etc.) for the upcoming budget fiscal year.

### Posted: 1/12/2017

The General Fund Transfer is set at 8.2% of the three-year average of Austin Water operating revenues. This threeyear average is calculated using the year-end estimate at March 31st for the current year and the previous two years of actual revenue. Each customer class for Retail and Wholesale is allocated a proportionate share of the General Fund Transfer based on the percentage of revenue each customer class contributes in revenue.

### Posted: 12/29/2016

Non-rate revenue, including grants, is subtracted from the gross revenue requirement in the COS model in order to determine the net revenue requirement.

### Posted: 12/29/2016

AW's bond covenant requirements for debt service is to maintain a 1.25x coverage. AW's financial policy requirements for debt service is to target 1.50x coverage. The COA's bond covenant requirements are not related to the general fund transfer. The debt to equity ratio is calculated using the City's CAFR and reported at the combined utility basis. Debt service and debt/equity nformation as FY 15 was provided.

ID	Class	Торіс	Requestor	Question	Status	
941	All Classes	General Cost of Service	Lanetta Cooper	Submitted: 12/19/2016 Who can appeal a council decision on w/ww rates? A. What is the process? B. What is the regulatory standard applied by PUC on appeal? C. What is the status of customer refunds and/or surcharges should the PUC adjust the COA's revenue requirement and/or its COS on appeal?	Posted	Po In Wa Co th cu of
940	All Classes	General Cost of Service	Lanetta Cooper	<b>Submitted: 12/19/2016</b> Continued from above D. How should prudency be considered when an investment is proposed that is replacing a current investment not fully depreciated? E. Should COS and/or the rate effect that is related to the timing of the financial commitment to investment be considered? In other words, should some investments be deferred or fast tracked because of the COS and rate effects of the investments? Is this a component of prudency?	Posted	Po Ro W Ra its ne
939	All Classes	General Cost of Service	Lanetta Cooper	Submitted: 12/19/2016 How does COA relate its investment decisions to the used and useful regulatory standard-in other words, is the COA prudent in its investment decisions to ensure that it is not creating excess capacity? A. Is COA investment decisions driven by customer demand or by utility supply? i.) What is the long term and short term cost/benefit analysis of marketing and acquiring wholesale water contracts to retail base customers? Should a different COA approach be used to ensure retail base customers are not harmed? ii.) How does our current policy of entering into wholesale water contracts or serve retail customers outside our city limits affect: 1. Affordable housing 2. Environment 3. Sprawl and other growth concerns 4. How does this tie in to COS B. What should be the regulatory standard to determine whether an investment is a prudent utility decision? C. How should the effect on utility rates affect if at all an investment decision?	Posted	Pc Au op W Ra its ne
938	All Classes	General Cost of Service	Lanetta Cooper	Submitted: 12/19/2016 What is the amount of capital investment that is used and useful?	Posted	Po Ro fro Th ar



### New questions submitted since last PIC/WIC

### Information not yet available

New responses posted since last PIC/WIC

Responses previously posted on website

### **Summary Response**

### Posted: 12/29/2016

Inside city customers can appeal their water and wastewater rates by contacting the Water and Wastewater Commission, City of Austin Public Utilities Committee, and the Austin City Council. Outside city and wholesale customers can appeal directly to Public Utility Commission of Texas (PUCT).

### Posted: 12/29/2016

Replacement of current investments/assets is based on operational needs and service demands as part of Austin Water's (AW's) Capital Improvement Project (CIP) program. Rate impact is considered to the extent that AW manages its CIP Spending Levels to balance asset and infrastructure needs with the fiscal impact on AW's budget and rates.

### Posted: 1/3/2017

Austin Water's infrastructure investments are based on operational needs and service demands as part of Austin Water's (AW's) Capital Improvement Project (CIP) program. Rate impact is considered to the extent that AW manages its CIP Spending Levels to balance asset and infrastructure needs with the fiscal impact on AW's budget and rates.

### Posted: 1/11/2017

Response provided the Capital Plant in Service information from the Water and Wastewater Cost of Service Models. The net capital plant in service is \$1,607,078,593 for Water and \$1,435,204,022 for Wastewater.

ID	Class	Торіс	Requestor	Question	Status	T
937	All Classes	General Cost of Service	Lanetta Cooper	Submitted: 12/19/2016 How are new service connections addressed in COS?	Posted	P N C V C r e r e r e
936	All Classes	Allocation Methodologies	Lanetta Cooper	Submitted: 12/19/2016 What is the rage of alternate COS methodologies? A. How was the range determined? B. How were the COS methodologies relied upon by consultants for residential customer classes determined? (what kind of vetting process was used to ensure the consultants that are relied upon for COS methodologies represented residential customer class in rate cases?).	Posted	P A p
935	All Classes	General Cost of Service	Lanetta Cooper	Submitted: 12/19/2016 How does the water conservation program factor into rates? Into the cost of service?	Posted	F Ir F ir v
934	All Classes	General Cost of Service	Lanetta Cooper	Submitted: 12/19/2016 Does the COA have any customers who are not either within the city limits of Austin or within the service territory of AE?	Posted	P A S n A S
933	Residential	General Cost of Service	Lanetta Cooper	Submitted: 12/19/2016 How can we hold low income customers harmless for potential rate increases with the goal of maintaining affordability?	Posted	P T p re c
931	All Classes	General Cost of Service	Lanetta Cooper	<b>Submitted: 12/19/2016</b> How consistent, if at all, is the w/ww reserve policies with AE's reserve policies? A. What are all of COA's reserves and what is the policy behind each reserve? B. Are nontraditional expenses such as specialized reserves considered O&M expenses for purposes of determining the needed level of COA reserves such as the amount needed for cash working capital?	Posted	

### New questions submitted since last PIC/WIC

### Information not yet available

New responses posted since last PIC/WIC

Responses previously posted on website

### Summary Response

### Posted: 12/29/2016

New service connections (i.e. Capital Recovery Fees) are considered non-rate revenue and are not based on the volume of water and wastewater sold in the COS analysis. Capital recovery fees are used to reduce debt service requirements associated with growth related projects, which reduces rate revenue required to cover revenue requirements.

### Posted: 04/21/2017

Austin Water provided a summary of issues (decision points) evaluated during the current Cost of Service study.

### Posted: 12/29/2016

In the current COS model, the Water Conservation Program is allocated as a common to all (retail and wholesale) administrative cost. Costs associated with this indirect cost category are allocated based on the projected volume by customer class.

### Posted: 12/29/2016

Austin Water (AW) provides water and/or wastewater services to outside city and wholesale customers that are not within the city limits or within the service territory of Austin Energy (AE). A map is provided showing the current service territorry for AW and AE.

### Posted: 12/29/2016

The volumetric rates for the water and wastewater CAP participants are designed to collect 60% of the revenue requirements for the class. Residential CAP participants receive an average combined bill discount of 34.9% compared to the Residential Non-CAP customers.

### Posted: 12/29/2016

Austin Water's (AW's) reserve policies are only consistent with AE's reserve policies as it pertains to debt service, specifically, the Combined Utility Reserve Fund which is a debt service reserve fund shared by both AE and AW. Other reserve funds are specific to each utilities master debt ordinance or financial policies adopted by City Council.

ID	Class	Торіс	Requestor	Question	Status	
927	Residential	General Cost of Service	Lanetta Cooper	Submitted: 12/19/2016 What is the current low income bill discount program?	Posted	P Ti pi ei re
926	Residential	Customer Demand Characteristics	Lanetta Cooper	Submitted: 12/19/2016 What is the amount of wastewater used for families meeting basic needs?	Posted	P A co ga fa re th
925	Residential	Customer Demand Characteristics	Lanetta Cooper	Submitted: 12/19/2016 What is the amount of water needed for families meeting basic needs?	Posted	P A co ga fa re th
924	Residential	General Cost of Service	Lanetta Cooper	Submitted: 12/19/2016 Except for low income customers participating in bill discount programs, are residential customers treated alike in w/ww rates? A. Do some residential customers have more than one meter that affects their usage characteristics for purposes of billing-that is do customers avoid conservation high tier rates by having a 2nd meter? If this is so, how are these customers billed for their water consumption and for "customer costs". B. How are tenants in multi-family structures charged for water/wastewater? I. If LL charges tenants a monthly amount for water, is the system fair? How does COA monitor? What utility costs are involved in providing w/ww to these tenants? II. If tenants water usage is individually metered, are there some COS savings?	Posted	P P tr ra
923	All Classes	General Cost of Service	Lanetta Cooper	Submitted: 12/19/2016 What conservation studies have been done to justify conservation rates adopted by COA? What are their results? What reports have been done to verify estimated amounts of water conservation occurring as a result of rate structures?	Posted	P R b c s c E a a

### New questions submitted since last PIC/WIC

### Information not yet available

New responses posted since last PIC/WIC

Responses previously posted on website

### Summary Response

### Posted: 12/29/2016

The City of Austin's Customer Assistance Program (CAP) provides waived water and wastewater customer charges to enrolled customers. In addition, volumetric rates are reduced for CAP participants.

### Posted: 12/29/2016

Austin Water (AW) considers the "winter average" of water consumption for residential customers, currently 4,000 gallons per month, as the amount of **wastewater** flows for families to meet basic needs since this period generally reflects the lowest level of residential consumption during the year.

### Posted: 12/29/2016

Austin Water considers the "winter average" of water consumption for residential customers, currently 4,000 gallons per month, as the amount of **water** needed for families to meet basic needs since this period generally reflects the lowest level of residential consumption during the year.

### Posted: 12/29/2016

All residential water and wastewater customers that do not participate in the Customer Assistance Program (CAP) are treated alike and pay the same fixed fees and volumetric rates for water and wastewater service.

### Posted: 12/29/2016

Recent research indicates that the effect could be higher but due to the variability of rate structures, weather, and conservation measures between cities, it is difficult to specifically determine the impact of conservation based on customer consumption. A 2014 report produced by the UNC Environmental Finance Center and the Sierra Club provides a good summary of the issue specific to Texas, and links to available national research.

ID	Class	Торіс	Requestor	Question	Status	T
922	All Classes	Cost Recovery Basis	Lanetta Cooper	Submitted: 12/19/2016 Are the current rate designs reasonable and equitable? A. Do the rate designs include riders or surcharges? B. What are the policies behind the rate designs for each customer class and for each rider or surcharge that exist, if any? C. Are there differentials in rates based on geographic location? D. Fixed vs volumetric charges	Posted	P U Cl Se cl re ra ca ca th
921	All Classes	Allocation Methodologies	Lanetta Cooper	Submitted: 12/19/2016 How should excess capacity be addressed?	Posted	P E D oi
920	All Classes	Allocation Methodologies	Lanetta Cooper	Submitted: 12/15/2016 1. Do you have any debt service costs relating to facilities that have been decommissioned and are no longer used and useful in providing service? 2. If the answer is yes, please identify each facility and for each facility provide the following: a. The total amount of debt and the annual debt service requirement. b. How the costs were allocated, if at all, among the customer classes and please explain the methodologies along with the supporting reasoning utilized for the cost allocations.	Posted	P A de
919	All Classes	Allocation Methodologies	Lanetta Cooper	Submitted: 12/15/2016 How were construction work in progress related costs allocated among the customer classes? In your answer, please explain the methodologies along with the supporting reasoning utilized for the cost allocations.	Posted	P A A C T e a (b T I pa
918	All Classes	Allocation Methodologies	Lanetta Cooper	Submitted: 12/15/2016 How were the capital and O&M costs relating to overhead and office costs for general plant executives and staff allocated in the FY 2017 COS	Posted	P O ar 20 ex vo pl se

### New questions submitted since last PIC/WIC

### Information not yet available

New responses posted since last PIC/WIC

Responses previously posted on website

### **Summary Response**

### Posted: 12/29/2016

Under the current rate design, water rates for the residential customer class do not fully recover the costs of providing service, while wastewater rates for the residential customer class are designed to recover the full revenue

requirements. In addition, current water and wastewater rates for the Wholesale customer class are also below the calculated cost of providing the services, while rates for commercial, multifamily and large volume customers recover over 100% of the calculated cost of service for those classes.

### Posted: 12/29/2016

Excess capacity (i.e. Base Demand versus Max Day Demand and Max Hour Demand) costs are allocated based on the water demand parameters and usage characteristics of each customer class.

### Posted: 12/29/2016

Austin Water is not aware of any outstanding debt related to decommissioned facilities.

### Posted: 1/3/2017

Austin Water includes construction work in progress in rates as debt service payments for either Revenue Bonds, Commercial Paper, Water District Bonds or Cash Funding. This is first allocated to "Key Water Service Functions" then each function is assigned to either common to all costs (both retail and wholesale), retail only, or wholesale only. The functioned costs are then allocated to demand parameters.

### Posted: 1/11/2017

O&M overhead and office costs for general plant executives and staff are itemized as Administrative Support in the FY 2017 COS. These costs are allocated as "Common to All" expenditures that are jointly shared among the retail and wholesale customer classes based on their projected volumes. Capital overhead and office costs for general plant executives and staff is a part of the annual debt service.

10		<b>_</b> .	<b>.</b>		<b></b>	T
ID	Class	Торіс	Requestor	Question	Status	
917	All Classes	General Cost of Service	Lanetta Cooper	Submitted: 12/15/2016 Please identify when the load assumptions for planning identified in the previous question were developed.	Posted	Po Th fo Ro
916	All Classes	General Cost of Service	Lanetta Cooper	Submitted: 12/15/2016 Please provide the load assumptions for planning a residential subdivision and for a multifamily building. To the extent load assumptions include recognition of water appliance assumptions, home size assumptions, and land assumptions, please include an explanation of all assumptions relied upon in developing the load assumptions for planning.	Posted	Provide a contract of the cont
915	All Classes	Allocation Methodologies	Lanetta Cooper	<b>Submitted: 12/15/2016</b> 1. How were, if any, extra capacity costs allocated to fire protection. Please explain why or why not extra capacity costs were allocated to fire protection. 2. How were the fire protection costs identified and quantified for the FY 2017 COS study the PIC is reviewing? 3. Please provide the load factors (base, extra day and extra hour) for fire protection for the three year interval studies for the FY 2016 COS and for the FY 2017 COS.	Posted	Pe Fi pe m
914	Residential	Customer Demand Characteristics	Lanetta Cooper	<b>Submitted: 12/15/2016</b> 1. What is the total number of CAP customer relied upon in the cost of service study the PIC is reviewing? 2. For those customers identified in no. 1, please provide the bill frequency distribution for the CAP customers for each FY identified in the load data provide the PIC. (By this I mean the number of bills at the different rate levels of consumption by month and by year.) (If the request calls for inconsistent data - that is CAP customer come and go, please provide the data based on the CAP customers for the relevant requested FYs data) 3. What research, if any, have you performed or been provided that explains any large water consumption for any of the CAP customers including: peak day and peak hour consumption, if possible. 4. How many CAP customers had a consumption level for any month of the fiscal year used for the COS that were in the third tier, in the fourth tier, in the fifth tier?	Posted	

- New questions submitted since last PIC/WIC
- Information not yet available
- New responses posted since last PIC/WIC
- Responses previously posted on website

### Summary Response

### Posted: 1/27/2017

The Living Unit Equivalent (LUE) guidance document used for infrastructure planning and sizing for Service Extension Requests was last updated in September 2014.

### Posted: 1/27/2017

Austin Water uses different planning methods for different planning projects. Several criteria and data sets are used to determine the appropriate infrastructure sizing for planning projects. Typically peak loadings are most appropriate for infrastructure project sizing, but in some circumstances the more applicable loading for planning represents minimum or average flows. For water infrastructure, peak hour or peak day plus fire flow are often used. For wastewater infrastructure, peak loadings are often represented as peak wet weather flows related to inflow and infiltration.

Response provides current living unit equivalent guidance document used for Service Extension requests.

### Posted: 12/29/2016

Fire demand costs are not allocated based on peak day or beak hour demands, consequently Austin Water does not maintain load factor information for fire protection.

### Posted: 1/3/2017

Provided requested information related to number of CAP customers, including bill distribution detail based on consumption and number of accounts

ID	Class	Торіс	Requestor	Question	Status	
913	All Classes	General Cost of Service	Lanetta Cooper	<b>Submitted: 12/15/2016</b> Please identify and list each cost you have identified as non-volume related in your COS the Public Involvement Committee (PIC) is reviewing. For each cost identified, please provide the following: a. Whether the cost is customer, meter, or fire b. What amount you identified for that cost; and c. How that cost was allocated among the customer classes. Please explain the allocation method used.	Posted	P V
912	Residential	Allocation Methodologies	Lanetta Cooper	Submitted: 12/15/2016 Please explain how you developed your peaking factors for the residential class. In your explanation, please identify how the load research was developed including: the number of accounts used in the sample; how the sample was determined for sampling and for the accuracy of the sample to the whole customer class load characteristics.	Posted	P C C D D C D D P
909	Residential	General Cost of Service	Lanetta Cooper	<b>Submitted: 12/07/2016</b> Questions relating to W/WW Cost of Service Submitted by Lanetta Cooper December 7, 2016, Prt.6 "You" in these questions refer to Austin W/WW and its employees including the general manager, officers and c16. Please provide you estimated typical monthly water consumption for each of the following residential family sizes including water used for a washing machine but not for lawn irrigation: a. Single member household b. Two person household c. Four person household d. Six person household e. Eight person household f. Ten person household g. 16 person household 17. Please provide a copy of your chart of accounts. 18. Is your chart of accounts consistent with the National Association of Regulatory Commissioners' Uniform System of Accounts? Please explain why or why not your onsultants	Posted	P A or cl of A of
908	Residential	General Cost of Service	Lanetta Cooper	Submitted: 12/07/2016 Questions relating to W/WW Cost of Service Submitted by Lanetta Cooper December 7, 2016, Prt.5 "You" in these questions refer to Austin W/WW and its employees including the general manager, officers and consultants. 15. In your response to Grant Rabon requested on 10/18/2016 you provided the peaking factors by customer class. However, the residential customers apparently list both residential customers residing within Austin's city limits and residing outside Austin's city limits. Please break down the peaking factors for the residential class by inside the city limits and outside the city limits relying upon the same data, if able, you relied upon in your response to Mr. Rabon.	Posted	P S C V ir

### New questions submitted since last PIC/WIC

- Information not yet available
- New responses posted since last PIC/WIC

Responses previously posted on website

### **Summary Response**

### Posted: 1/27/2017

Provided a list of costs Austin Water has identified as non-volume related costs.

### Posted: 12/29/2016

Customer class peaking factors are calculated as follows: "Class Peak Day Factor" = ((Class Peak Month Demand/Class Average Month Demand) X (System Peak Day Demand/System Peak Month Demand))

"Class Peak Hour Factor" = ((Class Peak Month Demand/Class Average Month Demand) X (System Peak Hour Demand/System Peak Month Demand))

### Posted: 12/29/2016

Austin Water does not maintain customer household size information, consequently consumption forecasts are based on average consumption per account for each customer class, not on family size. Provided AW's chart of account elements. AW uses the City of Austin's standardized chart of accounts, which is not consistent with the National Association of Regulatory Commissioners' Uniform System of Accounts.

### Posted: 12/29/2016

Separate NCP factors for the inside city and outside city customers are not calculated in the COS model and Austin Water currently does not maintain separate peaking factor information for outside city customers.

ID	Class	Торіс	Requestor	Question	Status	
907	Residential	General Cost of Service	Lanetta Cooper	<b>Submitted: 12/07/2016</b> Questions relating to W/WW Cost of Service Submitted by Lanetta Cooper December 7, 2016, Prt.4 "You" in these questions refer to Austin W/WW and its employees including the general manager, officers and consultants. 11. For the FY where the most recent data is available, what is the total amount of water treated on your peak day? On your peak hour day? 12. For each FY for the next ten years, please provide your estimates of water consumption during your peak day and during your peak hour. 13. In developing your peaking factors used to allocate costs, do you normalize the data for weather? Please explain. 14. How much reserve capacity do you have with your water treatment plants?	Posted	Pr Co
906	Residential	General Cost of Service	Lanetta Cooper	<b>Submitted: 12/07/2016</b> Questions relating to W/WW Cost of Service Submitted by Lanetta Cooper December 7, 2016, Prt.3 "You" in these questions refer to Austin W/WW and its employees including the general manager, officers and consultants. 7. Please provide documents in your possession, care, or control you are aware of that support your position that W/WW needs the level of reserves you have identified in No. 6 above. 8. Please identify each non rate-related revenue source you have. 9. For each source identified in No. 8 above, please provide the following: a) Description of the source; b) The amount budgeted for FY 2017; c) How the revenues realized from that source were incorporated into your cost of service. 10. What is the total capacity of water treatment W/WW has involving its water treatment plants currently; projected for FY 2017; projected for FY 2018; and projected for each FY over the next five years and over the next ten years?	Posted	Pc Se cu W inf
905	Residential	General Cost of Service	Lanetta Cooper	<b>Submitted: 12/07/2016</b> Questions relating to W/WW Cost of Service Submitted by Lanetta Cooper December 7, 2016, Prt.2 "You" in these questions refer to Austin W/WW and its employees including the general manager, officers and consultants. 4. Please explain how the revenue stability reserve costs were allocated among the various customer classes for FY 2017 or for the most recent FY available. 5. For each fiscal year since the creation of the revenue stability reserve to the present, please provide the amount of revenues W/WW realized from each customer class. 6. Please provide the total level of reserves W/WW opines it needs to maintain fiscal responsibility.	Posted	Po Pr re Co

- New questions submitted since last PIC/WIC
- Information not yet available
- New responses posted since last PIC/WIC
- Responses previously posted on website

### Summary Response

### Posted: 12/29/2016

Provided FY15 peaking factor information used in the FY17 Cost of Service model.

### Posted: 12/29/2016

Separate NCP factors for the inside city and outside city customers are not calculated in the COS model and Austin Water currently does not maintain separate peaking factor information for outside city customers.

### Posted: 12/22/2016

Provided the amount of Revenue Stability Reserve Fund revenues realized from each customer class and Joint Committee recommedations related to reserve fund targets.

ID	Class	Торіс	Requestor	Question	Status	
904	Residential	General Cost of Service	Lanetta Cooper	<b>Submitted: 12/07/2016</b> Questions relating to W/WW Cost of Service Submitted by Lanetta Cooper December 7, 2016, Prt.1 "You" in these questions refer to Austin W/WW and its employees including the general manager, officers and consultants. 1. Please answer the questions I provided to you through the PIC meeting on September 27, 2016 and that are posted on your website. 2. Please provide the formula, calculation, model, and./or such other procedure you have/are using to determine what amount of revenue stability reserves is necessary to maintain the utility's fiscal soundness. 3. Please identify what water systems you are aware of operating in Texas that have revenue stability reserves.	Posted	P TI Fi A Fi Su Su To re
900	Residential	General Cost of Service	Grant Rabon	<b>Submitted: 12/01/2016</b> Please provide the following data for each of the last five (5) fiscal years and the estimates for the current budget by utility (i.e., water, reclaimed water and wastewater). a) Dollar amount of cash funded capital expenditures b) Dollar amount of total capital expenditures c) Total debt service (principal and interest) d) Debt to equity ratio e) Debt service coverage ratio f) Total cash reserves g) Days cash on hand		P Ca pa ca W
899	Residential	General Cost of Service	Grant Rabon	Submitted: 12/01/2016 Please indicate if the \$900,000 per year currently budgeted by Austin Water to support the Barton Springs/Edwards Aquifer Conservation District is a cost that has been specifically assigned to Austin Water by the Texas Legislature or, rather, was assigned to the City of Austin and the City decided that it should be paid by Austin Water.	Posted	P T L A
896	Outside	General Cost of Service	Chuck Loy	Submitted: 11/30/2016 Regarding the current consideration of calculating the "Outside" rates using the Utility Method. Does AW have detailed records to be able to identify the plant that is providing service to outside customers? Or alternatively, can reasonable allocations be developed such as inch-feet, water produced or transferred, etc.? How would shared production facilities be allocated?	Posted	P A cu se
891	Wholesale	General Cost of Service	Jay Joyce	Submitted: 11/22/2016 8. [Wholesale] According to the COA Purchasing Office's Scope of Work for the current COS study (Solicitation #RFP CDL2002), the consultant will have up to three meetings with PUC staff to assist AW in developing the wholesale rate filing package. Please describe how AW or the consultant is engaging the PUC and provide any documentation submitted to any PUC personnel on this topic. If the PUC has responded, please describe their response and provide all documents given to AW or its consultants by the PUC in their response(s).	InProgress	

### New questions submitted since last PIC/WIC Information not yet available New responses posted since last PIC/WIC Responses previously posted on website

### Summary Response

### Posted: 1/6/2017

The 2012 Joint Committee on Austin Water's (AW) Financial Plan (2012 Joint Committee) recommended that AW create a Revenue Stability Reserve Fund (Reserve Fund) with a funding target of 120 days of budgeted Water operating requirements by implementing a new volumetric surcharge. AW is not aware of any other water systems in Texas that has a revenue stability reserve fund or similar reserve.

### Posted: 12/29/2016

Provided 5 year history and FY17 budget for cash funded capital expenditures, total capital expenditures, debt service payments, debt to equity ratio, debt service coverage, total cash reserves and days cash on hand by utility (water, wastewater and reclaimed).

### Posted: 12/20/2016

Texas law under Chapter 8802 of the Texas Special Local Laws Code assesses the District fee to the City of Austin. Austin Water pays the annual fee.

### Posted: 12/20/2016

Austin Water operates a integrated system which serves all customers. We do not identify specific plant or assets serving each customer class.

ID	Class	Торіс	Requestor	Question	Status	
890	Wholesale	General Cost of Service	Jay Joyce	<b>Submitted: 11/22/2016</b> 7. [Wholesale] According to the COA Purchasing Office's Scope of Work for the current COS study (Solicitation #RFP CDL2002), the consultant will "develop written process documentation of PUC rate filing requirements learned from any meetings with PUC staff." Please provide that document when available.	InProgress	
889	Wholesale	General Cost of Service	Jay Joyce	<b>Submitted: 11/22/2016</b> 6. [Wholesale] If AW changes the rate methodology for the wholesale customers from the current cash basis to a utility basis, how does AW propose to compensate or credit these customers for their historical debt service contributions used to retire principal on debt? How will AW avoid double-collecting since most assets have shorter debt repayment schedules than the corresponding depreciable lives for the same assets?	Posted	P T th e: cl
888	Wholesale	General Cost of Service	Jay Joyce	<b>Submitted: 11/22/2016</b> 5. [Wholesale] If AW changes the rate methodology for the wholesale customers from the current cash basis to a utility basis, how does AW propose to compensate or credit these customers for their historical contributions to cash-funded capital to avoid double- collecting?		P T th Ci r
887	Wholesale	General Cost of Service	Jay Joyce	<b>Submitted: 11/22/2016</b> 4. [Wholesale] Provide the contract (as defined in COA Purchasing Office's Standard Purchase Definitions) for AW's Impartial Hearing Examiner related to the current AW cost of service study.	InProgress	
886	Wholesale	General Cost of Service	Jay Joyce	<b>Submitted: 11/22/2016</b> 3. [Wholesale] Provide the solicitation (as defined in COA Purchasing Office's Standard Purchase Definitions) for AW's request for an Impartial Hearing Examiner related to the current AW cost of service study.	Posted	P A h
885	Wholesale	General Cost of Service	Jay Joyce	<b>Submitted: 11/22/2016</b> 2. [Wholesale] According to the procedural schedule adopted for Austin Energy's 2016 cost of service and rate review (shown in Impartial Hearing Examiner's Memorandum No. 8) the parties submitted prefiled direct written testimony, conducted discovery, submitted prefiled rebuttal testimony, participated in a four-day hearing, and filed closing arguments in a manner similar to those used in a contested case at the PUC. Does AW envision using substantially the same process as AE? If not, what is expected to be different, and why?	Posted	P A tr th in re Si Si T fil

New questions submitted since last PIC/WIC

- Information not yet available
- New responses posted since last PIC/WIC
- Responses previously posted on website

### **Summary Response**

### Posted: 3/2/2017

The Austin Water (AW) executive team decided to continue using the cash basis to determine revenue requirements for the wholesale customer class. Consequently, debt service expenditures will continue to be allocated to all customer classes and recovered using existing methodologies.

### Posted: 3/2/2017

The Austin Water (AW) executive team decided to continue using the cash basis to determine revenue requirements for the wholesale customer class. Consequently, cash-funded capital expenditures will continue to be allocated to all customer classes and recovered using existing methodologies.

### Posted: 4/21/2017

Austin Water provided the scope of work for the impartial hearing examiner solicitation.

### Posted: 04/21/2017

Austin Water (AW) has committed to an open and transparent rate review process following the conclusion of the Cost of Service study. The rate review process will include an independent review of AW's rate recommendation by an Impartial Hearing Examiner (IHE). The IHE process is expected to begin in October 2017 and conclude by May 2018. AW envisions the process to be similar to the process Austin Energy under took in 2016. The process will include pre-filed testimony, discovery, prefiled rebuttal testimony and filed closing briefs.

ID	Class	Торіс	Requestor	Question	Status	
884	Wholesale	General Cost of Service	Jay Joyce	<b>Submitted: 11/22/2016</b> 1. [Wholesale] AW is required to submit a rate filing package to the PUC in order to change the rates of the four wholesale customers who were parties to the rate case (PUCT Docket No. 42857), and the COA Purchasing Office's Scope of Work for the current COS study (Solicitation #RFP CDL2002) states that the COS consultant will be designing a working model for the PUC rate filing package concurrent with the preparation of this COS Study. Please provide this model when it is available.	InProgress	
881	All Classes	General Cost of Service	Grant Rabon	Submitted: 10/26/2016 Related to the FY 2017 Proposed O&M budget, for each line-item below please indicate what is driving the significant increase in this cost for the combined utilities (from the FY 2015 Actual) AND if the cost is expected to persist at the FY 2017 level into the future. a) Temporary Employees (acct 5006) b) Security Services (acct 5675) c) Other Services (acct 5860) d) Interdepartmental Charges (acct 6203) e) Legal Claims/Damages (acct 6355) f) Pipeline Maintenance (acct 6396) g) Commercial Incentives (acct 6811) h) Household Efficiency (acct 6813) i) Irrigation Efficiency (acct 6814)	Posted	Po Ro th
880	Large Volume	General Cost of Service	Jay Joyce	<b>Submitted: 10/26/2016</b> (This question was originally submitted as a comment on 10/24/16)Industrial/Large Volume: Please provide the proposal and the agreement with Raftelis Financial Consultants, Inc. to conduct this COS Study. How does AW propose to recover this cost from customers?	Posted	Po Au to co of av
878	Large Volume	General Cost of Service	Jay Joyce	Submitted: 10/26/2016 (This question was originally submitted as a comment on 10/24/16) Industrial/Large Volume: Please provide the following information pertaining to the sale(s) in FY 13, FY 14, FY 15, or FY 16 of any large AW assets (original cost greater than \$1,000,000): • original cost • net asset value when sold • gross and net proceeds from sale, and • explanation of difference in gross and net proceeds (e.g., decommissioning cost, remediation, etc.).	Posted	P( R( C)

New questions submitted since last PIC/WIC

- Information not yet available
- New responses posted since last PIC/WIC
- Responses previously posted on website

Summary Response

### Posted: 12/20/2016

Response provides explanations for significant increases to the requested budget line items.

### Posted: 2/14/2017

Austin Water (AW) selected Raftelis Financial Consultants to conduct the 2016 Cost of Service rate study following a competitive solicitation process. The contract for the Cost of Service study, which includes Raftelis' proposal, is available on the City of Austin Purchasing Department website.

### Posted: 12/20/2016

Response provides information on the sale of the Lime Creek Quarry in September 2015 for \$4,100,000.

ID	Class	Торіс	Requestor	Question	Status	
875	Wholesale	General Cost of Service	Randy Wilburn	Submitted: 10/25/2016 Why are the Wholesale and Out-of-CIty customers being excluded from the PIC? ALL customers, including wholesale and out-of-City customers, should be part of the PIC process.	Posted	Po Au ar cu inv ch we re
						AI W su re Pi
874	All Classes	General Cost of Service	Randy Wilburn	<b>Submitted: 10/25/2016</b> The Texas Public Utility Commission has already declared the following costs illegal for the COA to collect through water and wastewater rates: • General Fund Transfers; • rate case expenses; • reclaimed water (capital and O&M costs); • City's reclassification of SWAP and commercial paper administration costs from capital to expense; • drainage fee; • allocation of O&M expenses to the reclaimed water utility; • depreciation; • Green Water Treatment Plant capital costs; • Revenue Stability Reserve Fund; • Barton Springs/Edwards Aquifer Conservation District; • Govalle Wastewater Treatment Plant (capital costs/O&M costs); • utility-wide contingency; • Water Treatment Plant No. 4; and • Green Choice electricity When will AWU reduce all customers revenue requirements and rates in accordance with PUC Order?	Posted	Po Th re cu ille or pa im
871	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Please reference p. 16 of the September 27, 2016, PIC meeting Agenda and Backup document (Slide #19) which indicates that AW has 1,170.00 FTE positions in FY 2017. Please separate this into water, wastewater, and reclaimed water. How many of these positions are vacant today, and what are the revenue requirements (budgeted payroll and benefits) associated with these vacancies? Please also separate vacancy count and revenue requirements into water, wastewater, and reclaimed water.	Posted	Po Ta po bu
869	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Please provide the anticipated level of capital spending for each of the next ten fiscal years (or as many years as possible if ten years' data is not available) for each of the water, wastewater, and reclaimed water utilities.	Posted	P( W

### New questions submitted since last PIC/WIC Information not yet available New responses posted since last PIC/WIC Responses previously posted on website

### Summary Response

### Posted: 1/5/2017

Austin Water decided to hold separate meetings for its retail and wholesale customers to provide all interested wholesale customers an opportunity to participate in the public involvement process given recent wholesale rate challenges. In prior COS studies, wholesale customers were limited to two Public Involvement Committee representatives.

Although, Austin Water decided to hold separate PIC and WIC meetings, all meetings are open public meetings. As such, all interested parties, including wholesale customer representatives, are invited to attend and participate in the Public Involvement Committee process.

### Posted: 1/5/2017

The PUC Order made findings of fact based on evidence relating to the 2013 rates charged to four specific wholesale customers; the PUC Order did not declare these costs llegal. It is incorrect and misleading to imply that the PUC's order from the specific case, with its particular facts and particular parties, must be applied more broadly. It is also mportant to note that the PUC Order is on appeal.

### Posted: 12/20/2016

Table provides breakdown of 2017 Budget full time positions by utility, vacant positions, and vacant position budgeted salaries.

Posted: 12/13/2016 Water asset listing available electronically upon request.

ID	Class	Торіс	Requestor	Question	Status	
868	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Please provide the complete detailed wastewater asset listing (including original cost, accumulated depreciation, annual depreciation expense, and net asset value) that will be used in the FY 17 wastewater COS model.	Posted	P W re
867	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Please provide the complete detailed water asset listing (including original cost, accumulated depreciation, annual depreciation expense, and net asset value) that will be used in the FY 17 water COS model.	Posted	P A ca ye
866	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Please provide a listing of all of the revenue requirements inputs to the FY 17 wastewater COS model and compare those amounts to the same categories of input amounts in the FY 13 wastewater COS model.	Posted	P S of
865	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Please provide a listing of all of the revenue requirements inputs to the FY 17 water COS model and compare those amounts to the same categories of input amounts in the FY 13 water COS model.	Posted	P S se
863	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Please verify that AW has properly booked the net proceeds of the sale of the Green Water Treatment Plant (\$34,765,000) into a capital account for future use in capital projects for AW as ordered by the PUCT in Docket No. 42857. How much of the \$34,765,000 booked amount will AW utilize for capital projects FY 17?	Posted	P R re d
862	Large Volume	General Cost of Service	JAY JOYCE	Submitted: 10/24/2016 Industrial/Large Volume: Please verify that AW is properly removing from the COS all amounts transferred to the capital infrastructure fund relating to the Capital Management Department (\$2.6 million in water O&M in FY 13 and \$1.4 million in wastewater O&M in FY 13) as ordered by the PUCT in Docket No. 42857. What are the amounts in AW's FY 17 budget for the Capital Management Department?	Posted	P C \$ \$
861	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: What are the legal fees in the FY 17 budget associated with appeals of PUCT decisions or future PUCT rate cases?	Posted	P N w hi

New questions submitted since last PIC/WIC

- Information not yet available
- New responses posted since last PIC/WIC

Responses previously posted on website

Summary Response

### Posted: 12/13/2016

Wastewater asset listing available electronically upon request.

### Posted: 12/29/2016

Austin Water (AW) provided the Council approved 5 year capital spending plan by utility and project type for fiscal years (FY) 2017 – 2021.

### Posted: 12/12/2016

Schedule includes FY 2013 and FY 2017 wastewater cost of service model revenue requirements.

### Posted: 11/17/2016

Schedule includes FY 2013 and FY 2017 water cost of service model revenue requirements.

### Posted: 12/13/2016

Response includes details of proper accounting for the resolution of the Green Water Treatment Plant decommissioning and sale of property.

### Posted: 12/12/2016

Capital Projects Management Fund budget for FY 2017 is \$1,173,937 for water, \$602,536 for wastewater and \$37,076 for reclaimed.

### Posted: 12/12/2016

No FY 2017 budget was included for the appeal of wholesale rate case as internal City Law Department is handling.

ID	Class	Торіс	Requestor	Question	Status	
860	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Please provide a listing of all legal fees in the FY 17 budget and the purpose of each.	Posted	P F Se \$ ra
859	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Does AW agree that simply because an expenditure may be considered by some to be "good for society" does not mean that it is reasonable and necessary to recover the cost in utility rates?	Posted	P M W W
858	Large Volume	General Cost of Service	JAY JOYCE	Submitted: 10/24/2016 Industrial/Large Volume: Has AW quantified the difference in rate case expenses required to defend a cash basis approach vs. a utility basis approach at the PUCT? The utility basis will require qualified outside experts to conduct and defend depreciation studies, cost of capital analyses, and cash working capital amounts. If yes, how much is that difference, and how much is included in the FY 17 budget? If not, why not, since AW has indicated that it is considering submitting a utility basis approach to the PUC.	Posted	P A e a T th b o d
857	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Please reference page 25 of the October 5, 2016, PIC meeting Agenda and Backup document (Slides #39 and #40). In PUCT Docket No. 42857, AW spent over \$1.3 million in legal and consulting fees in order to defend its positions before the PUCT and convince the PUCT of the validity of its costs: (SEE LIST IN COMMENTS SECTION) In addition to incurring the outside legal and consulting expenses, AW spent considerable unquantified internal resources working on the case. According to AW staff at the October 5 PIC meeting, AW "may come back" and attempt to convince the PUCT that the PUCT's decisions were wrong and that the previously disallowed items should be included in cost of service. Please quantify the cost of this effort that is included in the FY 17 budget.	Posted	P C d b p S c a H

### New questions submitted since last PIC/WIC

### Information not yet available

New responses posted since last PIC/WIC

Responses previously posted on website

### **Summary Response**

### Posted: 12/12/2016

FY 2017 budget includes \$860,000 for outside legal services, without any specific purpose. A contract for \$700,000 for outside legal services for the Shady Hollow rate challenge was approved by Council in November 2016.

### Posted: 1/10/2017

Austin Water believes that its' revenue requirements are made up entirely of costs necessary to provide water and wastewater services to customers, to ensure long-term water supply adequacy and to maintain a high water quality water source.

### Posted: 1/3/2017

Austin Water has not quantified the difference in rate case expenses required to defend a cash basis approach versus a utility basis approach at the Public Utility Commission of Texas (PUCT). Austin Water intends to select the method that best provides a fair and equitable allocation of costs between retail and wholesale customers irrespective of the outcome of the approach or the costs associated with defending the selected allocation basis.

### Posted: 12/29/2016

Other than COS expenses, budgeted at \$494,000 for the duration of the study, and staff salaries, no other costs have been budgeted to support the COS and PUCT rate approval process. However after the start of the new fiscal year, Shady Hollow Municipal Utility District filed a new rate challenge. On November 10, 2016, City Council approved a contract for outside legal service realted to the Shady Hollow rate case in amount not to exceed \$700,000.

ID	Class	Торіс	Requestor	Question	Status	
853	Large Volume	General Cost of Service	JAY JOYCE	Submitted: 10/24/2016 Industrial/Large Volume: Please reference page 25 of the October 5, 2016, PIC meeting Agenda and Backup document (Slides #39 and #40). Listed on those slides are the following PUCT revenue requirement disallowances with their FY 13 amounts added below: 1. Green Water Treatment Plant Costs (\$12,073,835 capital) 2. Revenue Stability Reserve Fund (\$5,516,300 O&M) 3. Barton Springs/Edwards Aquifer Conservation District (\$900,000 O&M) 4. Govalle Wastewater Treatment Plant (\$835,516 O&M and \$1,368,571 capital) 5. Utility-wide Contingency (\$176,175 O&M) 6. Green Choice Electricity (\$4,622,644 O&M increase vs. normal electricity costs) What are the FY 17 amounts for the above items? How are these being allocated among customer classes?	Posted	Pc Re an
852	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Please reference page 25 of the October 5, 2016, PIC meeting Agenda and Backup document (Slides #39 and #40). Listed on those slides are the following PUCT revenue requirement disallowances with their FY 13 amounts added below: 1. General Fund Transfer (\$34,524,366 O&M) 2. Rate Case Expenses (\$641,811 O&M in FY 13 budget, \$1.3 million actual) 3. Reclaimed water system (\$960,000 O&M and \$960,000 capital) 4. Reclassification of SWAP and commercial paper costs from capital to operating expense (\$4,000,000 O&M) 5. Allocation of O&M expense to Reclaimed Water (\$4,857,528 O&M) What are the FY 17 amounts for the above items? How are these being allocated among customer classes?	Posted	Po Re ar
851	Large Volume	General Cost of Service	JAY JOYCE	Submitted: 10/24/2016 Industrial/Large Volume: Please reference page 24 of the October 5, 2016, PIC meeting Agenda and Backup document (Slides #37 and #38) which indicates that costs associated with the City Hall water feature will be allocated 100% to retail customers. In FY 13, capital costs for the City Hall water feature were \$450,000. What is the amount in FY 17? Is the City Hall water feature currently running? If AW sold the City Hall water feature, could AW still provide water, wastewater, and reclaimed water service?	Posted	Po Au W ca re
850	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: What other costs on page 24 of the October 5, 2016, PIC meeting Agenda and Backup document (Slides #37 and #38) that are classified as "Budget Reduction" have simply been reclassified, renamed, or otherwise changed such that they remain in the FY 17 budget despite AW's statements that they should be and have been removed?	Posted	Po 31 re eli Ec

### New questions submitted since last PIC/WIC

- Information not yet available
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### Summary Response

### Posted: 11/9/2016

Response includes FY 2017 budget for all requested items and the allocation by customer class.

### Posted: 11/9/2016

Response includes FY 2017 budget for all requested items and the allocation by customer class.

### Posted: 12/15/2016

Austin City Hall water feature was cash funded by Austin Water in FY 2006. There are no ongoing operating or capital costs included in retail or wholesale revenue requirements.

### Posted: 12/13/2016

311 System Support costs were not eliminated, only reduced. Transfer to Economic Incentive Reserve fund was eliminated. Austin Water began funding a portion ot the Economic Development Fund.

ID	Class	Торіс	Requestor	Question	Status	
849	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Please reference page 24 of the October 5, 2016, PIC meeting Agenda and Backup document (Slides #37 and #38) which indicates that costs for 311 System Support has been classified as "Budget Reduction," which AW staff indicated in the PIC meeting meant that these costs were entirely eliminated from AW's FY 17 budget because they did not relate to AW. Page 30 of the October 5, 2016, PIC meeting Agenda and Backup document shows \$169,190 for Interdepartmental Charges for FY 17. According to the Austin Water Fund Line Item Description at the end of the same document, Interdepartmental Charges indicates that "…this requirement is AW's allocation to fund the 311 System Support…" Will this amount be eliminated from the Cost of Service as not necessary for AW to provide service?	Posted	Pr So F So
848	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Please reference page 24 of the October 5, 2016, PIC meeting Agenda and Backup document (Slides #37 and #38) which indicates that costs for the Radio Communications Fund will be allocated 100% to retail customers. In FY 13, revenue requirements for the Radio Communications Fund were \$192,470 water and \$192,470 wastewater. What are the amounts in FY 17? If AW eliminated the costs for the Radio Communications Fund, could AW still provide water, wastewater, and reclaimed water service? If not, how much could AW reduce the expenditures relating to the costs for the Radio Communications Fund and still continue to provide water, wastewater, and reclaimed water, and reclaimed water service?	Posted	P( R) W
847	Large Volume	General Cost of Service	JAY JOYCE	Submitted: 10/24/2016 Industrial/Large Volume: Please reference page 24 of the October 5, 2016, PIC meeting Agenda and Backup document (Slides #37 and #38) which indicates that costs for Accounts Receivable Leak Adjustment will be allocated 100% to retail customers. In FY 13, revenue requirements for the Accounts Receivable Leak Adjustment were \$785,000 water and \$97,100 wastewater. What are the amounts in FY 17? What is the breakout of bad debt expense for each retail class?	Posted	Po Ad is Al
846	Large Volume	General Cost of Service	JAY JOYCE	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Please reference page 24 of the October 5, 2016, PIC meeting Agenda and Backup document (Slides #37 and #38) which indicates that costs for Bad Debt Expense will be allocated 100% to retail customers. In FY 13, revenue requirements for the Bad Debt Expense were \$925,000 water and \$917,500 wastewater. What are the amounts in FY 17? What is the breakout of bad debt expense for each retail class?	Posted	P B W C

New questions submitted since last PIC/WIC

Information not yet available

New responses posted since last PIC/WIC

Responses previously posted on website

### Summary Response

### Posted: 11/8/2016

Schedule provides actual costs for 311 System Support for FY 2013 to FY 2016. FY 2017 budget for 311 System Support is \$169,190.

### Posted: 11/8/2016

Regional Radio System budget for FY 2017 is \$253,605 for water and \$0 for wastewater.

### Posted: 11/7/2016

Accounts Receivable Leak Adjustments budget for FY 2017 is \$976,000 for water and \$60,100 for wastewater. Allocation by customer class is included in the schedule.

### Posted: 11/7/2016

Bad debt expense budget for FY 2017 is \$2,508,825 for water and \$1,850,456 for wastewater. Allocation by customer class is included in the schedule.

ID	Class	Торіс	Requestor	Question	Status	
845	Large Volume	General Cost of Service	JAY JOYCE	Submitted: 10/24/2016 Industrial/Large Volume: Please reference page 24 of the October 5, 2016, PIC meeting Agenda and Backup document (Slides #37 and #38) which indicates that costs for Reicher Ranch O&M and capital costs will be allocated 100% to retail customers. In FY 13, revenue requirements included \$105,770 in O&M and \$818,704 in capital costs. What are the amounts in FY 17? If AW sold Reicher Ranch, could AW still provide water, wastewater, and reclaimed water service?	Posted	<b>Po</b> Re
844	Large Volume	General Cost of Service	Jay Joyce	<b>Submitted: 10/24/2016</b> Industrial/Large Volume: Please reference page 24 of the October 5, 2016, PIC meeting Agenda and Backup document (Slides #37 and #38) which indicates that costs for the Land Management Division will be allocated 100% to retail customers. In FY 13, revenue requirements for the Land Management Division were \$1,458,750. What is the amount in FY 17? If AW eliminated the Land Management Division, could AW still provide water, wastewater, and reclaimed water service? If not, how much could AW reduce the expenditures relating to the Land Management Division and still continue to provide water, wastewater, and reclaimed water service?	Posted	<b>Pc</b> La
840	All Classes	General Cost of Service	Grant Rabon	<b>Submitted: 10/17/2016</b> Related to the FY 2017 Proposed O&M budget: a. The program costs for Water Resources Management in the water and wastewater budgets have increased significantly between FY 2014 (Actual) and FY 2017 (Proposed). Can you explain what is driving this increase? b. Were the transfers to Administrative Support in the FY 2017 budget formerly captured within the line item for transfers to Support Services Fund in the FY 2014 and FY 2015 actuals? c. Why is there a transfer to the Economic Development in the FY 2017 budget? Wasn't this a cost no longer to be recovered from Austin Water or did we misunderstand this treatment? d. The program costs for Utility Billing System Support in the wastewater budget have increased significantly between FY 2014 (Actual) and FY 2017 (Proposed). Can you explain what is driving this increase?		Po Re cos
839	All Classes	General Cost of Service	Grant Rabon	<b>Submitted: 10/17/2016</b> What is the current cash balance for the water, reclaimed water, and wastewater utilities, segregated by purpose (e.g., Rate Stability Reserve, Operating Reserve, etc.)? Please identify any restricted amounts.	Posted	Pc Cu Se
838	All Classes	General Cost of Service	Grant Rabon	<b>Submitted: 10/17/2016</b> Please provide the currently outstanding principal amount for any debt that will be repaid by the water, reclaimed water, or wastewater utilities, by series. For shared debt (e.g., General Obligation issues), please identify the percentage of the issue that is allocated to water, reclaimed water, or wastewater.	Posted	<b>Ρα</b> Οι \$2

New questions submitted since last PIC/WIC

- Information not yet available
- New responses posted since last PIC/WIC
- Responses previously posted on website

### Summary Response

Posted: 11/7/2016

Reicher Ranch budget for FY 2017 is \$81,088.

Posted: 11/7/2016 Land Management budget for FY 2017 is \$1,446,357.

Posted: 11/7/2016 Responses related to FY 2017 Proposed Operating Budget costs.

### Posted: 11/1/2016

Current restricted and non-restricted cash balances as of September 30, 2016 is \$256,611,614.

## Posted: 11/9/2016

Outstanding principal as of August 1, 2016 is \$2,325,094,000.

ID	Class	Торіс	Requestor	Question	Status	
837	Residential	General Cost of Service	Grant Rabon	Submitted: 10/17/2016 For the allocation of Customer Care costs between electric, water, wastewater, ARR (solid waste), drainage, transportation and code compliance, please explain the rationale for the following organization costs being allocated to electric, water and wastewater only. Please also provide a brief explanation for each cost. a. Bill Production (Org 8807) b. Revenue Measurement and Control (Org 8811) c. Bill Support (Org 8817) d. Quality Management (Org 8818) e. CCC-Small Commercial (Org 8820) f. Multi-Family Partnership Program (Org 8824)	Posted	Po Ri Ci
836	All Classes	Cost Recovery Basis	Grant Rabon	<b>Submitted: 10/17/2016</b> Given that only monthly water consumption data is available, please provide the underlying assumptions that will be used to develop the peak day and peak hour water demands by customer class, as well as the basis for these assumptions, if this methodology is pursued.	Posted	P S m
834	Residential	General Cost of Service	Grant Rabon	<b>Submitted: 10/17/2016</b> With as many specifics as possible, please provide Austin Water Utility's plans to address residential rate affordability and the disproportionate cost of water and wastewater service for residential customers as a percentage of MHI (as reported by Fitch).	Posted	P R m
833	Residential	Customer Demand Characteristics	Grant Rabon	<b>Submitted: 10/17/2016</b> Currently, how much is the average annual residential wastewater bill for Austin Water Utility customers in dollars per month and as a percentage of MHI?	Posted	P A W
832	Residential	Customer Demand Characteristics	Grant Rabon	<b>Submitted: 10/17/2016</b> Currently, how much is the average annual residential water bill for Austin Water Utility customers in dollars per month and as a percentage of median household income (MHI)?	Posted	P A W
830	All Classes	General Cost of Service	Dave Yanke	<b>Submitted: 10/12/2016</b> Question submitted via 09/27/16 PIC meeting. "Can staff provide information as to what other cities are using as a policy for 'Operating Cash Reserves'. Top 30 cities for example."	Posted	P R po ra
829	Wholesale	Revenue Requirements	Robert Anderson	<b>Submitted: 10/12/2016</b> Question submitted via 9/27/2016 WIC meeting. "Please provide a listing of the 'Peaking Factors' for all customer classes".	Posted	P S av
828	All Classes	General Cost of Service	Karyn Keese	Submitted: 10/12/2016 09/28/16 PIC Meeting questions submitted Via written document.	Posted	P R ex fu di ba

### New questions submitted since last PIC/WIC

### Information not yet available

New responses posted since last PIC/WIC

Responses previously posted on website

### **Summary Response**

### Posted: 12/21/2016

Response includes explanations for each of the requested Customer Care costs and why they were allocated to only electric, water and wastewater only.

### Posted: 10/24/2016

Summary of peak day and peak hour calculation methodology.

### Posted: 12/21/2016

Response provides historical cost reductions and debt management strategies to minimize rate increases.

### Posted: 11/1/2016

Average FY 2017 residential water bill of \$41.60 per month which is estimated to be 0.74% of adjusted MHI.

### Posted: 11/1/2016

Average FY 2017 residential water bill of \$41.59 per month which is estimated to be 0.74% of adjusted MHI.

### Posted: 1/12/2017

Response provides reserve and debt service coverage policies and results where available for the top 35 cities ranked by population as of July 2014.

### Posted: 10/25/2016

Schedule showing FY 2013, FY 2014, FY 2015 and 3-year average peaking factors by customer class.

### Posted: 1/12/2017

Response provides requested information related to expenditure cost categories, transfers, capital program funding, Public Utility Commission of Texas (PUCT) disallowed wholesale expense items and cash versus utility pasis revenue requirement calculation.

ID	Class	Торіс	Requestor	Question	Status	
827	All Classes	General Cost of Service	Amenity Applewhite	Submitted: 10/11/2016 How have you notified Austin residents about the series of public meetings? I polled 22 residents/customers in my neighborhood and 100% had not heard about the Service Rate Study and public participation options. Additionally, I would like information on how you recruited the Public Involvement Committee Members. Thank you.	Posted	P S c c
820	All Classes	Cost Recovery Basis	Jim Schaffrath	Submitted: 09/30/2016 Why is it we always approach City utility rates from the revenue side of the ledger? Since we are going to computerized meters are we going to lay off the meter readers? If not, why not? Are there any other cost reducing measures that have been considered? Why haven't we an opportunity to comment on those? I do not want my water bill increased for any reason until we have exhausted cost saving measures.	Posted	P S pa ch
818	All Classes	General Cost of Service	Phil Howry	Submitted: 09/30/2016 Does the AWU pay a tiered-rate structure for water pumped from the LCRA system and by reason of the city's historic "riparian rights" to river water, at what extaction volume does the AWU begin paying the LCRA for water? Does the per unit water treatment costs rise or fall with volume? Please explain. How can AWU funds transferred per annum to the city's general fund be deemed a legitimate AWU "rate matrix expense"?	Posted	P S cc us
817	All Classes	General Cost of Service	Marcia Stokes	<b>Submitted: 09/30/2016</b> Can staff provide an updated history of fixed & volumetric charges by customer class as provided in AWU 2012 Joint Subcommittee Financial Plan website question 208 2/24/2012?	Posted	P S by cc
816	All Classes	Customer Demand Characteristics	Dan Wilcox	Submitted: 09/29/2016 Question submitted at 09/27/16 PIC meeting. "Can staff provide the revenue by customer class for FY 2015 in the same format as the consumption/flows by customer class?"	Posted	P S C 20
815	Multifamily	Customer Demand Marcia Stokes Characteristics		Submitted: 09/29/2016 Requested information during the 09/27/16 PIC meeting. "What are the population percentages for 'single-family' residential and 'multi-family' residential water and wastewater customer of Austin Water?"	Posted	<b>P</b> ( C 44
814	All Classes	General Cost of Service	Lanetta Cooper	Submitted: 09/28/2016 Water and Wastewater Cost of Service meeting questions to cover over the course of the study. Submitted by Lanetta Cooper during the Public Involvement Committee on Tuesday, September 27, 2016.	Posted	P Q Se

### New questions submitted since last PIC/WIC

- Information not yet available
- New responses posted since last PIC/WIC

Responses previously posted on website

### **Summary Response**

### Posted: 11/7/2016

Summary of Austin Water's cost of service rate study communication initiatives.

### Posted: 11/4/2016

Summary of Austin Water's cost reduction efforts over the bast several years and impact on meter reading costs when changing to advanced metering infrastructure.

### Posted: 10/25/2016

Summary of City of Austin water rights, Austin Water firm contract with LCRA, \$100M prepaid reservation and water use and the 201,000 acre feet trigger.

### Posted: 10/24/2016

Schedules showing historical fixed and volumetric charges by customer class for the first and final year of the previous cost of service model use time periods.

### Posted: 10/4/2016

Schedule showing number of customers for August 2016, consumption/flows for FY 2015, and Actual Revenue for FY 2015.

### Posted: 10/24/2016

Current population estimates include 56% single family and 44% multifamily

### Posted: 9/28/2016

Questions submitted by Lanetta Cooper were subsequently separated into questions 921 to 944.

ID	Class	Торіс	Requestor	Question	Status	
805	Wholesale	General Cost of Service	Clay Collins	<b>Submitted: 09/27/2016</b> There was some mention at today's Wholesale Cost of Service meeting about the PUC settlement with some of the wholesale customers. My understanding is that part of this case dealt with costs that were included in the current cost of service model that were determined not to be applicable to wholesale customers. Can the costs that were disallowed by the PUC be identified and discussed at one of the next two Committee meetings? And can we be informed as to which of these costs COA intends to include in the 2017 Revenue Requirements for Wholesale Customers?	Posted	Pc Re dis Su 20 pe
804	All Classes		Martin Hodell	<b>Submitted: 08/24/2016</b> Could you please share the historical rates and % change by year from ~1995 to 2016. Please indicate what level of consumption is assumed (e.g., 10k gallons/mo, 15k gallons)	Posted	Po So an inc
	Total Numbe	er of Questions Su er Posted: er InProgress:	ıbmitted:	126 122 4		

### New questions submitted since last PIC/WIC

- Information not yet available
- New responses posted since last PIC/WIC
- Responses previously posted on website

### Summary Response

### Posted: 11/4/2016

Revenue requirements disallowed by the PUC were discussed at the October 5, 2016 PIC and WIC meetings. Subsequent discussion took place at the November 29, 2016 PIC and WIC meetings and Raftelis provided their perspective.

### Posted: 9/28/2016

Schedule showing average monthly water bills at 10,000 and 15,000 gallons usage from 1995 to 2016 with % increase from prior year.



# **Decision Point Handout | WIC**





# **Decision Point Handout | WIC**

# **Decision Point Handout | WIC**

### Austin Water Cost of Service Rate Study 2016 Executive Team Decision Points and Recommendations

Decision Points	AW Executive Team Recommendation
Issue #1: Revenue Requirement for Wholesale	AW will continue using the cash basis to determine revenue requirements for wholesale customers.
Issue #2: Revenue Requirement for Outside City Retail	AW will continue using the cash basis to determine revenue requirements for outside city retail custome
Issue #3: General Fund Transfer (GFT)	AW will continue to allocate an 8.2% General Fund Transfer to all customer classes including wholesale of
Issue #4a: Debt Service Coverage	AW will target a 1.85x debt service coverage over the next 5-10 years.
Issue #4b: Cash Reserves Target	AW will target a base operating cash reserve level of 245 days for both the water fund and wastewater f to achieve the 120 days of water reserves in the Revenue Stability Reserve Fund. The overall reserve tar wastewater fund.
Issue #4c: Cash Financing of CIP Target	AW will target a 50% use of cash to fund our CIP projects over the next 5-10 years.
Issue #5: Allocation of Rate Case Expenses to Wholesale	No allocation of rate case expenses to wholesale customers, except for the direct recovery of rate case e allowances.
Issue #6: Allocation of Reclaimed Water Costs to Wholesale	AW will allocate reclaimed water costs to all customer classes including wholesale customers.
Issue #7: Allocation of SWAP and Commercial Paper Costs to Wholesale	AW will allocate SWAP and commercial paper costs to all customer classes including wholesale custome
Issue #8: Allocation of Green WTP Costs to Wholesale	No Green WTP costs will be allocated to wholesale customers.
Issue #9: Allocation of Revenue Stability Reserve Fund Costs to Wholesale	AW will allocate revenue stability reserve fund costs to all customer classes including wholesale custome
Issue #10: Allocation of Barton Springs/Edwards Aquifer Conservation District costs to Wholesale	No Barton Springs/Edwards Aquifer Conservation District costs will be allocated to wholesale customers
Issue #11: Allocation of Govalle WWTP Costs to Wholesale	AW will allocate costs associated with the continued use of the Govalle WWTP site to all customer classe
Issue #12: Allocation of Utility-Wide Contingency to Wholesale	No Utility-wide contingency costs will be allocated to wholesale customers.
Issue #13: Allocation of Water Treatment Plant No. 4 to Wholesale	AW will allocate Water Treatment Plant No. 4 costs to all customer classes including wholesale custome
Issue #14: Allocation of Green Power Costs to Wholesale Customers	AW will allocate green power costs to all customer classes including wholesale customers.
Issue #15: Peaking Factor Methodology	AW will continue current use of AWWA methodology guidelines for peaking factor calculation.

ons
rs.
ustomers.
und over the next 5-10 years. In addition, AW will continue get will be 365 days for the water fund and 245 days for the
xpenses from the challenging parties according to PUC
S.
rs.
s including wholesale customers.
S.

Decision Points	AW Executive Team Recommendation
Issue #16: Inflow/Infiltration cost determination and allocation to customer classes	AW will continue to determine the amount of I/I which results in I/I being 10.5% of the resulting Total Flow applying an 11.7% to the customer class contributed flow. In addition, AW will continue to allocate estimate customer class.
Issue #17: Adding additional wastewater strength parameters	AW will not add any additional wastewater strength parameters in its cost of service methodologies. How will be considered using the current Industrial Waste Surcharge mechanism.
Issue #18: Allocation of drainage fees to wholesale customers	AW will allocate drainage fees to all customer classes including wholesale customers.
Issue #19: CAP customer costs, allocation to classes, and recovery method (Community Benefit Charge and rate)	AW will recommend creation of a Community Benefit Charge (CBC) to recover costs associated with the CA wastewater discount to include a volumetric rate discount. No costs associated with the CAP Program will
Issue #20: Modification of fire demand meter fixed charges	AW will modify the fixed charges for fire demand meter charges by basing the fixed meter charge on the s
Issue #21: Fire protection costs and allocation to customer classes	AW will modify the fire protection allocation using revised meter equivalencies based on hydraulic capacit Selection, Installation, Testing, and Maintenance
Issue #22: Elimination of Commercial and Large Volume subsidy of residential water customers and transition	AW will recommend to eliminate the current commercial and large volume subsidy of residential water curres residential customers, AW will likely recommend a short-term transition of this subsidy.
Issue #23: Test year for revenue requirements	AW will use a historical actual test year adjusted for known and measurable changes.
Issue #24: Creation of outside city retail customer classes and rates	AW will create outside city retail customer classes and rates.

### ons

lows into our wastewater system. This is achieved by mated I/I costs based on contributed flow volume by

owever, high levels of ammonia strengths for some customers

CAP program. Also, AW will recommend an increase in the will be allocated to wholesale customers.

e smaller meter size rather than the larger meter size.

city by meter type as identified in AWWA M6, Water Meters -

customers. However, based on levels of impacts to

## Decision Point Handout April 25, 2017 PIC and WIC Meetings







1

Meeting 11 | April 25, 2017

	Change?	P If Yes,	Cash	Basis	Utility Basis (Option for Change)			
	(Yes or No)	Option for			·			
Issue		Change	Pros	Cons	Pros	Cons		
How should the revenue requirement for wholesale customers be determined? Status Quo: Cash Basis Revenue Requirement Determination		Utility Basis	<ol> <li>Historically used – "generally" accepted by all customers</li> <li>Simple, easy to understand, determine, update and administer</li> <li>All customers treated the same; same methodology used for everyone</li> <li>Matches City's budget and accounting methodology, i.e., cash method</li> </ol>	<ol> <li>O/C customers start paying for assets before placed into service</li> <li>No explicit return to I/C customers for investment and risk to serve O/C customers</li> <li>Potential for material rate changes based on capital financing decisions (e.g., debt vs. cash funding)</li> </ol>	<ol> <li>Provides explicit return to I/C customers for investment and risk to serve O/C customers (O/C rates are higher for the same level of service)</li> <li>Fairness and equity in terms of return provided to I/C customers (O/C rate are higher for the same level of service)</li> <li>Fairness and equity for O/C customers in terms of elimination of subjective decisions by AW regarding method of capital financing which can cause material rate changes</li> <li>Enhanced level of rate stability for O/C customers</li> <li>O/C customer do not pay a return on assets or depreciation until assets are in service</li> <li>Consistent with methodology used by PUCT in the regulation of investor-owned utilities</li> <li>Widely used by other local government utility providers across the US in O/C service arrangements</li> <li>The PUC is currently considering a Notice of Proposed Rulemaking that would require municipal/local government electric utilities to use the Utility Basis for O/C customers. This may indicate a preference that municipal water utilities will also be required to employ the Utility Basis for O/C customers.</li> </ol>	<ol> <li>New approach for customers to understand</li> <li>Absent an agreed upon methodology, potential exists for extensive debate regarding determination of the cost of equity capital</li> <li>Requires the determination of the used and useful rate base – potential for debate regarding in-service date and "usefulness" for assets under construction</li> <li>Represents costs in a manner different thar the City's current cash budget methodology</li> <li>Transitioning to the Utility Basis for O/C customers may raise questions regarding the recovery of capital-related costs. During WIC meeting discussions, concern was raised of "paying for assets twice", based on the disconnect between financing periods and asset life, on which depreciation and rate of return is paid under the Utility Basis.</li> <li>When considering fairness of utility rates, PUC ruling guidelines may favor the consistency of method applied, regardless of the method in use. This "fairness" concern is a consideration when evaluating a move from the Cash to the Utility Basis.</li> </ol>		
PIC Meeting Dates:	PIC Meeting #	<sup>1</sup> 2 on October 5,	2016 / PIC Meeting #3 on October 25, 2016 / PIC M	eeting #7 January 4, 2017 / PIC Meeting #10 Februa	ary 21, 2017			
WIC Meeting Dates:	WIC Meeting	#2 on October 5	, 2016 / WIC Meeting #3 on November 8, 2016 / WI	C Meeting #6 January 4, 2017 / WIC Meeting #9 Feb	bruary 21, 2017			
Consultant Recommendation:	AW should us	e the utility basi	s method to determine the revenue requirement fo	r wholesale customers (see consultant Technical M	emorandum dated October 17, 2016)			
PIC & WIC Comments:	I support Aus Chuck Loy (PI The multi-fan Return to cov Marcia Stoke I agree with p Jay Joyce (WI a car without Gary Rose (W Howard Hage	tin Water to util C-Multifamily) nily recommends er any subsidies s (PIC-Multifami revious commen C-Wells Branch knowing the cos /IC-Southwest M emann (WIC-We	Rate Advocate) ize the utility basis for these (wholesale and outside is the outside rates be determined by the utility meth that could occur as a result of the recent PUC case. ily) nts by the residential rate advocate and multifamily MUD): since there's no guarantee that either cash o ist and don't think it would that difficult to do a rougl /ater Co.): preference for utility basis with caveats: o Ils Branch MUD): It seems the utility basis is used by can be an issue with respect to handling assets.	nod. For two reasons. 1) It is a method that the Texa PIC rep that the utility basis be used for wholesale a r utility basis will result in increase or decrease of c h estimate capital expenses, used and useful, and reasonable ra	and outside city customers while inside city remain ost of service, it will be tough for customer classes t ate of return concerns	cost basis. o decide without a rough estimate; I wouldn't buy		

	Don Conklin (WIC-North Austin MUD #1): I worry about transparency and am concerned about the continued reference to cash needs vs revenue requirements when the PL
	and not City of Austin revenue needs based.
	Lanetta Cooper (PIC-Residential/Low Income): The Inside city customers can't intervene in PUCT cases, and want clear delineation of wholesale vs retail costs. Recommend
	Dave Yanke (PIC- Residential Rate Advocate): Initially I prefer utility basis, but don't know methodology assumptions so it's hard to be absolute. A conditional yes. Utility bas
	wastewater, too.
	Grant Rabon (PIC-Residential Rate Advocate): I agree with what Dave Yanke said.
	Todd Davey (PIC-Industrial/Large Volume): Splitting wholesale and retail will require additional policy. A conditional yes as we don't know the accounting, i.e. capital expense
	flexibility with utility basis equals less equitability for cash basis. Have concern with how any new rules will impact the retail side. Utility basis puts the onus on Austin Water t susceptible to swings in costs, etc. I'm generally in favor of utility basis for all. Retail shouldn't pay for wholesale cost under-recovery.
	Chuck Loy (PIC-Multifamily): Utility basis would be most equitable. We need more details but I'm fairly firm in support/preference. I believe Austin Water would be in a better wholesale.
	Marcia Stokes (PIC-Multifamily): It doesn't really matter to retail, we will still be cash basis. Utility basis is lesser of two evils for wholesale. I prefer the path of least resistance Dan Wilcox (PIC-Industrial/Large Volume): If I recall, there will be a minute change in revenue requirements because the wholesale percentage is so small, but a higher cost
	the effort, risk and cost for so little a revenue change? I have no preference, really, but feel cash basis is better in the long run but utility basis is more business-like.
	Mary Guerrero-McDonald (Commercial): I agree with Todd Davey. This issue is between Austin Water and wholesale customers. I only care how it impacts retail customers.
	Jesse Penn (PIC-W/WW Commissioner): I'm neutral/lean towards utility basis. Rate of return is a way to mitigate investment risk. It's more business-like and straightforward Luke Metzger (PIC-Environmental): I'm neutral. The change sounds like a hassle for a small benefit.
	Chien Lee (PIC-W/WW Commissioner): If wholesale goes with utility basis, why keep retail as cash basis? Keep it simple and straightforward. Utility basis seems more predict
	2/21/2017
	Lanetta Cooper (PIC-Residential/Low Income): One of the benefits that Austin Water stipulated was that the PUCT was addressing the utility basis methodology. What has a PUCT under the cash basis and the utility basis is the recognition of timing. The PUCT has been reluctant to give a return with the CWIP.
	Karen Keese (PIC-Residential): I started thinking about the cash basis methodology, and I discovered how few of the wholesale customers Austin Water has. The costs neces outweigh the benefits/savings.
Executive Team	Decision: AW will continue using the cash basis to determine revenue requirements for wholesale customers.
Decision:	Rationale: AW has been using the cash basis since our first COS in 1992. The cash basis method aligns the rate making process with the cash flow requireme
	of using the cash basis will provide a more consistent rate development. A change to the Utility basis would require significant analysis, additional consulting basis in capital cost recoveries, and other anticipated changes in processes. The PUC has indicated that it accepts the cash basis method for municipal utilities

PUCT has repeatedly said rates should be cost of service based d utility basis for wholesale. basis for wholesale is not atypical; Fort Worth does it for

nses funding vs debt funding. What is the rate of return? Less or to manage the rate of return. Cash is more flexible,

etter position with PUCT filings if they use utility basis for

ince.

st with utility basis. It may be more equitable but is it worth

s. I'm neutral. Find what's best for commercial. ard.

lictable, less risky.

s changed? It appears that the big difference between the

essary to build a case for the wholesale rate case would

nents identified during the budget process. The continuity ng costs, possible adjustments to account for changing ies.

	Change?	If Yes,	Cash Basis		Utility
Issue	(Yes or No)	Option for Change	Pros	Cons	Pros
How should the revenue requirement for outside city retail customers be determined?		Utility Basis	Same as Issue #1	Same as Issue #1	Same as Issue #1
Status Quo: Cash Basis Revenue Requirement Determination					
PIC Meeting Dates: WIC Meeting Dates:			· · · ·	Meeting #7 January 4, 2017 / PIC Meeting #10 VIC Meeting #6 January 4, 2017 / WIC Meeting	
Consultant Recommendation:	AW should use	e the utility basis me	thod to determine the revenue requirement	for wholesale customers (see consultant Techn	ical Memorandum dated October 17, 2016)
PIC & WIC Comments:	Grant Rabon (PIC-Residential Rate Advocate) I support Austin Water to utilize the utility basis for these (wholesale and outside city) customers. Chuck Loy (PIC-Multifamily) The multi-family recommends the outside rates be determined by the utility method. For two reasons. 1) It is a method that the Texas PUC is most familiar with and understa Return to cover any subsidies that could occur as a result of the recent PUC case. Marcia Stokes (PIC-Multifamily) I agree with previous comments by the residential rate advocate and multifamily PIC rep that the utility basis be used for wholesale and outside city customers while inside cit Gary Rose (WIC-Southwest Water Co.): I agree that wholesale and outside city should probably be the same but have a hard time being okay with being lumped into someon Lanetta Cooper (PIC-Residential/Low Income): Will outside city customers become inside city customers? Can you leave outside city as cash basis? I'm on the fence. Keep a b concerns as Todd Davey regarding changing to utility basis i.e. factoring reserves, etc. Can those be recovered in the utility basis model? We need to clarify that what we're re have no strong feelings but utility basis has clearer guidelines. The PUCT generally looks at rates on a system wide basis, so you will need to justify a change between outside. Chuck Loy (PIC-Multifamily): Yes, keep outside city the same as wholesale. What costs do outside city incur that inside city don't? Higher risk for outside city being outside th Grant Rabon (PIC-Residential Rate Advocate): If you're not keeping assets segregated between inside city and outside city, you would be blind to the change between utility city is higher than inside city.				
Executive Team Decision:	Decision: AV	N will continue us	ing the cash basis to determine revenue r	equirements for outside city retail custome	ers.
	Rationale: The	he same rationale	for wholesale customers above applies to	o outside city retail customers.	

Basis (Op	tion for Change)
	Cons
	Same as Issue #1
city remain c one else's rat bright line a really talking e city and ins he city of Au	e class. nd regulatory rate distinction. I share same about is preventing residual dumping on retail. I

	Change?	If Yes,	Issue #3: General Fund Transfer in Wholesale Revenue F	
	(Yes or	Option for	Reduce of Eliminate the General	Fund Transfer (Option for Change)
Issue	No)	Change	Pros	
Should the General Fund Transfer be a part of the revenue requirement for wholesale customers? Status Quo: Maintain General Fund Transfer in the Wholesale Revenue Fund Requirement	Reduce or eliminate the General Fund Transfer and/or consider other forms of justification, e.g., PILOT, Franchise Fee, and/or Street Rental Fee	<ol> <li>Wholesale customers received no benefit from the inside city governmental services funded by the transfer.</li> </ol>	<ol> <li>It is standard practice for municipal operation of municipal utilities. Pay         <ol> <li>Direct transfer such as that</li> <li>Payment in lieu of taxes th investor-owned utilities</li> <li>Franchise fee that is conce</li> </ol> </li> <li>Austin Energy makes an annual Gen for Austin Water to be different</li> <li>The General Fund Transfer is a cost company providing water and waste business" that should also be paid b</li> <li>The amount of the General Fund Transfer is a ppropriately made by the Austin C</li> </ol>	
				for this or any other level of Genera
PIC Meeting Dates:	PIC Meeting	I #4 on November 8,	I , 2016 / PIC Meeting #11 March 6, 2017	
WIC Meeting Dates:	WIC Meeting	; #5 on November 2	29, 2016 / WIC Meeting #10 March 6, 2017	
Consultant	General Fund	d Transfers, regardl	less of how they are structured or what they labeled, are a valid operating expense incurred by many mu	unicipal utilities and should be included in the
Recommendation: PIC & WIC Comments:			he General Fund Transfer as a payment-in-lieu of taxes and/or a Franchise Fee. In the meantime, the Au ter Co.): It seems rate of return and General Fund Transfer is double dipping under a utility basis.	stin Water General Fund Transfer should co
	Howard Hagemann (WIC-Wells Branch MUD): I see things not allocated to what they're actually expended for. I recommend against the General Fund Transfer under utilit Robert Anderson (WIC-Northtown MUD/Wells Branch MUD): The PUCT has disallowed this so I'm not sure why we're discussing it. Item #4 under "Cons" is a slap in the fa Don Conklin (WIC-North Austin MUD #1): I request the General Fund Transfer be withdrawn as part of the cost of service allocation as repeatedly ruled by the courts; that' Charles Winfield (WIC-City of Rollingwood): My preference is to not include the General Fund Transfer. There's already one included for Austin Energy which we pay. Luke Metzger (PIC-Environmental): Maintain the wholesale General Fund Transfer. They should pay their fair share. Todd Davey (PIC-Industrial/Large Volume): No change. They're different jurisdictions (city of Austin and PUC). Set up those rates of return in another fashion. I don't thinl wholesale. The city should recover funds that hit operating expenses. How does wholesale get their voice heard? General Fund Transfer and City of Austin don't apply to th Lanetta Cooper (PIC-Residential/Low Income): I strongly support charging the wholesale customer class the General Fund Transfer. I see the General Fund Transfer as profit to earn a profit. There are some expenses applicable to wholesale and they should bear their share. The General Fund Transfer shouldn't apply to costs borne by inside city Todd Davey (PIC-Industrial/Large Volume): I agree with Lanetta but disagree with "Cons" item #4. Chuck Loy (PIC-Multifamily): I agree. Those costs should be recovered in some way. Call them something else or the PUCT will challenge them. Dave Yanke (PIC-Residential Rate Advocate): I agree with Chuck Loy. You will need justification. There may be other mechanisms to recover costs and they must be defens Jesse Penn (PIC-W/WW Commissioner): What did the WIC say? Karyn Keese (PIC-Residential): You need some formula/mechanism other than a flat 8.2% and it should be part of whol			
	at reasonable Howard Hag	eness in terms of th emann (WIC-Wells	al/Low Income): I still have a concern charging a General Fund transfer to the Reclaimed Water utility w ne General Fund Transfer. Branch MUD): Even though the PUCT advised that Austin Water not go forward with this charge, you a The PUCT has not said that Austin Water cannot collect the General Fund transfer, just that Austin Water	re still going to charge this to wholesale?
Executive Team Decision:	Rationale:	Current City finar	to allocate an 8.2% General Fund Transfer to all customer classes including wholesale custome ncial policy provides for an 8.2% General Fund Transfer as a payment in lieu of taxes. Municipa a range of other cities.	

### e)

### Cons

al governments to earn a "profit" or "dividend" from the ayments to the General Fund can be structures in several ways: nat made by Austin Water and Austin Energy

that is conceptually similar to the property taxes paid by

ceptually similar to the fee also paid by investor-owned utilities eneral Fund Transfer to the City of Austin - there is no reason

st of doing business that would be incurred by a private stewater services in the City and as such is a "cost of doing d by wholesale customers

Fransfer (8.2% of Gross Revenues) is a policy decision

City Council. Council does not need to justify their reasoning ral Fund Transfer.

the revenue requirement of the wholesale customers. There is continue in the amount specified by Austin City Council.

Transfer. sis.

the heart of my skepticism about this process.

City of Austin should mandate General Fund Transfer by

fordability impact of 8.2% on rates and what that means to the

he highest General Fund transfer of all utilities. I hope you look

eral fund transfer to compensate citizen owners of the

	Change?	If Yes,	Issue #4: Rate Recovery of Costs Incurred to Meet Finance	
	(Yes or	Option for	Reduce or Eliminate the Cost of Meeting Fina	Inclai Benchmarks in Rates (Option
Issue	No)	Change	Pros	
Is it appropriate for Austin Water to continue to include in rates the costs incurred to meet financial benchmarks related to items such as Debt Service Coverage; Cash Reserves, and specific target levels of debt in the Austin Water capital structure? Status Quo: Continue to include the cost of meeting financial benchmarks in the rates paid by both retail and wholesale customers		Reduce or eliminate the cost of meeting financial benchmarks in the rates paid by both retail and wholesale customers.	<ol> <li>Austin Water should only include in rates the absolute minimum costs necessary to maintain contractually mandated debt service coverage requirements (nothing more), the minimum possible cash reserve levels. Austin Water CIP financing decisions should be made solely on the basis of what results in the lowest rates today. Consideration of long-term capital structure issues and the reduced risks of have lower amounts of debt should not be considered in CIP financing decisions.</li> </ol>	<ol> <li>Financially stable utilities must main bare minimum. This is the only way unforeseen events such as severe and</li> <li>Financially stable utilities must engated capital structure with the appropriative financial risk of too much debt a cash funded CIP.</li> <li>Austin Water must compete for fun costs incurred to meet reasonable f Water's borrowing costs and ensure</li> </ol>
PIC Meeting Dates:	PIC Meeting #	3 on October 5, 2	2016 / PIC Meeting #5 on November 29, 2016 / PIC Meeting #11 March 6, 2017	
WIC Meeting Dates:	WIC Meeting #	<sup>‡</sup> 2 on October 5,	2016 / WIC Meeting #4 on November 25, 2016 / WIC Meeting #10 March 6, 2017	
Consultant Recommendation:	The costs incu	rred to meet rea	sonable financial benchmarks should be included in rates and allocated to both retail and wholesale custo	omers.
PIC & WIC Comments:	Howard Hager Gary Rose (WI Don Conklin (V Luke Metzger Grant Rabon ( Karyn Keese (I Todd Davey (P Water's rates a benchmarking an affordabilit Lanetta Coope into a utility ba Dave Yanke (P	mann (WIC-Well IC-Southwest Wa WIC-North Austin (PIC-Environmen PIC-Residential I PIC-Residential): PIC-Industrial/Lan are already high. . My baseline is h y goal like Austin er (PIC-Residenti asis model. These PIC-Residential R	<ul> <li>MUD): How do you propose to incorporate these costs into a utility basis?</li> <li>as Branch MUD): Aren't impact fees intended to cover items like this?</li> <li>ater Co.): Is Austin Water's bond rating separate from the City of Austin's and Austin Energy's bond rating in MUD #1): What is the required debt service coverage? Can we see it? Does it include reserves? Are resental: It's absolutely appropriate and good financial practice.</li> <li>Rate Advocate): Certainly debt and bond covenants. What Austin Water is doing now far surpasses require I totally agree with Grant Rabon. Certainly debt service coverage is important but at what level? I would I rege Volume): I don't believe you should recover any more than what is needed to operate the utility. I hav Operate more efficiently. They were able to find equitable rates/levels in the Austin Energy settlement. I now your rates compare to others. Right now your benchmarks are out of alignment. Council is making de Energy does.</li> <li>al/Low Income): I don't know if the PUCT would allow it under utility basis. Depreciation would have to core are covered by the rate of return. Look at it as a rate design issue especially Revenue Stability Reserves. ate Advocate): Debt service coverage and reserves are critical. If you want them to grow, provide a detailer operate levels are.</li> </ul>	erves locked to Austin Water and unable to ements. What level is an appropriate level? ike a more formalized policy. I would like to ve concerns about pre-collecting for future contacted the Fitch analyst and there are n cisions impacting your revenue and deman over these costs. I think Austin Water will he I share Todd and Grant's concerns for inside
Executive Team Decision:	The Executive	decisions associa	ated with the financial benchmarks were separated into issues #4a – 4c.	

### n for Change)

### Cons

aintain debt service coverage and cash reserve levels above the ay to protect ratepayers from emergency rate increases due to and prolonged drought and major infrastructure failures. gage in CIP financing strategies that move toward an optimal riate balance of debt and equity. Such a capital structure limits t and minimizes the rate increases caused by the use of too much

unds and issue debt in the capital markets. Including in rates the e financial benchmarks is prudent because it lowers Austin ures unfettered access to the debt markets.

### to be siphoned off?

el? Please share the Fitch 2017 medians report. It to see a sampling of other debt service coverage plans. It re rate increases. Your stated targets are way out of line. Austin It more parts to a bond rating than what Austin Water is and, more so than with Austin Energy. Austin Water should have

I have difficulty squeezing debt service coverage and reserves side city – why do you need such a big piggy bank? ncrementally get there without significant rate increases. The

	Chause 2	If Mar	Issue #4a: Rate Recovery of Costs Incurred to Meet Financial Benchma			
	Change? (Yes or	If Yes, Option for	Reduce or Eliminate the Cost of Meeting Fina	ncial Benchmarks in Rates (Option for Change)		
lssue	No)	Change	Pros	Cons		
Is it appropriate for Austin Water to continue to include in rates the costs incurred to meet financial benchmarks related to items such as Debt Service Coverage; Cash Reserves, and specific target levels of debt in the Austin Water capital structure? Status Quo: Continue to include the cost of meeting financial benchmarks in the rates paid by both retail and wholesale customers		Reduce or eliminate the cost of meeting financial benchmarks in the rates paid by both retail and wholesale customers.	<ol> <li>Austin Water should only include in rates the absolute minimum costs necessary to maintain contractually mandated debt service coverage requirements (nothing more), the minimum possible cash reserve levels. Austin Water CIP financing decisions should be made solely on the basis of what results in the lowest rates today. Consideration of long-term capital structure issues and the reduced risks of have lower amounts of debt should not be considered in CIP financing decisions.</li> </ol>	<ol> <li>Financially stable utilities must maintain debt service coverage and cash reserve levels above the bare minimum. This is the only way to protect ratepayers from emergency rate increases due to unforeseen events such as severe and prolonged drought and major infrastructure failures.</li> <li>Financially stable utilities must engage in CIP financing strategies that move toward an optimal capital structure with the appropriate balance of debt and equity. Such a capital structure limits the financial risk of too much debt and minimizes the rate increases caused by the use of too much cash funded CIP.</li> <li>Austin Water must compete for funds and issue debt in the capital markets. Including in rates the costs incurred to meet reasonable financial benchmarks is prudent because it lowers Austin Water's borrowing costs and ensures unfettered access to the debt markets.</li> </ol>		
PIC Meeting Dates:	PIC Meeting #	3 on October 5, 2	016 / PIC Meeting #5 on November 29, 2016 / PIC Meeting #9 January 31, 2017 / PIC Meeting #10 Februa	iry 21, 2017 / PIC Meeting #11 March 6, 2017		
WIC Meeting Dates:	WIC Meeting #	<sup>‡</sup> 3 on October 5,	2016 / WIC Meeting #5 on November 29, 2016 / WIC Meeting #8 January 31, 2017 / WIC Meeting #9 Febr	uary 21, 2017 / WIC Meeting #10 March 6, 2017		
Consultant Recommendation:	The costs incu	rred to meet rea	onable financial benchmarks should be included in rates and allocated to both retail and wholesale custo	mers.		
	need to change it. Gary Rose (WIC-Southwest Water Co.): If 1.85x makes the rating agencies comfortable, then it would be an adequate reserve fund level. David Yanke (Residential): It should be relatively straight forward to perform a 5-year forecast and how it affects the cost of service with rates by customer class. Todd Davey (PIC-Industrial/Large Volume): I called the Fitch representative to ask about the ratings. You are stacking cash reserves. Some of the volatility is created by the rate design in the residential customer class, some is created by policy. Ratings can be improved in other methods, other than increasing the debt service coverage. It's a little misleading to compare the Fitch medians with Austin Water. As a fixed cost dependent utility, the focus needs to be less about cash on hand and more about surcharges needed at the time. More important to focus on how to bring the rates down, look at capital spending plans to get costs more in line. Grant Rabon (PIC-Residential Rate Advocate): In the past, when you have had financial hardships some of that was driven of the level of fixed costs recovered. Currently, the percentage is higher. I am going to suggest that it would take a much more significant level of drought to take you down to the revenue loss level of 2010 and 2014. Lanetta Cooper (PIC - Low income Residential): Haw to see the rate differences between different debt service coverage. Assume the debt equity and debt service coverage at minimum levels to see the rate differences. It seems like we are changing policy from what city council has recommended. <u>2/21/2017</u> Katy Phillips (WIC- Sunset Valley): Has 1.85x been historically consistent? Howard Hagemann (WIC- Weils Branch MUD): Isn't this a function of the efficiency of the utility? What is your current level? Grant Rabon (PIC-Residential Rate Advocate): The DSC, reserve requirements, and the cash funding of CIP are the three legs of the utility. What is the largest driver? It seems that it would be best to set the other					
Executive Team Decision:	Karyn Keese (I	PIC-Residential):	ndependent Hearing Examiner not now. I think right where you are right now is adequate. I don't see the need to talk about going higher than the	at. Your current metrics look healthy.		
Executive ream Decision:	Rationale: Ir credits, it wil	nprovement in I still provide in	.85x debt service coverage over the next 5-10 years. AW's debt service coverage is a critical component in strengthening our financial position and m provement from our current 1.7x level. The 1.85x target level can be achieved with a reasonabl d up and CIP cash financing. In addition, Austin Water's actively manages debt levels to lower o	le level of rate increases over the time period. Additionally, the 1.85x target level will result in		

	Change?	If Yes,	Recovery of Costs Incurred to Meet Financial Benchmarks – Cash Reserves	<u> </u>		
	(Yes or	Option for	Reduce or Eliminate the Cost of Meeting Fina	The second result of the second results and t		
Issue	No)	Change	Pros			
Is it appropriate for Austin Water to continue to include in rates the costs incurred to meet financial benchmarks related to items such as Debt Service Coverage; Cash Reserves, and specific target levels of debt in the Austin Water capital structure? Status Quo: Continue to include the cost of meeting financial benchmarks in the rates paid by both retail and wholesale customers		Reduce or eliminate the cost of meeting financial benchmarks in the rates paid by both retail and wholesale customers.	<ol> <li>Austin Water should only include in rates the absolute minimum costs necessary to maintain contractually mandated debt service coverage requirements (nothing more), the minimum possible cash reserve levels. Austin Water CIP financing decisions should be made solely on the basis of what results in the lowest rates today. Consideration of long-term capital structure issues and the reduced risks of have lower amounts of debt should not be considered in CIP financing decisions.</li> </ol>	<ol> <li>Financially stable utilities must main bare minimum. This is the only way unforeseen events such as severe ar</li> <li>Financially stable utilities must enga capital structure with the appropriat the financial risk of too much debt a cash funded CIP.</li> <li>Austin Water must compete for func costs incurred to meet reasonable fi Water's borrowing costs and ensure</li> </ol>		
PIC Meeting Dates:	PIC Meeting #	] 3 on October 5, 2	2016 / PIC Meeting #5 on November 29, 2016 / PIC Meeting #9 January 31, 2017 / PIC Meeting #10 Februa	  ry 21, 2017 / PIC Meeting #11 March 6, 20		
WIC Meeting Dates:	WIC Meeting	#3 on October 5,	2016 / WIC Meeting #5 on November 29, 2016 / WIC Meeting #8 January 31, 2017 / WIC Meeting #9 Febr	uary 21, 2017 / WIC Meeting #10 March 6,		
Consultant Recommendation:	The costs incurred to meet reasonable financial benchmarks should be included in rates and allocated to both retail and wholesale customers.					
	Todd Davey (F example Fitch cash to fund c David Yanke ( Jay Joyce (Wid Howard Hage Gary Rose (Wid Don Conklin (* <u>3/6/2017</u> David Yanke ( Fitch uses a 29 Karyn Keese ( Diego has a 1. rethought. I w Lanetta Coope reserves. Wha goes up. Debt Dan Wilcox (P would be to ge Karyn Keese ( Grant Rabon (	PIC-Industrial/La customer classe apital. Residential): The C-Wellsbranch): mann (WIC-Well IC-Southwest Wa WIC-North Austi WIC-North Austi C-Southwest Wa WIC-North Austi IC-Southwest Wa WIC-North Austi IC-Southwest Wa WIC-North Austi IC-Southwest Wa Set (PIC-Residential): Could applaud the er (PIC-Residential) is cheaper than is cheaper than is cheaper than is cheaper than IC-Industrial/Lar et to 245 days or PIC-Residential Residential): I ap	al/Low Income): There seems to be more piggy banks than needed due to negative watch rge Volume): Bond convent is not on the graph, which is relative high to other systems and income. Volati is are more rate sensitive. Austin Water should not focus on raising cash to reach 2.0 coverage ratio, but ra ere is a lot that goes into a rating and AW suggestions are reasonable. A 1.85x over 10-years is a reasonable Concerned how cash reserves would be incorporated into utility basis. sbranch): How will would cash reserves be allocated to wholesale customers? ater Co.): Are Austin Water bond ratings separate from the City of Austin? In MUD#1): What is debt service requirement? Would like to see backup information. Are the reserves blo now we have talked a lot about days of cash on hand. I would like to go on record that the city hold current t we (Austin) are at 2.4%. I would echo that the metrics here are too aggressive. California has drought problems and revenue probl arget. I think Austin Water is currently fine. You want to go 50% capital funding, but they have a 10% goal. e debt management program if you increase your debt service coverage. That's fine. al/Low Income): For fiscal year 2017 the debt to equity ratio is 1.7x. Was that an increase from the previou you achieve that target, do you lower it? There should be some adjustment to the debt service coverage v equity financing especially when you have a treatment plant coming online. You don't have depreciation sa ge Volume): I think these three metrics are on the aggressive side. If you are looking at a balance, when y 1.85x compared to 1.75x. What value is it going to give us in 5-10 years? It's not clear how these more agg We would like to see the quantifiable impact of these metrics on residential customers. Your recommend Rate Advocate): You are a quality strong AA utility rating. I am struggling to understand the increase to the opreciate that you are developing a five year forecast that you cannot show until council approval, but if w	ather wait till there is an issue. The focus sh e range for me. It would not impact afforda ocked from the City taking? t residential rates where they are for Fiscal lems. They brought in a debt manager. The Over time 50% cash funding is less expensi us target? The reserves are all interrelated. when you achieve that target. You are goin o customers in the future would not be pay you are pushing affordability it is hard to ass gressive metrics are going to pay off in the I lation versus exactly where you are today. I ese targets from where they are. I would for		

### ating Requirements

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aintain debt service coverage and cash reserve levels above the ay to protect ratepayers from emergency rate increases due to and prolonged drought and major infrastructure failures. gage in CIP financing strategies that move toward an optimal iate balance of debt and equity. Such a capital structure limits t and minimizes the rate increases caused by the use of too much

unds and issue debt in the capital markets. Including in rates the e financial benchmarks is prudent because it lowers Austin ures unfettered access to the debt markets.

2017	
6, 2017	

and policy. Also, ratings can be improved without coverage for should be to bring rates down to a 1.5-1.6 level and use excess

dability.

cal Year 2018. Here in Austin there is an affordability problem.

ney prefer to have a low target and exceed that amount. San nsive but ignores affordability today. These metrics need to be

ed. You were increasing your reserves and the debt service bing to pay down your debt to achieve 50:50 which means equity baying for the plant. There are intergeneration subsidies. associate that with these metrics. You have no idea what rates he long run.

v. If it's really not that much to get there.

focus more concern to affordability.

at would be beneficial. It helps educate citizens if they have

	Robert Wood (WIC-City of Westlake Hills): On the decision point chart, is there a way to indicate change from current practice?
Executive Team Decision:	<b>Decision:</b> AW will target a base operating cash reserve level of 245 days for both the water fund and wastewater fund over the next 5-10 years. In addition, AW the Revenue Stability Reserve Fund. The overall reserve target will be 365 days for the water fund and 245 days for the wastewater fund. Since the water fund is above the base level.
	<b>Rationale:</b> Improvement in AW cash reserves is a critical component in strengthening our financial position and maintaining our current AA bond ratings. Our bor in our days cash on hand is appropriate to maintain our ratings. While this target is below the Fitch median for AA credits, this level will provide improvement from to and a result of the improving debt service coverage levels.

V will continue to achieve the 120 days of water reserves in is more volatile, it is appropriate for additional days cash

ond rating agencies have indicated continued improvement om our current levels. The levels of cash reserves is related

	Change? (Yes or	If Yes, Option for	Issue #4c: Rate Recovery of Costs Incurred to Meet Financial Benchmarks Reduce or Eliminate the Cost of Meeting Fina	¥¥
Issue	No)	Change	Pros	
Is it appropriate for Austin Water to continue to include in rates the costs incurred to meet financial benchmarks related to items such as Debt Service Coverage; Cash Reserves, and specific target levels of debt in the Austin Water capital structure? Status Quo: Continue to include the cost of meeting financial benchmarks in the rates paid by both retail and wholesale customers		Reduce or eliminate the cost of meeting financial benchmarks in the rates paid by both retail and wholesale customers.	<ol> <li>Austin Water should only include in rates the absolute minimum costs necessary to maintain contractually mandated debt service coverage requirements (nothing more), the minimum possible cash reserve levels. Austin Water CIP financing decisions should be made solely on the basis of what results in the lowest rates today. Consideration of long-term capital structure issues and the reduced risks of have lower amounts of debt should not be considered in CIP financing decisions.</li> </ol>	<ol> <li>Financially stable utilities must mai bare minimum. This is the only way unforeseen events such as severe a</li> <li>Financially stable utilities must eng capital structure with the appropria the financial risk of too much debt cash funded CIP.</li> <li>Austin Water must compete for fur costs incurred to meet reasonable for Water's borrowing costs and ensure</li> </ol>
PIC Meeting Dates:	-		2016 / PIC Meeting #5 on November 29, 2016 / PIC Meeting #9 January 31, 2017 / PIC Meeting #10 Februa	-
WIC Meeting Dates:	_		2016 / WIC Meeting #5 on November 29, 2016 / WIC Meeting #8 January 31, 2017 / WIC Meeting #9 Febr	
Consultant Recommendation:	The costs incu	rred to meet rea	sonable financial benchmarks should be included in rates and allocated to both retail and wholesale custo	omers.
PIC & WIC Comments:	Gary Rose (W Clay Collins (V	IC-Southwest Wa VIC-Sunset Valle	<ul> <li>stlake Hills): Do any of the financial policies have a ceiling? Is there any sort of prioritization given (covera ater Co.): I think anything more than 50% is putting too much burden on the customers. With excess cash</li> <li>y): Could CRFs also be used for infrastructure improvements?</li> <li>s Branch MUD): What do you mean by a 50% credit for the CRF calculation?</li> </ul>	
Executive Team Decision:	Rationale: In between hav	mproving our us ving current and	50% use of cash to fund our CIP projects over the next 5-10 years. se of cash financing of CIP projects will reduce our dependency on debt financing that can drive I future customers paying for infrastructure. Improvements in our debt service coverage results ost of a CIP project, therefore avoiding debt is a cost effective way of reducing costs for the futu	in cash that can be used to fund CIP pr

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aintain debt service coverage and cash reserve levels above the ay to protect ratepayers from emergency rate increases due to and prolonged drought and major infrastructure failures. gage in CIP financing strategies that move toward an optimal riate balance of debt and equity. Such a capital structure limits t and minimizes the rate increases caused by the use of too much

unds and issue debt in the capital markets. Including in rates the e financial benchmarks is prudent because it lowers Austin ures unfettered access to the debt markets.

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ervice coverage. The 50% target level strikes a balance projects and reduce debt service in the future. Financing

	-		Issue #5: Allocation of a Portion of Rate Case Expenses to Wh	olesale Customers
	Change? (Yes or	If Yes, Option for	Allocate a Portion of Rate Case Expenses t	o Wholesale Customers (Option for
Issue	No)	Change	Pros	
The PUCT disallowed Austin Water's allocation of a portion of rate case expenses to the wholesale customers. Should Austin Water seek to include these costs in the wholesale customer revenue requirement in its next rate case? Status Quo: If Austin Water incurs rate case expenses in the future, they should continue to be excluded from the wholesale customer	NO)	If Austin Water incurs rate case expenses in the future, a portion of these costs should be allocated to the wholesale customer revenue requirement.	1. Rate case expenses are a valid operating cost that benefit all customers, retail and wholesale.	1. As the petitioning party challenging any rate case expenses.
revenue requirement.				
PIC Meeting Dates:	PIC Meeting #	5 on November 29,	2016 / PIC Meeting #8 January 17, 2017 / PIC Meeting #11 March 6, 2017	
WIC Meeting Dates:	WIC Meeting	#4 on November 29	9, 2016 / WIC Meeting #6 January 4, 2017 / WIC Meeting #10 March 6, 2017	
Consultant Recommendation:	Rate case exp	enses are a natural	outcome of the regulatory process that benefits both retail and wholesale customers. If incurred in the	e future, wholesale customers should be all
PIC & WIC Comments:	requirement allocated to wholesale customers. The only exception to this general statement would be if Austin Water opts to utilize the utility basis for these customers (which I disallowed costs that are inconsistent with, or inappropriate for, inclusion under the utility basis. Don Conklin (WIC-North Austin MUD #1): I don't think allowing any of these is a something we would support. Why do you repeatedly try to include costs that have been repeate negotiations result in agreement and a rate case is not necessary. Our concession would be what's included in rate case expenses. Inside City elects the Council who sets rates an Gary Rose (WIC-Southwest Water Co.): Rate case expenses can be included but you're not guaranteed to recover them; the PUCT occasionally disallows. Robert Wood (WIC-City of Westlake Hills): Inside city should pay all rate case costs. Shareholders are City of Austin residents. If the argument for rate of return is that they bear to Charles Winfield (WIC-Northtown MUD/Wells Branch MUD): Exclude them. Robert Anderson (WIC-Northtown MUD/Wells Branch MUD): Exclude them. Howard Hagemann (WIC-Wells Branch MUD): Exclude them. Jay Joyce (WIC-Wells Branch MUD): Exclude them. Jay Joyce (WIC-Wells Branch MUD): Exclude them. Todd Davey (PIC-Industrial/Large Volume): The utility should operate with whatever is the accepted process. 3/6/2017 Gary Rose (WIC-Southwest Water Co.): If we challenge the rates, would Austin Water push those costs only to the challenging parties according parties according parties according parties according parties according parties costs only to the challenging parties according parties a			
Executive Team Decision:	Rationale: F	Rate case expense	e case expenses to wholesale customers, except for the direct recovery of rate case expenses s from the 2013 rate challenge have been paid previously by all customer classes except the F d from the challenging parties. Austin Water would present evidence to justify these rate case	Petitioners in the case. Future rate case

### or Change)

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ng Austin Water's rates, wholesale customers should not pay

allocated a portion of Austin Water's rate case expenses.

inclusion of previously disallowed costs into the revenue I support) and, then Austin Water could exclude only those

tedly disallowed by the PUCT? Best case scenario, and they have recourse, but outside city doesn't.

the risk, then let them bear the risk.

ng to PUC allowances.

se expenses associated with future PUC challenges ding.

	Charry 2		Issue #6: Allocation of a Portion of Reclaimed Water Costs to W			
	Change?       If Yes,       Allocate a Portion of Reclaimed Water Costs to Wholesale Cust         (Yes or       Option for		to Wholesale Customers (Option for Change)			
Issue	No)	Change	Pros	Cons		
The PUCT disallowed Austin Water's allocation of a portion of reclaimed water costs to the wholesale customers. Should Austin Water seek to include these costs in the wholesale customer revenue requirement in its next rate case?	portion of Austin Water's reclaimed water costs the wholes customer revenue	Austin Water's reclaimed water costs to the wholesale customer	<ol> <li>Reclaimed water is a cost effective source of supply that diversifies Austin Water's water supply portfolio and enhances the total amount of water available to all customers (retail and wholesale). Specifically, if more reclaimed water used, more of Austin Water's existing sources of supply are available for potable water customers, retail and wholesale. For this reason, both retail and wholesale customers should be allocated a portion of reclaimed water costs.</li> </ol>	<ol> <li>Even though reclaimed water increases the overal (retail and wholesale), wholesale customers do no be allocated a portion of reclaimed water costs.</li> </ol>		
Status Quo: Continue to exclude reclaimed water costs from the wholesale customer revenue requirement.						
PIC Meeting Dates:			5, 2016 / PIC Meeting #3 on November 25, 2016 / PIC Meeting #5 on November 29, 2016 / PIC Meeting #			
WIC Meeting Dates:	WIC Meeting #2 on November 5, 2016 / WIC Meeting #3 on November 8, 2016 / WIC Meeting #4 on November 29, 2016 / WIC Meeting #6 January 4, 2017 / WIC Meeting #10 March 6, 2017					
Consultant Recommendation:	Reclaimed wa	ater is a valid so	rce of supply that benefits the entire system. A portion of reclaimed water costs should be allocated to w	vholesale customers.		
	disallowed co Jay Joyce (Wi Robert Ander Howard Hage Don Conklin Charles Winf Randall Raen <u>1/17/17</u> Dan Wilcox (fi Include these Dave Yanke (	osts that are inco IC-Wells Branch rson (WIC-Nort emann (WIC-Wo (WIC-North Aus ield (WIC-City o non (WIC-Mars PIC-Industrial/L e costs. (PIC-Residential	sidential Rate Advocate): Per our discussion at the PIC meeting on 11/29/16, I am formally indicating my strong belief that Austin Water should d to wholesale customers. The only exception to this general statement would be if Austin Water opts to utilize the utility basis for these custo are inconsistent with, or inappropriate for, inclusion under the utility basis. Branch MUD): I oppose based on testimony in the case. What are the changed circumstances since the ruling in this case? Are there any EPA (C-Northtown MUD/Wells Branch MUD): I agree with Jay. The PUCT has already ruled. Why is the city of Austin butting its head against the w WIC-Wells Branch MUD): I agree and oppose and we don't use any reclaimed water. rth Austin MUD #1): I agree and oppose. Disallow. Does the PUCT give any reasons for disallowances? C-City of Rollingwood): I agree and oppose. Disallow. Does the PUCT give any reasons for disallowances? C-Marsha WSC): Do not support allocation to wholesale customers. strial/Large Volume): Is there a precedent saying you should go one way or another? Where did the PUCT decision come from? If most custor dential Rate Advocate): Was there a detailed explanation/background given during the rate case? ustrial/Large Volume): If reclaimed is a benefit to the entire system, yes wholesale should pay. But another consideration is: is it a reasonable			
	customers. Lo out? That ado Dan Wilcox (I Chien Lee (PI	CRA is moving a ds to debt servic PIC-Industrial/L IC-W/WW Comi	ead with a downstream reservoir; they learned lessons from the drought. Wholesale should bear the bur e, cost of service and rates. <b>rge Volume):</b> Is the rate of reclaimed water still subsidized? <b>issioner):</b> Is the statement 'wholesale customers do not use reclaimed water' true? Because reclaimed water benefits all customers, I think it should be included and you can probably make	den of costs, too. Can we defer some of the capital to b		
Executive Team Decision:	Decision: A	W will allocate	reclaimed water costs to all customer classes including wholesale customers.			
	drought resi trigger whe	istant supply. n significant ra	reclaimed water system is a cost effective water supply component. The reclaimed system exteres regional water planning efforts mandate the review of reclaimed water system as a water v water costs must be paid to LCRA. Our conservation and reclaimed system efforts would have the cost of the c	supply alternative. Use of reclaimed water will cone avoided a possible LCRA curtailment plan had the		

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eases the overall amount of water available to all customers
customers do not use reclaimed water and therefore should not

he inclusion of previously disallowed costs into the revenue ch I support) and, then, Austin Water could exclude only those

ry obligations? easing rate case costs?

have access, why should wholesale be treated any differently?

ary cost? Is a return on investment there? There are only 66 f the capital to be invested in the near term if the need is pushed

lies, defers needs for additional water supply, and is a water will contribute to delaying Austin Water hitting the t plan had the lake levels reached critical stage during the

	Change? (Yes or	If Yes, Option for	Allocate a Portion of SWAP and Commercial Paper	Costs to Wholesale Customers (Op	
Issue	No)	Change	Pros		
The PUCT disallowed Austin Water's allocation of a portion of SWAP and commercial paper costs the wholesale customers. Status Quo: Continue to exclude SWAP and commercial paper costs from the wholesale customer revenue requirement		Allocate a portion of Austin Water's SWAP and commercial paper costs to the wholesale customer revenue requirement.	<ol> <li>SWAP and commercial paper costs are valid debt issuance costs that are incurred by Austin Water to fund CIP projects that provide service to all customers. These costs were previously amortized over the life of each debt instrument. The Governmental Accounting Standards Board now requires these costs to be expensed in the year incurred. It is appropriate for all customers, both retail and wholesale, to be allocated a portion of SWAP and Commercial paper costs.</li> </ol>	1.	
PIC Meeting Dates:	PIC Meeting #	2 on November	5, 2016 / PIC Meeting #5 on November 29, 2016 / PIC Meeting #8 January 17, 2017 / PIC Meeting #11 M	larch 6, 2017	
WIC Meeting Dates:	WIC Meeting	#2 on Novembe	5, 2016 / WIC Meeting #4 on November 29, 2016 / WIC Meeting #7 January 17, 2017 / WIC Meeting #1	0 March 6, 2017	
Consultant Recommendation:	Annual SWAP	and commercia	paper costs are a valid operating cost.		
PIC & WIC Comments:	requirement a disallowed co <u>1/17/17</u> Jay Joyce (WI Howard Hage Don Conklin ( more detail is reaching an a Grant Rabon Todd Davey ( Chuck Loy (PI Dan Wilcox (F Marcia Stoke	PIC-Residential Rate Advocate): Per our discussion at the PIC meeting on 11/29/16, I am formally indicating my strong belief that Austin Water should pursue th located to wholesale customers. The only exception to this general statement would be if Austin Water opts to utilize the utility basis for these customers (whic ts that are inconsistent with, or inappropriate for, inclusion under the utility basis. -Wells Branch MUD): When did GASB make the pronouncement? nann (WIC-Wells Branch MUD): If we go to a utility basis, would this still be separate from depreciation? VIC-North Austin MUD #1): I have concern regarding the lack of level of detail and breakout. The PUCT has ruled against these costs previously – we do not wan needed. I am concerned the City of Austin is trying to add disallowed costs. I feel like the previous costs were set, then the PUCT ruled, and now you're trying to reement on what regulatory costs need to be included. PIC-Residential Rate Advocate): GASB indicates this is an operating expense under both cash and utility basis, so there's no rational reason to exclude it. IC-Industrial/Large Volume): Agree. -Multifamily): Agree. C-Industrial/Large Volume): Agree. (PIC-Multifamily): Agree. C-Multifamily): Agree. C-W/WW Commissioner): Agree.			
Executive Team Decision:	Rationale: 7	hese costs are	WAP and commercial paper costs to all customer classes including wholesale customers. associated with Austin Water's capital financing mechanisms that benefit all customers. The G . These costs are appropriate operations and maintenance costs which should be allocated to		

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ption for Change)
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e inclusion of previously disallowed costs into the revenue
h I support) and, then, Austin Water could exclude only those
t these costs included. If more conversation is needed, then insert them again. Avoid litigation and save money by
Board (GASB) has required these costs to be expensed in

	Change?	If Yes,	Allocate a Portion of Green Water Treatment Plant Ca	apital Costs to Wholesale Cus	
	(Yes or	Option for	Pros	·	
Issue	No)	Change	FIUS		
The PUCT disallowed Austin Water's allocation of a portion of Green Water Treatment Plant costs to the wholesale customers. Green Water has been decommissioned by Austin Water for treatment service. Status Quo: Continue to exclude the Green Water Treatment Plant costs from the wholesale customer revenue requirement.		Allocate a portion of Green Water Treatment Plant costs to the wholesale customer revenue requirement.	<ol> <li>The Green Water Treatment Plant has been decommissioned but there may be some debt service outstanding related to the Green WTP improvements.</li> </ol>	1. The Green Water Treatmen	
PIC Meeting Dates:	PIC Meeting #2 on November 5, 2016 / PIC Meeting #5 on November 29, 2016 / PIC Meeting #8 January 17, 2017 / PIC Meeting #11 March 6, 2017				
WIC Meeting Dates:	WIC Meeting #2 on November 5, 2016 / WIC Meeting #4 on November 29, 2016 / WIC Meeting #7 January 17, 2017 / WIC Meeting #10 March 6, 2017				
Consultant Recommendation:	Debt service costs should be allocated to all customer classes including wholesale customers.				
	revenue requirement allocated to wholesale customers. The only exception to this general statement would be if Austin Water opts to utilize the utility basis could exclude only those disallowed costs that are inconsistent with, or inappropriate for, inclusion under the utility basis. <u>1/17/17</u> Shirley Ross (WIC-Wells Branch MUD): Is it still being used for training? Green WTP has never been used to supply water to us? Howard Hagemann (WIC-Wells Branch MUD): Since it's not being used, and we're not receiving a benefit, and we've paid on the debt service, how can you sa far reach. I don't see this as having any bearing on water flowing to us. Stay with the status quo and exclude. Response: Costs are allocated through the nor Jay Joyce (WIC-Wells Branch MUD): The City of Austin sold a revenue producing asset that still had revenue bonds payable? Don Conklin (WIC-North Austin MUD #1): I'm concerned you acknowledge these costs don't pass the used and useful test. I'm concerned you didn't use the outside city doesn't have a voice, I strongly encourage the status quo. Chuck Loy (PIC-Multifamily): Was the plant retired early? Chien Lee (PIC-W/WW Commissioner): What is the amount of outstanding debt? Jesse Penn (PIC-Multifamily): Does used and useful apply in this situation? Todd Davey (PIC-Industrial/Large Volume): The debt has probably been refinanced and bundled. It's difficult to trace to a specific asset. Sounds like you've t off? It sounds like an immaterial amount. For simplicity, I support requiring wholesale to pay, too. Chuck Loy (PIC-Multifamily): It sounds like everyone benefited from the decommissioning, deconstructing and sale of the land so all should pay. Allocate it.		he debt service, how can you say a p are allocated through the normal c concerned you didn't use the funds fic asset. Sounds like you've tried –		
Executive Team Decision	Decision: N	o Green WTP cos	ts will be allocated to wholesale customers.		
	<b>Rationale:</b> The former Green WTP has been decommissioned in 2008. No assets remain. To the extent that any capital cost debt service remains from these costs will be allocated to retail only customers.				

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ustomers (Option for Change)
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ent Plant does not pass the "used and useful" test.
ould pursue the inclusion of previously disallowed costs into the
these customers (which I support) and, then, Austin Water
a plant not being used has any costs allocated to wholesale? It's cost of service process; debt service costs are common to all.
ds for paying off debt but rather for other purposes. Because
- can revenue from the sale of other assets be used to pay this
from projects completed prior to decommissioning,

	Change?	If Yes,	Issue #9: Allocation of Revenue Stability Reserve Fund Costs to Who Allocate a Portion of Revenue Stability Reserve Fun		
Issue	(Yes or No)	Option for Change	Pros		
The PUCT disallowed Austin Water's allocation of a portion of Revenue Stability Reserve Fund costs to the wholesale customers. Should Austin Water seek to include these costs in the wholesale customer revenue requirement in the next rate case? Status Quo: Continue to exclude Revenue Stability Reserve Fund costs from the wholesale customer revenue requirement.		Allocate a portion of the Revenue Stability Reserve Fund costs to the to the wholesale customer revenue requirement.	<ol> <li>The Revenue Stability Reserve Fund protects the financial integrity of Austin Water caused by revenue fluctuations. This is a valid operating cost that accrues to the benefit of all customers, both retail and wholesale.</li> </ol>	<ol> <li>The entire risk of revenue f customers. Therefore, no p customers.</li> </ol>	
PIC Meeting Dates:	PIC Meeting #	2 on November 5,	l 2016 / PIC Meeting #5 on November 29, 2016 / PIC Meeting #8 January 17, 2017 / PIC Meeting #	11 March 6, 2017	
WIC Meeting Dates:	WIC Meeting #2 on November 5, 2016 / WIC Meeting #4 on November 29, 2016 / WIC Meeting #7 January 17, 2017 / WIC Meeting #10 March 6, 2017				
Consultant Recommendation:	The maintena	nce of a Revenue S	Stability Reserve Fund is a valid operating cost that benefits all customers. Wholesale customers	should be allocated a portion of th	
	Grant Rabon (PIC-Residential Rate Advocate): Per our discussion at the PIC meeting on 11/29/16, I am formally indicating my strong belief that Austin V revenue requirement allocated to wholesale customers. The only exception to this general statement would be if Austin Water opts to utilize the utility could exclude only those disallowed costs that are inconsistent with, or inappropriate for, inclusion under the utility basis.         1/17/17       Don Conklin (WIC-North Austin MUD #1): When you look at Austin Water's responsibility to operate the utility, you expect Austin Water to save money and do something else with it. In wet years when you have more revenue than intended, is the extra revenue used to expedite funding of the Revenue Stability Fund, not to any other expense/activity/cost of service.         Gary Rose (WIC-Southwest Water Co.): I recommend against including the Revenue Stability Fund. The Revenue Stability Fund gives Austin Water the o and dry years will happen and manage it. Cost of service and revenue requirements encourage inside city conservation which leads to reduced revenue - Jay Joyce (WIC-Wells Branch MUD): Volatility is a product of steep inverted blocks on the retail side, not wholesale. Is it true the Council can do whatew Andrew Hunt (WIC- North Austin MUD): I should not be allowed. Is there a number goal for the fund? Does the city of Austin use drought surcharges o Todd Davey (PIC-Industrial/Large Volume): I have concerns about the levels of the funds. Is the value of the reserves that there won't be vast fluctuatio don't benefit from revenue stability funded by the retail class.         Grant Rabon (PIC-Residential Rate Advocate): If debt can be reduced and reserves are between 180-270 days, would that help affordability? Todd Davey (PIC-Industrial/Large Volume): If should not serves are between 180-270 days, would that help affordability?      <		n Water to save money in years w inding of the Revenue Stability Fu ives Austin Water the option to no ds to reduced revenue which shou Council can do whatever they wa se drought surcharges or pull from won't be vast fluctuations in rates ale? How will you defend at the PU Now we need to balance with the fordability?		
Executive Team Decision:	<b>Rationale:</b> T integrity of <i>A</i> agencies in a	he Revenue Stab Austin Water thro Issessing credit w	venue stability reserve fund costs to all customer classes including wholesale customers wility Reserve Fund protects the financial integrity of Austin Water caused by water rever bugh the use of reserves is a standard practice for utilities which benefits all customer classes for thiness in issuing revenue bonds. All customer classes benefit from this reserve and t have a reduced level of surcharge to build these reserves due to their reduced volatility	nue fluctuations due to weathe asses. Cash reserves are one o herefore should be allocated t	

tomers (Option for Change)
Cons
e fluctuations should be borne by Austin Water's retail o potion of these costs should be allocated to wholesale
6 4 h
f these costs. Hould pursue the inclusion of previously disallowed costs into the r these customers (which I support) and, then, Austin Water
s when revenue is over and above requirements, not peel it off Fund? Every dime of additional revenue should go to the
not collect the full cost of service from inside city. Assume wet nouldn't be passed to wholesale. I oppose allowing it. want with this money? om this fund?
tes? If there's no perceived value for wholesale to benefit, they
PUCT? We all understand the importance of reserves and the affordability of rates. By number of days cash on hand and
er?
her, drought, or conservation. Protecting the financial

these costs. Austin Water has determined that of rates versus retail rates.

	Change?	If Yes,	Allocate a Portion of Barton Springs/Edwards Aquifer Conserva	tion District Costs to Wholesa
	(Yes or	Option for		
Issue	No)	Change	Pros	
The PUCT disallowed Austin Water's allocation of a portion of Barton Springs/Edwards Aquifer Conservation District costs to wholesale customers. Should Austin Water seek to include these costs in the wholesale customer revenue requirement in the next rate case? Status Quo: Continue to exclude Barton Springs/Edwards Aquifer Conservation costs from the wholesale customer revenue requirement		Allocate a portion of Barton Springs/Edwar ds Aquifer Conservation District costs to the wholesale customer revenue requirement.	<ol> <li>The fee paid by Austin Water for the Barton Springs/Edwards Aquifer Conservation District was mandated by State of Texas legislation.</li> </ol>	
PIC Meeting Dates:	PIC Meeting #	2 on November 5,	2016 / PIC Meeting #5 on November 29, 2016 / PIC Meeting #8 January 17, 2017 / PIC Meeting #1	1 March 6, 2017
WIC Meeting Dates:	WIC Meeting #	<sup>‡</sup> 2 on November 5	2016 / WIC Meeting #4 on November 29, 2016 / WIC Meeting #7 January 17, 2017 / WIC Meeting	g #10 March 6, 2017
Consultant Recommendation:	The Barton Springs/Edwards Aquifer Conservation District costs, which are paid by AW as mandated by City Council, are a valid operating expense that should be re allocated a portion of these costs.			
PIC & WIC Comments:	Grant Rabon (PIC-Residential Rate Advocate): Per our discussion at the PIC meeting on 11/29/16, I am formally indicating my strong belief that Austin Water should prevenue requirement allocated to wholesale customers. The only exception to this general statement would be if Austin Water opts to utilize the utility basis for these exclude only those disallowed costs that are inconsistent with, or inappropriate for, inclusion under the utility basis.         1/17/17         Jay Joyce (WIC-Wells Branch MUD): Austin Water shows \$900,000 budget for this fee, but BSEACD only shows \$700,000 from Austin Water.         Howard Hagemann (WIC-Wells Branch MUD): I'm in agreement with excluding this from wholesale.         Todd Davey (PIC-Industrial/Large Volume): Generally, I support trying to recoup costs from wholesale but this brings up the reasonable and necessary hurdle to jump Dave Yanke (PIC-Residential Rate Advocate): I agree with Todd. This seems like an uphill battle but go for it.         Chuck Loy (PIC-Industrial/Large Volume): You should attempt to allocate.         Marcia Stokes (PIC-Multifamily): Why is it other cities who are wholesale customers don't pay?         3/6/2017         Grant Rabon (PIC-Residential Rate Advocate): What is the rationale to not allocate these cost to wholesale?			
	Jay Joyce (WIC Howard Hager Todd Davey (P Dave Yanke (P Chuck Loy (PIC Dan Wilcox (P Marcia Stokes <u>3/6/2017</u>	mann (WIC-Wells PIC-Industrial/Larg PIC-Residential Rat C-Multifamily): Are IC-Industrial/Larg (PIC-Multifamily)	<ul> <li>Branch MUD): I'm in agreement with excluding this from wholesale.</li> <li>e Volume): Generally, I support trying to recoup costs from wholesale but this brings up the reaso is e Advocate): I agree with Todd. This seems like an uphill battle but go for it.</li> <li>e costs charged by BSEACD based on volume? Does is benefit Austin Water customers?</li> <li>e Volume): You should attempt to allocate.</li> <li>: Why is it other cities who are wholesale customers don't pay?</li> </ul>	
Executive Team Decision	Jay Joyce (WIC Howard Hager Todd Davey (P Dave Yanke (P Chuck Loy (PIC Dan Wilcox (P Marcia Stokes <u>3/6/2017</u> Grant Rabon (	mann (WIC-Wells PIC-Industrial/Larg PIC-Residential Rat C-Multifamily): Are IC-Industrial/Larg (PIC-Multifamily) PIC-Residential Ra	<ul> <li>Branch MUD): I'm in agreement with excluding this from wholesale.</li> <li>e Volume): Generally, I support trying to recoup costs from wholesale but this brings up the reaso is e Advocate): I agree with Todd. This seems like an uphill battle but go for it.</li> <li>e costs charged by BSEACD based on volume? Does is benefit Austin Water customers?</li> <li>e Volume): You should attempt to allocate.</li> <li>: Why is it other cities who are wholesale customers don't pay?</li> </ul>	
Executive Team Decision	Jay Joyce (WIC Howard Hager Todd Davey (P Dave Yanke (P Chuck Loy (PIC Dan Wilcox (P Marcia Stokes <u>3/6/2017</u> Grant Rabon ( Decision: No	mann (WIC-Wells PIC-Industrial/Larg PIC-Residential Rat C-Multifamily): Are IC-Industrial/Larg (PIC-Multifamily) PIC-Residential Ra	<ul> <li>Branch MUD): I'm in agreement with excluding this from wholesale.</li> <li>e Volume): Generally, I support trying to recoup costs from wholesale but this brings up the reaso is Advocate): I agree with Todd. This seems like an uphill battle but go for it.</li> <li>e costs charged by BSEACD based on volume? Does is benefit Austin Water customers?</li> <li>e Volume): You should attempt to allocate.</li> <li>: Why is it other cities who are wholesale customers don't pay?</li> </ul>	nable and necessary hurdle to jump

more
mers
ale Customers (Option for Change)
Cons
overed from all customers. Wholesale customers should be
pursue the inclusion of previously disallowed costs into the
e customers (which I support) and, then, Austin Water could
0.
Austin Water. While some benefit to Austin Water

	Change?	If Yes,	Allocate a Portion of Govalle Wastewater Treatment Plant O	&M and Capital Costs to Whole
	(Yes or	Option for	Pros	•
Issue	No)	Change		
The PUCT disallowed Austin Water's allocation of a portion of Govalle Wastewater Treatment Plant costs to the wholesale customers. Should Austin Water seek to include these costs in the wholesale customer revenue requirement in the next rate case? Status Quo: Continue to exclude the Govalle Wastewater Treatment Plant costs from the wholesale customer revenue requirement		Allocate a portion of Govalle Wastewater Treatment Plant costs to the wholesale customer revenue requirement.	<ol> <li>Although the Govalle Wastewater Treatment Plant has been decommissioned, it is still being used for purposes that benefit all customers, both retail and wholesale. This includes various treatment support functions, emergency wastewater flow diversion, and for storage of treatment plant and infrastructure assets.</li> </ol>	<ol> <li>The Govalle Wastewater Treatr not be allocated to wholesale c</li> </ol>
PIC Meeting Dates:	PIC Meeting	#2 on November 5,	 2016 / PIC Meeting #5 on November 29, 2016 / PIC Meeting #8 January 17, 2017 / PIC Meeting	#11 March 6, 2017
WIC Meeting Dates:	WIC Meeting #2 on November 5, 2016 / WIC Meeting #4 on November 29, 2016 / WIC Meeting #7 January 17, 2017 / WIC Meeting #10 March 6, 2017			
Consultant Recommendation:	The Govalle Wastewater Treatment Plant operating and maintenance costs should be allocated to all customer classes including wholesale customers.			
	revenue requesclude only <u>1/17/17</u> <b>Gary Rose (V</b> can be done <b>Howard Hag</b> a concern th <b>Don Conklin</b> associated w <b>Chuck Loy (P</b> <b>Marcia Stoke</b> <b>Todd Davey</b> <b>Dan Wilcox (</b> <b>Grant Rabon</b> <b>Chien Lee (P</b> <b>Jesse Penn (</b> )	VIC-Southwest Wat at other sites. emann (WIC-Wells at some of these po (WIC-North Austin ith a decommission PIC-Multifamily): Co es (PIC-Multifamily): Co es (PIC-Multifamily) (PIC-Industrial/Larg PIC-Industrial/Larg (PIC-Residential Ra IC-W/WW Commiss PIC-W/WW Commiss	te Volume): It's a hurdle to overcome but yes you should try to include. e Volume): I agree. You should attempt to charge to wholesale. ate Advocate): I agree and don't find it particularly hard to sell to the PUCT. sioner): Yes, include it. ssioner): It should be included. What type of training takes places and should that be included?	opts to utilize the utility basis for the why the administrative building is legit unt of effort and research. What is the ioned? I recognize that administrative pport until we have more information
Executive Team Decision	Rationale: and treatm	Govalle WWTP do ent staff. Additior	sts associated with the continued use of the Govalle WWTP site to all customer classes bes not provide any wastewater treatment as a functioning plant. However, there are s hally, clearwells from the previous plant provide emergency storage for wastewater du ocated to all customer classes.	still buildings on the property whic

lesale Customers
holesale Customers (Option for Change)
Cons
reatment Plant does not pass the "used and useful" test and should ale customers.
ould pursue the inclusion of previously disallowed costs into the r these customers (which I support) and, then, Austin Water could
legitimate but the old building for training isn't because training
is the percentage usage by wholesale customers? Transparency is

tive and training costs are real costs – do they need to be tion.

hich provide space for training facilities for our pipeline the extent these costs are for the benefit of all customer

	Change?	If Yes,	Issue #12: Allocation of a Portion of the Utility-Wide Contingency to		
	(Yes or	Option for	Allocate a Portion of the Utility-Wide Continge	ency to Wholesale Customers (C	
Issue	No)	Change	Pros		
The PUCT disallowed Austin Water's allocation of a portion of its utility- wise contingency to the wholesale customers. Should Austin Water seek to include these costs in the wholesale customer revenue requirement in the next rate case? Status Quo: Continue to exclude the Utility-Wide Contingency from the wholesale customer revenue requirement		Allocate a portion of the Utility-Wide Contingency to the wholesale customer revenue requirement.	<ol> <li>The utility revenue requirement item designed to provide funds in case of emergency repair or other unplanned contingency. This is a valid operating cost that benefits all customers, both retail and wholesale.</li> </ol>	<ol> <li>Austin Water maintains other is redundant.</li> <li>Austin Water must ensure tha requirement is appropriate ba</li> </ol>	
PIC Meeting Dates:	PIC Meeting	g #2 on Novembe	 er 5, 2016 / PIC Meeting #5 on November 29, 2016 / PIC Meeting #8 January 17, 2017 / PIC Meetir	ng #11 March 6, 2017	
WIC Meeting Dates:	WIC Meeting #2 on November 5, 2016 / WIC Meeting #4 on November 29, 2016 / WIC Meeting #7 January 17, 2017 / WIC Meeting #10 March 6, 2017				
Consultant Recommendation:	Austin Wate	er must demonst	rate why its requested contingency is appropriate to be included in the revenue requirement. If ju	ustified, a portion of this cost should b	
Executive Team Decision	Grant Rabon (PIC-Residential Rate Advocate): Per our discussion at the PIC meeting on 11/29/16, I am formally indicating my strong belief that Austi         revenue requirement allocated to wholesale customers. The only exception to this general statement would be if Austin Water opts to utilize the utili         could exclude only those disallowed costs that are inconsistent with, or inappropriate for, inclusion under the utility basis.         1/17/17       Don Conklin (WIC-North Austin MUD #1): Is this a fund? Continue to disallow it. Absent this being allocated specifically to a contingency fund, I oppc         Gary Rose (WIC-Southwest Water Co.): You've set rates based on the test year. Including contingency plans in a test year lets you get around the cost         future years if something unexpected happens. Exclude it.         Grant Rabon (PIC-Residential Rate Advocate): Does this issue go away if you used actuals and not a fund:         Dan Wilcox (PIC-Industrial/Large Volume): I should be allocated to the wholesale class. Would it be a factor if they used utility vs cash?         Todd Davey (PIC-Industrial/Large Volume): I agree. You should try to allocate it. Try to not take on debt.         3/6/2017         Lanetta Cooper (PIC-Residential/Low Income): It should be a known and measurable change, or it should be a separate cost of service item altogethe         Decision: No. It tilibuwide contingency costs will be allocated to wholesale customers		contingency fund, I oppose. you get around the cost of service an ty vs cash?		
Executive Team Decision	Rationale:	These costs ar	contingency costs will be allocated to wholesale customers. The budgeted to allow for funding for any contingencies that may arise during the budget y ed to wholesale customers.	year which were unplanned. Since	

(Option for Change)
Cons
er reserve funds and the use of a utility-wide contingency cost
hat the amount of the contingency included in its revenue based on its actual history of expenditures.
d be allocated to wholesale customers.
ould pursue the inclusion of previously disallowed costs into the
these customers (which I support) and, then, Austin Water
and charge customers more. In my business we push back into
holesale and retail should be treated the same.
ce these costs are not known and measurable, none of

	Change?	If Yes,	Allocate a Portion of Wastewater Treatment Plant No. 4 Costs to Wholesale Customers (Option for Change)					
Issue	(Yes or No)	Option for Change	Pros	Cons				
The PUCT disallowed Austin Water's allocation of a portion of Water Treatment Plant No. 4 costs to the wholesale customers. Should Austin Water seek to include these costs in the wholesale customer revenue requirement in the next rate case?		Allocate a portion of Water Treatment Plant No. 4 costs to the wholesale customer revenue requirement.	1. At the time of Austin Water's 2013 rate case, Water Treatment Plant No. 4 was not in service. Water Treatment Plant No. 4 is now in service. Austin Water operates a fully integrated utility system and all customers, including both retail and wholesale, benefit from Water Treatment Plant No. 4.	<ol> <li>Water Treatment Plant No. 4 is not specifically dedicated to wholesale customer service. Therefore, no potion of these costs should be allocated to wholesale customers.</li> </ol>				
Status Quo: Continue to exclude Water Treatment Plant No. 4 costs from the wholesale customer revenue requirement								
PIC Meeting Dates:	PIC Meeting #2	2 on November 5, 2	016 / PIC Meeting #5 on November 29, 2016 / PIC Meeting #8 January 17, 2017 / PIC Meeting	; #11 March 6, 2017				
WIC Meeting Dates:	WIC Meeting #	#2 on November 5,	2016 / WIC Meeting #4 on November 29, 2016 / WIC Meeting #7 January 17, 2017 / WIC Mee	ting #10 March 6, 2017				
Consultant Recommendation:	Water Treatr	nent Plant No. 4 r	elated costs are a valid and benefits all customers. Wholesale customers should be al	llocated a portion of these costs.				
PIC & WIC Comments:	into the reven Austin Water of <u>1/17/17</u> Gary Rose (WI Randy Wilbur Jay Joyce (WIC should apply to Grant Rabon ( Dan Wilcox (P Chien Lee (PIC Jesse Penn (PI Todd Davey (PIC of retail. Chuck Loy (PIC	tment Plant No. 4 related costs are a valid and benefits all customers. Wholesale customers should be allocated a portion of these costs. (PIC-Residential Rate Advocate): Per our discussion at the PIC meeting on 11/29/16, I am formally indicating my strong belief that Austin Water should pursue the inclusion of previously disallowed cost incur equirement allocated to wholesale customers. The only exception to this general statement would be if Austin Water opts to utilize the utility basis for these customers (which I support) and, there is could exclude only those disallowed costs that are inconsistent with, or inappropriate for, inclusion under the utility basis. VIC-Southwest Water Co.): On a peak day, is WTP4 used? If yes, it's a legitimate cost. Irm: The more appropriate question is: is it necessary to operate WTP4? No. It's a \$1 billion boondoggle. We have survived for 50 years with two plants. IC-Wells Branch MUD): I have no opinion on whether to include it; it certainly could be a discussion regarding used and useful. The PUCT will conduct a prudence review. They will quantify the amount is to all. (PIC-Industrial/Large Volume): I agree. It should be included. IC-W/WW Commissioner): WTP4 is partially to replace the capacity of decommissioning other plants. PIC-W/WW Commissioner): I agree. (PIC-Industrial/Large Volume): I agree. It's used and useful, reasonable and necessary. You should try to recover. If not, revisit reasonable and necessary for retail as this shouldn't only be the responsil VIC-Multifamily): I agree. Include it and allocate. <b>as (PIC-Multifamily):</b> I agree.						
Executive Team Decision	Rationale: W	Vater Treatment F	ter Treatment Plant No. 4 costs to all customer classes including wholesale customer Plant #4 was put into service in November 2014. This plant is a critical component of stomer classes including wholesale customers.					

Issue #14: Allocation of Green Power Costs to Wholesale Customers								
Change?			Allocate a Portion of Wastewater Treatment Plant No. 4 Costs to Wholesale Customers (Option for Change)					
Issue	(Yes or No)	Option for Change	Pros	Cons				
The PUCT disallowed Austin Water's allocation of a portion of Green Choice electricity costs to wholesale customers. Should Austin Water seek to include the cost of "green power" in the wholesale customer revenue requirement in the next rate case? Status Quo: Continue to exclude the cost of green power from the wholesale customer revenue requirement.		Allocate a portion of green power costs to the wholesale customer revenue requirement.	<ol> <li>At the time of Austin Water's 2013 rate case, Austin Water purchased electric power from Austin Energy under the Green Choice electricity tariff. The PUCT disallowed the estimated cost of the Green Choice electricity in excess of standard Austin Energy electric rates. Austin Water is now purchasing electricity from Austin Energy under the Commercial Energizer rate. The Commercial Energizer rates are lower than the rates charged under the Green Choice program but are still in excess of standard Austin Energy rates.</li> <li>If the Austin City Council wishes Austin Water to purchases electricity produced by green power sources, this is a valid operating cost that should be allocated to all customers, both retail and wholesale.</li> </ol>	<ol> <li>Wholesale customers should not be required to pay for green power costs in excess of standard electric rates because of the City of Austin's environmental/sustainability concerns. These excess costs should only be borne by retail customers located within the jurisdictional boundaries of the City of Austin.</li> </ol>				
PIC Meeting Dates:	PIC Meeting	#2 on November 5,	2016 / PIC Meeting #5 on November 29, 2016 / PIC Meeting #8 January 17, 2017 / PIC Meeting	, #11 March 6, 2017				
WIC Meeting Dates:	WIC Meeting	g #2 on November 5,	2016 / WIC Meeting #4 on November 29, 2016 / WIC Meeting #7 January 17, 2017 / WIC Mee	ting #10 March 6, 2017				
Consultant Recommendation:	Austin Wat	er's purchase of gr	een power electricity is City Council mandated and is a valid operating cost that benef	its all customers. Wholesale should be allocated a portion of these costs.				
PIC & WIC Comments:	into the rever Austin Water <u>1/17/17</u> Don Conklin Todd Davey discretionary Chuck Loy (P Dan Wilcox ( Grant Rabor Jesse Penn ( Marcia Stoke	(WIC-North Austin (WIC-North Austin (PIC-Industrial/Larg and an added expe (IC-Multifamily): Alla (PIC-Industrial/Larga (PIC-Residential Ra PIC-W/WW Commis es (PIC-Multifamily)	e <b>Volume):</b> Allocate it. I second Todd's comments. <b>te Advocate):</b> Allocate to all. <b>sioner):</b> I generally agree with an allocation to all. It affects all customers regardless of inside o	in Water opts to utilize the utility basis for these customers (which I support) and, then, ity basis. commend we continue to exclude. cessary. It's a City Council decision and the premium shouldn't be paid by any customer. It				
Executive Team Decision	Rationale:	Austin Water supp	een power costs to all customer classes including wholesale customers. Forts the City's goal of using 100% green power for operations. This is also in support of to all customers including wholesale.	of the City's Climate Action Plan. The use of green power benefits all customers a				

	Change?	lf Yes,	Modify the Peaking Factor Methodology Used in the Water Cost of Service M		
lssue	(Yes or No)	Option for Change	Pros		
Representatives of large industrial customers have stated that the current method used by Austin Water to estimate customer class maximum day and maximum hour peaking factors does not adequately reflect the nuances of large industrial customer water use and results in an overstatement of the industrial class revenue requirement. Status Quo: Maintain the peaking factor methodology currently used in the water model.		Modify the peaking factor methodology currently used in the water model to reflect data provided by the industrial customers.	<ol> <li>The current peaking factor methodology used in the water model does not reflect the actual daily or hourly water consumption of any customer in any retail customer class. To the extent customer-specific data is available it should be used; this would allow for customer-specific peaking factor determinations.</li> </ol>	<ol> <li>Austin Water uses an ir maximum day and max recommended in AWW Charges. This industry s wholesale customer cla</li> <li>Unless and until Austin records individual custo peaking factor method method for assessing co allocating costs betwee</li> <li>Modifying the current r inappropriately benefit retail and wholesale cu peaking factor method</li> </ol>	
PIC Meeting Dates:	PIC Meeting	 ; #6 December 13,	2016 / PIC Meeting #8 January 17, 2017 / PIC Meeting #11 March 6, 2017		
WIC Meeting Dates:	WIC Meetin	g #5 December 13	, 2016 / WIC Meeting #7 January 17, 2017 / WIC Meeting #10 March 6, 2017		
Consultant Recommendation:	Continue to	use the industry s	tandard peaking factor methodology currently employed by Austin Water (do not m	nodify the current methodolo	
PIC & WIC Comments:	Continue to use the industry standard peaking factor methodology currently employed by Austin Water (do not modify the cur Howard Hagemann (WIC-Wells Branch MUD): The solution seems to be a better metering process, to continue with the status quo. Debati gauge against. Jay Joyce (WIC-Wells Branch MUD): The method Austin Water is following is not in the AWWA Manual; the Manual doesn't endorse a rote it's not the right way to do it. I recommend the methodology be modified to be in conformation with the AWWA Manual and appendix. Gary Rose (WIC-Southwest Water Co.): I appreciate the 3-year smoothing for peaking. Don Conklin (WIC-North Austin MUD #1): I appreciate that Austin Water is working with unusual circumstances. If the issue is specific to la Each major stakeholder should have a separate peaking factor like their separate rates. If data and evidence show large volume aren't cont less, that's legitimate and fair. I favor tweaking the methodology as it applies to large volume customers and think we can all together come peaking factors altogether because we had storage but traded with the city of Austin for consideration of a lift station. We have overpaid on Randall Raemon (WIC-Marsha WSC): How many meters are we talking about for wholesale and large volume customers to get more accura Dan Wilcox (PIC-Industria/Large Volume): The application isn't consistent with the AWWA Manual exactly and doesn't represent actuals. If provide it. Each class should have its own metering/rate/method. Todd Davey (PIC-Industria/Large Volume): The application isn't consistent with the AWWA Manual. Our consumption patterns are more c Grant Rabon (PIC-Residential Rate Advocate): Any data avoilabe collected by Austin Water and not supplied by customers. Until we're at Chuck Loy (PIC-Industria/Large Volume): Dan Wilcox (PIC-Industria/Large Volume): We recommend the methodology be modified. Marcia Stokes (PIC-Multifamily): This is an opportunity because most peaking is due to irrigation during the summer, and large volume and water o		endorse a rote mechanical metho l appendix. is specific to large volume, each r me aren't contributing to peaking together come up with that. I ma ave overpaid our share of the bor et more accurate data? esent actuals. If the data on meter rns are more consistent and prece Until we're at the point data is re odification. e modified. ge volume and residential usage rly, daily data, etc.? This would pu ea of what the data will show. e same method/rules for all.		

### Model (Option for Change)

### Cons

industry standard methodology to estimate customer aximum hour peaking factors. This methodology is WA Manual M1, Principles of Water Rates, Fees, and standard methodology is used for all retail and lasses.

in Water installs advanced metering technology that stomer water consumption on an hourly basis, the dology used by Austin Water is a fair and equitable customer class water consumption characteristics and een customer classes.

methodology to estimate peaking factors would it large industrial customers by shifting costs to other ustomer classes. In order to maintain fairness, the same dology should be used for all customer classes.

ogy to estimate customer class peaking factors).

ssentially moot as we don't have enough information to

nod. We'll present at the PUCT and their engineers will say

major stakeholder having separate smart meters will help. Ing and retail rates will increase because large volume pays make the argument that we alone should be excluded from onds by paying for storage we never got.

ers are available and would be helpful, customers can

edictable. Use available data and allocate accordingly. readily available, treat all classes the same.

e drive it. Compare peak days to what class is allowed to

probably need a demand study.

· · · · · · · · · · · · · · · · · · ·	
	3/6/2017 Dan Wilcox (PIC-Industrial/Large Volume): Is Austin Water incorporating the AMI data from customers at the same time? What about customers that already the model be made to include the data? If the residential customer class is 95% of the accounts, it seems like it will take a lot longer than 5-7 years. Will the re What are other cities doing? Lanetta Cooper (PIC-Residential/Low Income): Once they put smart meters online, there is going to be a time period to determine if they actually work. It's a as good as electric smart meters. Karen Keese (PIC-Residential): I have several clients that have fully gone AMI, and it's a big shakeout. You have to work the bugs out. Howard Hagemann (WIC-Wells Branch MUD): When you bring in the peaking factor, is this going to be a fixed costs? Is it going to vary based on the volume of reserved, and that capacity is not always used. In your formula, you use the system average day and system maximum month. What is the difference between a 3-year average, do you use all variables by customer? That could create some disparity in the relationship between the customer and system. Andrew Hunt (WIC-North Austin MUD #1): Have you identified the 3-years you are going to use?
Executive Team Decision	<ul> <li>Decision: AW will continue current use of AWWA methodology guidelines for peaking factor calculation.</li> <li>Rationale: Austin Water currently uses AWWA guidelines for non-coincident peaking factor calculation. Use of AWWA guidelines is appropriat provides further benefit to customers in the calculation of the peaking factors by using a 3-year rolling average for each customer class which sr factors. Additionally, Austin Water uses a 5-day average of water system peak day peaking factors to smooth any adverse impacts of single day and peak hour factors from monthly billing data.</li> </ul>

ady have the smart meters? Could some accommodation in e residential customer volume be looked at individually?

s a brand new technology, and water meters have not been

ne of water used? There's a certain capacity that has to be veen the max day and max month by customer? When you do

ate for calculation of peaking factors. Austin Water smooths any adverse impacts of single year peaking ay system peak day factors used in estimated peak day

Issue #16: Inflow/Infiltration cost determination and allocation to customer classes					
lssue	Change? (Yes or No)	If Yes, Option for Change	Pros		
Austin Water currently allocates I/I to customer classes based on 100% volume in wastewater COS model.			<ol> <li>I/I is a flow related cost. Allocation of costs to customer class flow provides the appropriate link for cost causation.</li> </ol>	1. Charging I/I by 100% flc	
Status Quo: Allocate I/I flows to customer classes based on 100% volume.					
PIC Meeting Dates:	PIC Meeting	#9 January 31, 20	017 / PIC Meeting #11 March 6, 2017		
WIC Meeting Dates:	WIC Meeting #8 January 31, 2017 / WIC Meeting #10 March 6, 2017				
Consultant Recommendation: PIC & WIC Comments:	I/I is essentially a hydraulic cost, most directly linked to volumetric flow, and thus it is appropriate to recover 100% by volume.         Lanetta Cooper (Residential): I see the change, but it would make a difference. Some wholesale customers could be double counted for I&I (with flow met Shirley Ross (WIC-Wells Branch MUD): In addition to TVing our lines, we inspect our manholes. It would be nice to consider giving a credit to wholesale cu         Clay Collins (WIC-Sunset Valley): Right now the 10.5% is being allocated based on contributed flow. It's really just a mathematical calculation for allocation for allocation for allocation for MUD #1): North Austin MUD #1): North Austin TVs their lines yet we don't get any credit from the city for reducing the Inflow & Infiltration.         Karyn Keese (PIC-Residential): Recommend maintaining the status quo. In San Diego Wholesale customers are metered to give an incentive to tighten up t         Todd Davey (PIC-Industrial/Large Volume): People should be rewarded for taking care of their issues. Agree with the current system.         Marcia Stokes (PIC-Multifamily): We have a private water line and private sewer line. We get charged 100% of our water usage regardless if it's going into to         3/6/2017         Robert Wood (WIC-City of Westlake Hills): Does that effectively raise everyone's flows by 10.5%? You assume that everyone's influent is actual flows plus gallons, then you are going to raise it by 10.5%, right?				
Executive Team Decision	customer cla Rationale: T reasonable o	ass contributed flo This methodology considering a stud	b determine the amount of I/I which results in I/I being 10.5% of the resulting Total F bw. In addition, AW will continue to allocate estimated I/I costs based on contribute is consistent with the current practice used within the 2008 cost of service rate stud y in 1999 identified approximately 15%. The reduction was decided in a cost of serv partially caused by I/I.	d flow volume by customer cl ly. While a specific I/I study h	

Cons

flow allocation reduces costs for the residential class.

ers).

stomers who maintain their wastewater lines.

heir system. Austin needs to meter WW flows.

the sewer system. Allocate costs based upon system usage. wholesale system, you are assuming their Inflow & Infiltration

10.5% and then raise the billed flows? If the flow was 100k

system. This is achieved by applying an 11.7% to the class.

y has not been done recently, the 10.5% seems V's Austin Clean Water Program which addressed

	Issue #17: Adding additional wastewater strength parameters					
Issue	Change? (Yes or No)	If Yes, Option for Change	Pros			
AW wastewater COS model assumes that most customer classes have the discharge strengths. Status Quo: AW BOD of 200			Adding strength parameters would identify costs associated with higher strength wastewater dischargers and appropriately allocate costs to those customers.	Adding strength parameter for typical customer flow. cost allocation process. The the additional strength para the process.		
mg/L and TSS of 200 mg/L						
PIC Meeting Dates:	PIC Meeting	#9 January 31, 20	017 / PIC Meeting #11 March 6, 2017			
WIC Meeting Dates:	WIC Meeting #8 January 31, 2017 / WIC Meeting #10 March 6, 2017					
Consultant Recommendation:	AW should r	not incorporate ar	ny additional strength parameters until there is cost causation, such as inclusion in er	nhanced permit requirements		
PIC & WIC Comments:	Lanetta Cooper (PIC-Residential): If the TCEQ increases the treatment requirements, we are already treating these. Should we add additional cost allocat Dave Schneider (PIC-Industrial/Large Volume): Stay with status quo.         Gary Rose (WIC-Southwest Water Co.): Overall, wastewater ammonia loads are coming out much stronger at our facilities.         Shirley Ross (WIC-Wells Branch MUD): In the future, it makes since if the TCEQ requires lower levels of ammonia that you would charge.         Andrew Hunt (WIC-North Austin MUD): Where would you sample MUDs, at plants? <u>3/6/2017</u> Grant Rabon (PIC-Residential Rate Advocate): Are you currently charging any customer for these new items? How are you deciding who/when to sample decide who/when gets sampled?			ould charge.		
Executive Team Decision	using the cu	rrent Industrial W AW currently uses	y additional wastewater strength parameters in its cost of service methodologies. H /aste Surcharge mechanism. s industry standards of BOD and TSS as strength parameters. While some systems ad			

### Cons

ters would require sampling and setting standard limits v. It would also increase complexity in the cost of service Treatment costs related specifically to the treatment of arameters would need to be identified and segregated in

nts.

on parameters? Then yes.

<sup>2</sup> Large customers are getting sampled annually. How do you

onia strengths for some customers will be considered

mmonia, AW does not plan to use these parameters for

			Issue #18: Allocation of Drainage Fees to Wholesale Custo	omers	
	Change?	If Yes,	Allocate a Portion of Wastewater Treatment Plant No. 4 Costs to Wholesale Cust		
lssue	(Yes or No)	Option for Change	Pros		
The PUCT disallowed Austin Water's allocation of a portion of drainage fees to wholesale customers. Should Austin Water seek to include the cost of "green power" in the wholesale customer revenue requirement in the next rate case? Status Quo: Continue to exclude the drainage fees from the wholesale customer revenue requirement.		Allocate a portion of drainage fees to the wholesale customer revenue requirement.	<ol> <li>The drainage charge is calculated individually for Austin Water's facilities, based on the amount and percent of impervious cover to address flooding, erosion and water pollution within the City of Austin. Austin Water is charged at the same rates as other properties within the City.</li> </ol>	1. Wholesale customers do drainage utility. These co within the jurisdictional l	
PIC Meeting Dates:	PIC Meeting	#2 on November 5	, 2016 / PIC Meeting #5 on November 29, 2016 / PIC Meeting #10 February 21, 2017 / P	IC Meeting #11 March 6, 2017	
WIC Meeting Dates:	WIC Meetin	g #2 on November	5, 2016 / WIC Meeting #4 on November 29, 2016 / WIC Meeting #9 February 21, 2017 /	WIC Meeting #10 March 6, 2017	
Consultant Recommendation:	Drainage fee	es charged to Austi	n Water are a cost of doing business and is a valid operating cost required to be recover	ed from all AW customers.	
PIC & WIC Comments:	Jay Joyce (WIC-Wells Branch): Is the drainage fee charged to other government entities? Katy Phillips (WIC-Sunset Valley): How are drainage fees allocated to Wholesale? Howard Hagemann (WIC-Wellsbranch): PUC has disallowed it, so it should continue to be excluded Lanetta Cooper (PIC-Residential): Are drainage fees addressed by the Texas Legislature? This is cost allocation as opposed to the City has the right to charge for th doing business.				
Executive Team Decision	Rationale:	Drainage fees are s	inage fees to all customer classes including wholesale customers. imilar to other utility fees such as electric and gas. All properties within the City of Austi vithin the City, we are assessed drainage fees. This cost is a cost of doing business in Aus	-	

stomers (Option for Change)					
Cons					
do not receive any direct benefits from the City of Austin costs should only be borne by retail customers located al boundaries of the City of Austin.					
7					
./					
hese fees. You should charge these fees because it is a cost of					
based on a consistent formula related to their impervious					

to all customer classes.

	Change? (Yes or	If Yes, Option for	9: CAP Customer Costs, Allocation to Classes, and Recovery Method (Community Benefit C							
Customer Assistancediscount foProgram currentlywastewaterprovides discountedservice andrates for eligibleimplementcustomers.CommunityBenefit Char		Add volumetric discount for wastewater service and/or implement Community Benefit Charge to fund program.	<ol> <li>Provides funding for low-income, most vulnerable customers who need assistance to pay water and wastewater bills.</li> <li>Provides a discount on water services including waivers of fixed fees and discounted volumetric rates for water.</li> </ol>							
PIC Meeting Dates: WIC Meeting Dates:	_		/ PIC Meeting #11 March 6, 2017 7 / WIC Meeting #10 March 6, 2017							
Consultant Recommendation: PIC & WIC Comments:	effective/tra Gary Rose (W borne by the f Jay Joyce (Wf Rose, I don't k Katy Phillips ( Howard Hage Karyn Keese ( signal just like Todd Davey (f auto-enrollme the bill. Lanetta Coop you're going t had a tenant ( Grant Rabon benefits. Marcia Stokes 3/6/2017	nsparent customer a <b>TC-Southwest Co.)</b> : I ar retail customer class ar <b>C-Wells Branch MUD)</b> : snow how that's going f <b>WIC-Sunset Valley)</b> : I t <b>mann (WIC-Wells Bran</b> <b>PIC-Residential)</b> : Are y the rest of us. Water of <b>PIC-Industrial/Large Vo</b> ent. That's an AE issue. <b>er (PIC-Residential)</b> : I k to get a lot more benefic CAP participant who ha <b>(PIC-Residential Rate A</b> ) <b>s (PIC-Multifamily</b> ): Tal	nity Benefit Charge (CBC) would more closely align the messaging/customer assistance n ssistance program. We also support the expansion of the assistance to include a discour in a supporter of the customer assistance program, but the PUCT has told us that we cannot push and not by the wholesale class. During the rate proceeding at the PUCT, this was not an issue. It seems like we are intertwining to to flow into the wholesale rates. On the water conservation in the rate case, we received a list of hink the CBC idea makes sense for the retail classes, but for the wholesale class it needs to be trainch): I don't think we have a customer assistance program, so we would want to be a part of the p ou looking at the rate structure for the CAP program? My feeling is that the CAP rates get a disco conservation should be promoted in this program as well. Dume): We also have no issue with CAP program and I have no concerns with reviewing the rate to I don't believe this an issue that can be resolved here. We think it's a good idea to have a discour show that AE thinks it's transparent, but the three tariffs administered by AE does not improve cust it for the cost incurred. I have concern with high CAP users. I have not received a CAP bill frequen d a leak, but the owner did not repair it. The tenant received a high water bill. Other public polic valvocate) You can also have old fixtures for water and it can happen on the water side as well. If the ple 57 from the COS water model shows several large meters (2", 3/4"). Is the CBC pure volume bill about outside city retail customers, will they receive this benefit?	nt on the wastewater volumetric these types of costs to all customer the water conservation with low inco- instances where low flow devices h nsparent what portion is for water of orogram. bunt on the 4th tier, but not the 5th tiers. Some issues came up on the A nt program. I think the CBC is the m stomer understanding. I don't have ncies yet. We don't have the data ye y changes that we might want to loo the outside city customers are payin						
Executive Team Decision	volumetric ra Rationale: E CAP program	ate discount. No cos By creating a CBC, the	reation of a Community Benefit Charge (CBC) to recover costs associated with the CAP pr ts associated with the CAP Program will be allocated to wholesale customers. It costs associated with the CAP program will be transparently identified and detailed on o This will also allow for participation in CAP program initiatives, such as the arrearage ma sparency.	our customers' monthly bills. Th						

## narge)

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be allocated to all other retail customer classes.

## th Austin Energy's CBC; resulting in a more ric rate.

ers, so it was taken out of the rate of return. It should only be

ncome and they are not the same. I really agree with Mr. s had been provided to the wholesale customers. er conservation.

th tier. This is not fair because there should be some price

e AE side regarding the administration of the program with most transparent and it's consistent with how AE displays on

ve a formal decision. I don't know if it's necessary. I don't think yet to analyze what the effect would be to CAP customers. I ook at and not harm customers who cannot fix the leak. ing into the fund, it makes sense that they can receive the

narge? The more you use, the more you contribute.

end an increase in the wastewater discount to include a

his is consistent with how Austin Energy manages their ds will be segregated from other utility funds which will

			Issue #20: Modification of Fire Demand Meter Fixed	Charges
	Change?	lf Yes,	Modify the Fire Demand Me	eter Fixed Charge Rate Design
	(Yes or	Option for	Pros	
lssue	No)	Change		
Retail small multi-		Modify the	Fix unintended consequences of some low-volume customers with large fire	Will require extensive researc
family customers must		current small	demand meters having significantly higher fixed charge portions of their monthly	determine appropriate dome
currently pay fixed charges that contain a		multi-family fixed charge rate	bill.	Reduced fixed revenue from
potentially high		design.		charges.
allocation of public fire		ucsign.		
protection costs.				
Status Quo: Maintain				
the current small				
multi-family fixed				
charge rate design.				
PIC Meeting Dates:	PIC Meeting	#11 March 6, 2017		
WIC Meeting Dates:	WIC Meeting	g #9 February 21, 201	17	
Consultant	Multifamily of	customers should not	t be charged based on fire meter size. Instead, they should be assessed a fixed charge for	or a meter size as determined by t
Recommendation:				
PIC & WIC Comments:			ed charges should be based off smaller meter and read volume for both. Only charge higher fixed t <b>co.):</b> How are peaking factors impacted?	I charge if they use a larger meter.
	-	•	k that basing the fixed charge on the smaller meter size is the best option. If you base it on the v	olume, you can open another can of
			Advocate) Is this specific solution only targeting the Multifamily customer class? You might have	some customers that are using the la
		ogramming process?		
			<b>blume):</b> This is a portion of a larger rate design issue and should be discussed during rate discussi ave already submitted comments on how to fix this. This is an issue that not only affects Multifan	
				inny but an classes with me demand
Executive Team	Decision: A	N will modify the fixe	ed charges for fire demand meter charges by basing the fixed meter charge on the small	er meter size rather than the larg
Decision	Rationale: A	nalysis of the fire do	mand meters showed virtually no consumption being used through the larger meter size	All of the fire demand custome
		•	monthly volume customers with fire demand meters, the current practice of charging of	
			ed consequence of AW's increased fixed charge goals, will be corrected by this change in	-

gn
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arch on approximately 500-600 fire demand meters to
nestic use.
m these customers that will be made up on volumetric
by that customer's typical monthly use.

of worms.

e larger meter size. Has Austin Energy advised if this will be a

nd meters

rger meter size.

mers generally only use the larger size meter during sing some to have fixed charges as high as 90% of their

	Issue #21: Fire Protection Costs and Allocation to Customer Classes							
	Change?	If Yes,	Fire Protection	Cost Allocation				
	(Yes or	Option for	Pros					
Issue	No)	Change						
Fire protection costs		Modify the	Provides equitable allocation of fire protection costs associated with ensuring water	Fire protection is a standby se				
must be allocated to		current fire	system has sufficient capacities at all times					
customer classes		demand cost	Differences in fire protection needs between customer classes can be addressed					
based on fire demand.		determination and allocations	through allocation					
Status Quo: Maintain		to customer						
the current fire		classes.						
protection cost								
identification and								
allocation as								
developed in 2008								
COS study.								
PIC Meeting Dates:	PIC Meeting	#11 March 6, 2017						
WIC Meeting Dates:	WIC Meeting	g #9 February 21, 202	17					
Consultant								
Recommendation:								
PIC & WIC Comments:		-	Advocate): The minimum fixed charge column, the meter charge is based on the AWWA standard.					
			e the math to determine the 5/8" versus the 3/4"? When I look at the tables, I get slightly differer	it numbers than what you have chos				
			e of the meter allocations have changed over the years. eeting 6, slide 31 shows the table Austin Water is using. The customer charge is the same as the n	notor chargo is the table, but the fire				
			he numbers get changed. The stuff on the left should be the AWWA standard and the stuff on the	-				
			ctive way was to use the usage by meter size to allocate fire protection charges. Private fire hydra					
	-		ity \$28/month to put it into a database. According to the model, you only allocate 1.7% to the fire	-				
			nt to get tested and on top of that I am paying for all fire hydrants to get tested, and I'm not even					
		•	allocated to the fire protection category, but we get less credit back 1.7% to that category. 27% o	f fire hydrants are private. Do you r				
			really are 10k private hydrants, you model said you only collected \$58k.					
	-		nese costs include the customer charge, if we were to exclude the customer charges (\$4.83) how were the second the customer charges (\$4.83) how were the second to be a sec					
			w do we transition from one model to another? That rate model has the AWWA ratios for meter to stay at that amount (\$7.10)?	s, but when you get over to the rate				
			rou going to unbundle that (fixed charges)? So keeping it at \$7.10 will go away? I think we would li	ke to see it unbundle based on curr				
			ate design is a different issue than COS allocation. The inverted block rate and conservation. It is					
			on cost allocation and not the rate design.					
			holesale does not pay fire protection charges. What about outside city retail customers?					
			on't we oversize the mains due to fire protection? Why don't we charge wholesale for fire protec	tion needs?				
	Marcia Stokes	s (PIC-Multifamily): In	the model, under hydrants 25% of those costs are allocated to joint (wholesale and retail).					
Executive Team	Decision: A	W will modify the fire	e protection allocation using revised meter equivalencies based on hydraulic capacity by	meter type as identified in AWW				
Decision	and Mainten							
			eter equivalencies was undetermined and had some overrides for associated fixed charge	e rate design. This methodology				
	meter equiva	alency.						

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service and most customers rarely use

cy, I am expecting that to mean that you have looked up the losen.

Fire charge is higher. Those ratios are different. My concern tection charge should be based on the AWWA standards. The fiction that Austin Water has. We pay a contractor to test our back. We are not even getting full credit in that category. Not why don't you credit 100% of that credit to those who are a require the city fire hydrants to be maintained annually, are

te sheet it's something different. Is there some council action

rrent data with AWWA standards. hat the fixed fees are driving the subsidy. There would be a

WA M6, Water Meters - Selection, Installation, Testing,

y will ensure a specific source is identified for each

	Change?	If Yes,	Subsidy	bsidy Elimination		
Issue	(Yes or No)	Option for Change	Pros			
Residential rates currently subsidized by commercial and large volume customers.		Eliminate residential rates subsidy.	All customer classes would be charged rates that would recover their identified cost of service. All customers treated consistently with rates at their cost of service.	Customer impact to reside		
Status Quo: Maintain current level of rate subsidy.						
PIC Meeting Dates:	PIC Meeting	g #11 March 6, 201	17			
WIC Meeting Dates:	WIC Meetin	g #9 February 21,	2017			
Consultant Recommendation:	RFC recomm	nends the elimina	tion of the interclass subsidy. Depending on the magnitude of the updated cost of s	ervice, this may be phased in		
PIC & WIC Comments:	elimination o	of the subsidy would	Vhat would it take to get residential to 100%? Subsidy are one of my pet peeves. Affordabili I depend on the results of the cost of service study. We are very concerned about affordabil : The goal of the last COS study was to eliminate the subsidy in 5-7 years, but it is still not the	ity.		
Executive Team Decision	likely recom	imend a short-teri	d to eliminate the current commercial and large volume subsidy of residential water m transition of this subsidy. ve rates for each customer class cover their identified cost of service, with no subsid			

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dential class.

in over a short-term period, such as 3 years. e everyone is at their cost of service is the goal. The

ed on levels of impacts to residential customers, AW will

	Change?	If Yes,	Actual Test Year					
Issue	(Yes or No)	Option for Change	Pros					
Test year that will be used to determine total revenue requirements. Status Quo: Use the proposed budget as the revenue requirement test year.		Historical actual expenses with possible adjustments for known and measurable changes.	Actual expenses in a historical test year is a good representation of costs needed to operate the water and wastewater systems. Adjustments for known and measurable provides transparent justifications.	Not consistent with budge Could result in a lower reve				
PIC Meeting Dates:	PIC Meeting	g #10 February 21,	2017					
WIC Meeting Dates:	WIC Meetir	ng #9 February 21,	2017					
Consultant Recommendation:								
PIC & WIC Comments:	September 2 Worth used a Todd Davey	016, then we are ad a similar process. (PIC-Industrial/Larg	re we going to discuss known and measurable changes as a group? Labor costs, the PUC like justing for known and measurable for September 2017 which we already know when the hea e Volume): What's the timeline for delivery? When do you expect for the model to be comp /Low Income): My only concern is that not all of the known and measurable changes associa	arings examiner process begins ( lete?				
Executive Team Decision	Rationale: justification	Actual expenses fr of requirements t	rical actual test year adjusted for known and measurable changes. com a prior fiscal year provides justification of what it takes to operate and maintain co meet cash needs. Actual expenses adjusted for known and measureable changes of the utility can be met.					

Cons

geting process of municipality. evenue requirement than cash flow needs

s and keeps a running total. If the actual data is ending in is (same month). Are you going to lose a year? The City of Ft.

accounted for. PUC requires most recent data.

known and measurable changes provides further ur costs and justifications of any expected changes. It

	Change?	If Yes,	Create Outside City Retail Customer Classes							
Issue	(Yes or No)	Option for Change	Pros	Cons						
Whether to create outside city		Create the	Identifies cost of service and associated rates for these customers.	Different rates for customers who live just beyond the city limits as compared to						
retail customer classes for		outside city	Provides cost of service justification for those customers that have jurisdiction	city customers that might be in similar proximity						
residential, multifamily, and		customer	with the PUC for rate challenges.	Possibly have lower rates than inside city rates due to the consumption patterns						
commercial.		classes and		generally being higher than inside city rates.						
		develop cost of								
Status Quo: Austin Water does not have outside city retail		service rates for each.								
customer classes.										
PIC Meeting Dates:	N/A									
WIC Meeting Dates:	N/A									
Consultant Recommendation:										
PIC & WIC Comments:	an outside ci you charge tl <b>Grant Rabon</b>	ty rate? The PUCT unnem more if their CC (PIC-Residential Ra	ses a system wide cost of service. It would add administrative costs. It doesn't seem like it S requirements were higher?	hout this process, we have been told these costs are intermingled. How would you calculate 's worth the money. I can't think why you would need an outside city customer class. Would ferent peaking ratios for each (Inside City/Outside City)? I am suspicious that your O&M and the detail of your assets tracking.						
Executive Team Decision	Decision: A	W will create outs	ide city retail customer classes and rates.							
	PUC jurisdic	tion for their rates	tside city retail customer classes and rates provides for specific identification of co s, so this specific identification of revenue requirements and rates is necessary for a o mitigate any future PUC rate challenges.	st of service revenue requirements for each class. These outside city classes have any future PUC rate challenge. Additionally, the specific customer class information						



# Preliminary Water COS Results | WIC





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### Austin Water Water Utility Cost of Service Model Summary of Results Test Year FY 2017

Table																
Summary by Model		Existing COS	Rate Model		New COS Rate Model			Existing Model COS to New Model COS			Existing Model Revenue to New Model COS					
Customer Class	Cost of Service for Test Year (1)	Anticipated Revenue (2)	\$ Variance	% Variance	Cost of Service for Test Year (1) (3)	Anticipated Revenue (2) (3)	\$ Variance	% Variance	Cost of Service for Test Year (1) EXISTING MODEL	Cost of Service for Test Year (1) (3) NEW MODEL	\$ Variance	% Variance	Anticipated Revenue EXISTING MODEL	Cost of Service/ Anticipated Revenue (3) NEW MODEL	\$ Variance	% Variance
Inside City Retail										L. L						
Inside City Residential	\$115,622,785	\$113,495,981	(\$2,126,805)	-1.9%	\$116,724,610	\$116,724,610	(\$0)	0.0%	\$115,622,785	\$116,724,610	\$1,101,825	0.9%	\$113,495,981	\$116,724,610	\$3,228,630	2.8%
Inside City Multi-Family	61,577,212	62,521,507	944,295	1.5%	61,033,846	61,033,846	(0)	0.0%	61,577,212	61,033,846	(543,366)	-0.9%	62,521,507	61,033,846	(1,487,661)	-2.4%
Inside City Commercial	81,732,841	86,086,609	4,353,768	5.1%	81,674,462	81,674,462	(0)	0.0%	81,732,841	81,674,462	(58,379)	-0.1%	86,086,609	81,674,462	(4,412,147)	-5.4%
Inside City Residential CAP	6,736,309	6,736,309	0	0.0%	6,073,761	6,073,761	0	0.0%	6,736,309	6,073,761	(662,548)	-10.9%	6,736,309	6,073,761	(662,548)	-10.9%
Inside City Spansion	1,867,455	1,966,837	99,382	5.1%	1,868,784	1,868,784	0	0.0%	1,867,455	1,868,784	1,328	0.1%	1,966,837	1,868,784	(98,053)	-5.2%
Inside City NXP - Ed Bluestein Blvd	2,500,224	2,631,252	131,028	5.0%	2,552,146	2,552,146	0	0.0%	2,500,224	2,552,146	51,922	2.0%	2,631,252	2,552,146	(79,106)	-3.1%
Inside City NXP - W William Cannon	1,917,286	2,019,518	102,232	5.1%	1,879,610	1,879,610	0	0.0%	1,917,286	1,879,610	(37,676)	-2.0%	2,019,518	1,879,610	(139,908)	-7.4%
Inside City Samsung	10,772,330	11,340,744	568,414	5.0%	10,837,454	10,837,454	0	0.0%	10,772,330	10,837,454	65,123	0.6%	11,340,744	10,837,454	(503,290)	-4.6%
Inside City Novati	418,994	441,126	22,132	5.0%	415,582	415,582	0	0.0%	418,994	415,582	(3,412)	-0.8%	441,126	415,582	(25,544)	-6.1%
Inside City University of Texas	2,429,072	2,505,097	76,025	3.0%	2,396,860	2,396,861	0	0.0%	2,429,072 0	2,396,860 0	(32,211)	-1.3%	2,505,097	2,396,860	(108,237)	-4.5%
Total Inside City Retail	285,574,508	289,744,979	4,170,471		285,457,116	285,457,116	(0)		285,574,508	285,457,116	(117,392)		289,744,979	285,457,116	(4,287,863)	
Outside City Retail																
Wholesale	202.026	242.000	(10.070)	14.5%	201 602	204 602	0	0.00/	202.026	204 602	(40.254)	2.70	242.055	204 602	20.646	10.40
Creedmore-Maha	392,036	342,066	(49,970)	-14.6%	381,682	381,682	0	0.0%	392,036	381,682	(10,354)	-2.7%	342,066	381,682	39,616	10.4%
High Valley	36,455	29,069	(7,387)	-25.4%	32,198	32,198	0	0.0%	36,455	32,198	(4,257)	-13.2%	29,069	32,198	3,129	9.7%
Manor, City of	780	433 93,683	(347) (57,455)	-80.2% -61.3%	690	690 162,225	(U) 0	0.0%	780	690 162,225	(90) 11,087	-13.1% 6.8%	433 93,683	690	257 68,542	37.2%
Mid Tex Utilities	151,138 66,613	93,683 52,896	(57,455)		162,225 56,326	56,326	0		151,138	56,326		-18.3%	52,896	162,225 56,326	3,430	42.3% 6.1%
Marsha Water	12,252	52,896 10,937	(13,717) (1,315)	-25.9% -12.0%	9,792	9,792	0	0.0% 0.0%	66,613 12,252	9,792	(10,287) (2,460)	-18.3% -25.1%	10,937	9,792	3,430 (1,145)	-11.7%
Morningside Nighthawk	66,369	55,139	(1,313)	-12.0%	81,557	81,55 <b>7</b>	(0)	0.0%	66,369	9,792	(2,460)	-25.1%	55,139	9,792 81,557	(1,145) 26,418	-11.7%
North Austin MUD	1,587,954	1,005,453	(582,501)	-57.9%	1,568,692	1,568,693	(0)	0.0%	1,587,954	1,568,692	(19,262)	-1.2%	1,005,453	1,568,692	563,239	35.9%
North Austin MOD	1,317,778	866,120	(451.659)	-52.1%	1,343,470	1.343.470	0	0.0%	1,317,778	1,343,470	25,692	1.9%	866,120	1,343,470	477.350	35.5%
Rivercrest	661,544	557,846	(103,697)	-18.6%	659,625	659.625	(0)	0.0%	661,544	659,625	(1,919)	-0.3%	557,846	659,625	101,779	15.4%
Rollingwood	680,314	585,542	(103,057)	-16.2%	684,134	684,134	0	0.0%	680,314	684,134	3,820	0.6%	585,542	684,134	98,592	14.4%
Shady Hollow	1,047,844	786,025	(261,820)	-33.3%	1,040,927	1,040,927	(0)	0.0%	1,047,844	1,040,927	(6,918)	-0.7%	786,025	1,040,927	254,902	24.5%
Sunset Valley MUD	569,208	512,833	(56,375)	-11.0%	610,465	610,465	0	0.0%	569,208	610,465	41,257	6.8%	512,833	610,465	97,633	16.0%
Village of San Leanna	21,848	21,673	(175)	-0.8%	21,151	21,151	(0)	0.0%	21,848	21,151	(697)	-3.3%	21,673	21,151	(522)	-2.5%
Water District 10	4,183,574	2,462,362	(1,721,211)	-69.9%	4,268,491	4,268,491	(0)	0.0%	4,183,574	4,268,491	84,918	2.0%	2,462,362	4,268,491	1,806,129	42.3%
Wells Branch MUD	2,107,515	1,349,439	(758,077)	-56.2%	2,102,050	2,102,049	(0)	0.0%	2,107,515	2,102,050	(5,466)	-0.3%	1,349,439	2,102,050	752,611	35.8%
Southwest Water	27,405	21,168	(6,237)	-29.5%	24,545	24,545	(0) 0	0.0%	27,405	24,545	(2,860)	-11.7%	21,168	24,545	3,377	13.8%
Total Wholesale	12,930,627	8,752,683	(4,177,944)		13,048,019	13,048,019	0	0.078	12,930,627	13,048,019	117,392		8,752,683	13,048,019	4,295,336	
Total System	\$298,505,135	\$298,497,662	(\$7,473)		\$298,505,135	\$298,505,135	(\$0)		\$298,505,135	\$298,505,135	(\$0)		\$298,497,662	\$298,505,135	\$7,473	

(1) Represents Full Cost of Service including Outside City Adjustments, Reserve Fund Surcharge and Community Benefit Charge

(2) Revenue assumes November Implementation: 1 month of 2016 rates and 11 months of 2017 rates.

(3) Cost of Service and anticipated revenue in new model does not include reserve fund surcharge revenue from North Austin, Northtown, Water District 10, and Wells Branch to mirror the Existing model. However, AW plans to assess that charge to all customers

### Austin Water Water Utility Cost of Service Model Summary of Results Test Year FY 2017

RETAIL USER CHARGES		Existing COS Rate N	Nodel 2017 RATES		New COS Rate Model 2017 RATES				
	<b>RESIDENTIAL</b>	COMMERCIAL	MULTI-FAMILY	RESIDENTIAL CAP	<b>RESIDENTIAL</b>	COMMERCIAL	MULTI-FAMILY	<b>RESIDENTIAL CAP</b>	
Fixed Charge									
5/8"	\$7.10	\$17.90	\$24.35	n/a	\$7.40	\$18.20	\$24.65	n/a	
3/4"	13.00	29.00	39.00	n/a	13.00	29.00	38.90	n/a	
1"	15.00	42.00	58.00	n/a	16.10	43.10	59.20	n/a	
1.5"	26.00	80.00	112.00	n/a	22.50	76.50	108.80	n/a	
2"	42.00	128.00	180.00	n/a	33.70	120.10	171.70	n/a	
3"	71.00	244.00	347.00	n/a	74.10	246.90	350.10	n/a	
4"	136.00	406.00	567.00	n/a	116.80	386.80	548.10	n/a	
6"	275.00	815.00	1,138.00	n/a	231.10	771.10	1,093.60	n/a	
8"	916.00	1,780.00	2,296.00	n/a	402.30	1,266.30	1,782.30	n/a	
10"	1,106.00	2,348.00	3,090.00	n/a	607.30	1,849.30	2,591.10	n/a	
12"	1,336.00	3,172.00	4,269.00	n/a	838.00	2,674.00	3,770.50	n/a	
Tiered Fixed Fee									
Block 1: 0 - 2,000 Gallons	\$1.25	n/a	n/a	n/a	\$1.25	n/a	n/a	n/a	
Block 2: 2,001 - 6,000 Gallons	3.55	n/a	n/a	n/a	3.50	n/a	n/a	n/a	
Block 3: 6,001 - 11,000	9.25	n/a	n/a	n/a	9.75	n/a	n/a	n/a	
Block 4: 11,001 - 20,000 Gallons	29.75	n/a	n/a	n/a	29.75	n/a	n/a	n/a	
Block 5: 20,000 - over Gallons	29.75	n/a	n/a	n/a	29.75	n/a	n/a	n/a	
Volumetric									
Residential							,	44.44	
Block 1: 0 - 2,000 Gallons	\$3.18	n/a	n/a	\$2.50	\$3.22	n/a	n/a	\$2.22	
Block 2: 2,001 - 6,000 Gallons	5.05	n/a	n/a	4.13	5.11	n/a	n/a	3.67	
Block 3: 6,001 - 11,000	8.56	n/a	n/a	6.74	8.66	n/a	n/a	6.00	
Block 4: 11,001 - 20,000 Gallons	12.92	n/a	n/a	11.58	13.07	n/a	n/a	10.31	
Block 5: 20,000 - over Gallons	14.43	n/a	n/a	14.43	14.60	n/a	n/a	12.84	
Seasonal									
Off-Peak	n/a	\$5.97	\$5.11	n/a	n/a	\$5.49	\$4.84	n/a	
Peak	n/a	6.57	5.62	n/a	n/a	6.04	5.32	n/a	
Reserve Fund Surcharge	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	\$0.19	
Community Benefit Charge	n/a	n/a	n/a	n/a	\$0.14	\$0.14	\$0.14	n/a	

### Austin Water Water Utility Cost of Service Model Summary of Results Test Year FY 2017

LARGE VOLUME USER CHARGES	Existing Model 2017 Additional Fixed Charges	Existing Model 2017 Volumetric OFF PEAK RATES	Existing Model 2017 Volumetric PEAK RATES	New Model 2017 Additional Fixed Charges	New Model 2017 Volumetric OFF PEAK RATES	New Model 2017 Volumetric PEAK RATES
Inside City Spansion	\$20,100	\$5.44	\$5.98	\$20,500	\$4.97	\$5.47
Inside City NXP - Ed Bluestein Blvd	29,500	5.04	5.55	29,600	4.72	5.19
Inside City NXP - W William Cannon	22,000	5.58	6.13	21,400	4.98	5.48
Inside City Samsung	127,000	5.62	6.18	125,500	5.17	5.70
Inside City Novati	3,900	5.48	6.03	4,200	4.96	5.46
Inside City University of Texas	17,250	5.97	6.57	21,200	5.50	6.05

### WHOLESALE USER CHARGES

	Existing Model 2017 Additional Fixe <mark>d Charges</mark>	Existing Model 2017 Volumetric Rates		New Model 2017 Additional Fixed Charges	New Model 2017 Volumetric Rates
Wholesale Volumetric Rates				_	
Creedmore-Maha	\$2,800	\$3.89		\$3,500	\$4.34
High Valley	250	3.87		280	4.35
Manor, City of	0	5.09		0	28.44 (2)
Mid Tex Utilities	0	4.10		0	7.51
Marsha Water	450	3.92		500	4.19
Morningside	75	5.09		70	4.47
Nighthawk	450	3.90		750	5.96
North Austin MUD	15,452	2.75		13,000	4.97
Northtown MUD	11,167	2.59		11,200	4.49
Rivercrest	4,500	4.35		5,800	5.21
Rollingwood	5,000	4.65		6,100	5.53
Shady Hollow	7,500	4.45		9,500	6.10
Sunset Valley MUD	4,000	4.24		4,900	5.17
Village of San Leanna	200	4.06		160	4.04
Water District 10	37,986	2.75		38,600	5.52
Wells Branch MUD	20,457	2.60		18,400	4.65
Southwest Water	0	4.10		0	4.87
Reserve Fund Surcharge		\$0.10 (	1)		\$0.10
Community Benefit Charge		n/a			n/a

(1) North Austin, Northtown, Water District 10, and Wells Branch do not currently pay reserve fund surcharge.

(2) City of Manor will be adjusted similar to Existing Rates to reflect emergency usage only.

### Austin Water Wastewater Utility Cost of Service Model Summary of COS Results by Model Test Year FY 2017

	Existing COS Rate Model			New COS Rate Model			Existing Model COS to New Model COS			Existing Model Revenue to New Model COS						
Summary of COS Results by Model																
Customer Class	Cost of Service for Test Year (1)	Anticipated Revenue (2)	\$ Variance	% Variance	Cost of Service for Test Year (1)	Anticipated Revenue (2)	\$ Variance	% Variance	Cost of Service for Test Year (1) EXISTING MODEL	Cost of Service for Test Year (1) NEW MODEL	\$ Variance	% Variance	Anticipated Revenue	Cost of Service / Anticipated Revenue (1) NEW MODEL	\$ Variance	% Variance
Retail		(2)	9 Variance	70 Variance	Test Tear (1)	(2)	Ş vanance	76 Valiance			Ş vanance	76 Variance	EXISTING WODEL	NEW MODEL	5 Vanance	70 Variance
Residential	\$92,245,079	\$92,287,529	\$42,450	0.0%	\$92,222,135	\$92,222,135	\$0	0.0%	\$92,245,079	\$92,222,135	(\$22,944)	0.0%	\$92,287,529	\$92,222,135	(\$65,393)	-0.1%
Multi-Family	72,814,555	73,511,737	697,182	0.9%	73,819,776	73,819,776	0	0.0%	72,814,555	73,819,776	1,005,221	1.4%		73,819,776	308,039	0.4%
Commercial	68,812,005	69,515,936	703,931	1.0%	69,718,595	69,718,595	0	0.0%	68,812,005	69,718,595	906,590	1.3%	69,515,936	69,718,595	202,659	0.3%
Residential CAP	6,924,518	6,924,518	(0)	0.0%	5,189,709	5,189,709	0	0.0%	6,924,518	5,189,709	(1,734,809)	-33.4%	6,924,518	5,189,709	(1,734,809)	-33.4%
Spansion	1,700,551	1,711,828	11,277	0.7%	1,736,233	1,736,233	0	0.0%	1,700,551	1,736,233	35,682	2.1%		1,736,233	24,405	1.4%
NXP - Ed Bluestein Blvd	2,035,874	2,047,884	12,010	0.6%	2,079,643	2,079,643	0	0.0%	2,035,874	2,079,643	43,769	2.1%	, ,	2,079,643	31,758	1.5%
NXP - W William Cannon	2,016,637	2,017,289	652	0.0%	2,060,607	2,060,607	0	0.0%	2,016,637	2,060,607	43,970	2.1%		2,060,607	43,318	2.1%
Samsung	11,050,730	11,115,765	65,035	0.6%	11,286,794	11,286,794	n	0.0%	11,050,730	11,286,794	236,064	2.1%		11,286,794	171,029	1.5%
Novati	347,720	349,912	2,192	0.6%	355,497	355,497	0	0.0%	347,720	355,497	7,777	2.2%		355,497	5,585	1.6%
University of Texas	1,773,823	1,785,594	11,771	0.7%	1,800,838	1.800.838	0	0.0%	1,773,823	1,800,838	27,015	1.5%		1,800,838	15,243	0.8%
Extra Strength Surcharge Customers	4,758,925	4,758,925	0	0.0%	4,820,875	4,820,875	0	0.0%	4,758,925	4,820,875	61,950	1.3%		4,820,875	61,950	1.3%
Total Retail	264,480,417	266,026,916	1,546,499	0.6%	265,090,700	265,090,700	0	0.0%	264,480,417	265,090,700	610,283	0.2%	266,026,916	265,090,700	610,283	-0.4%
Wholesale																
Mid Tex Utilities (Avana Sub)	105,741	108,796	3,055	2.8%	95,883	95,883	0	0.0%	105,741	95,883	(9,858)	-10.3%	108,796	95,883	(12,913)	-13.5%
Comanche Canyon (WCID17)	24,460	21,998	(2,462)	-11.2%	21,851	21,851	0	0.0%	24,460	21,851	(2,609)	-11.9%	21,998	21,851	(147)	-0.7%
Manor, City of	532,325	507,780	(24,545)	-4.8%	486,131	486,131	0	0.0%	532,325	486,131	(46,194)	-9.5%	507,780	486,131	(21,649)	-4.5%
North Austin MUD	1,367,042	973,512	(393,530)	-40.4%	1,249,014	1,249,014	0	0.0%	1,367,042	1,249,014	(118,028)	-9.4%	973,512	1,249,014	275,502	22.1%
Northtown MUD	1,372,882	959,370	(413,512)	-43.1%	1,254,341	1,254,341	0	0.0%	1,372,882	1,254,341	(118,541)	-9.5%	959,370	1,254,341	294,971	23.5%
Rollingwood	234,917	224,656	(10,261)	-4.6%	214,590	214,590	0	0.0%	234,917	214,590	(20,327)	-9.5%	224,656	214,590	(10,066)	-4.7%
Shady Hollow	500,996	478,337	(22,659)	-4.7%	458,164	458,164	0	0.0%	500,996	458,164	(42,832)	-9.3%	478,337	458,164	(20,173)	-4.4%
Sunset Valley MUD	417,118	401,831	(15,287)	-3.8%	381,090	381,090	0	0.0%	417,118	381,090	(36,028)	-9.5%	401,831	381,090	(20,741)	-5.4%
Steiner Ranch (WCID17)	116,625	91,324	(25,301)	-27.7%	105,256	105,256	0	0.0%	116.625	105,256	(11.369)	-10.8%	91,324	105,256	13,932	13.2%
Wells Branch MUD	2,126,581	1,481,490	(645,091)	-43.5%	1,943,026	1,943,026	0	0.0%	2,126,581	1,943,026	(183,555)	-9.4%	· · · · · ·	1,943,026	461,536	23.8%
Westlake Hills	242,701	231,868	(10,833)	-4.7%	221,758	221,758	0	0.0%	242,701	221,758	(20,943)	-9.4%		221,758	(10,109)	-4.6%
	7,041,388	5,480,960	(1,560,428)	-28.5%	6,431,104	6,431,104	0	0.0%	7,041,388	6,431,104	(610,284)	-9.5%	5,480,960	6,431,104	(610,284)	14.8%
Total Wholesale	7,041,388															

Austin Water Wastewater Utility Cost of Service Model Summary of COS Rate Results for 2017 Test Year FY 2017

Residential Block 1         SA 90         5.16         0.26         5.1%           Block 2         S9.90         5.16         0.26         5.1%           Residential CAP Block 1         4.90         3.76         (1.14)         -30.3%           Block 2         9.94         7.63         (2.31)         -30.3%           Multi-Family         9.20         9.52         0.32         3.4%           Multi-Family         9.20         9.52         0.32         3.4%           Multi-Family         9.20         9.51         0.25         2.6%           Commercial         9.26         9.51         0.25         2.6%           Key Unne         Spansion         10.30         10.30         0.00           Spansion         7.95         8.52         0.57         6.7%         6.7%           Ed Bluestein Blvd         10.30         10.30         0.00         0.00           William Cannon         8.52         9.51         0.47         5.2%           Samsung         7.89         8.42         0.53         6.3%           Moveti         7.65         8.30         0.67         8.3%           Comanche Caynon (WCD17)         3.98         9.95 <th></th> <th></th> <th>Volumetric Rates (\$</th> <th>per 1,000 Gallons)</th> <th></th> <th colspan="6">Monthly Fixed Charge</th>			Volumetric Rates (\$	per 1,000 Gallons)		Monthly Fixed Charge					
Customer Class         Model         Model         S Difference         % Difference		2017 Rates from	2017 Rates from				2017 Rates from	2017 Rates from			
Residential Block 1         S4.90         5.16         0.26         5.1%           Block 2         \$9.94         1.0.47         0.53         5.1%           Residential CAP Block 1         4.90         3.76         (1.14)         -30.3%           Multi-Family         9.20         9.52         0.32         3.4%           Multi-Family         9.20         9.51         0.25         2.6%           Commercial         9.26         9.51         0.25         2.6%           Commercial         9.26         9.51         0.25         2.6%           Vi William Cannon         8.52         9.57         6.7%           6 Bloestein Blvd         10.30         10.30         0.00           Vi William Cannon         8.52         9.57         6.7%           6 Bluestein Blvd         10.30         10.30         0.00           Samsung         7.89         8.42         0.53         6.3%           Novati         0.63         9.51         0.43         4.5%           Modi Tex Utilities (Avana Sub)         5.66         4.93         (0.73)         1.49%           Comanche Canyon (WCD17)         3.98         3.95         (0.31)         -0.7%		the Existing COS	the New COS				the Existing COS	the New COS			
Block 1 Block 2         SA 90 System         5.16 System         0.26 System         5.18 System         Interview         Interview<	Customer Class	Model	Model	\$ Difference	% Difference	Customer Class	Model	Model	\$ Difference	% Difference	
Block 2         \$9.94         10.47         0.53         5.1%         Residential CAP           Residential CAP         Residential CAP         Residential CAP         Residential CAP         Residential CAP         Residential CAP         0.00         0.00         0.00         0.00           Block 1         9.94         7.65         (2.1)         -30.35         Residential CAP         0.00         0.00         0.00         0.00           Multi-Family         9.20         9.52         0.32         3.4%         Multi-Family         10.30         10.30         0.00         0.00           Commercial         9.26         9.51         0.25         2.6%         Commercial         10.30         10.30         0.00           Spansion         7.95         8.52         0.57         6.7%         Ed Bluestein Blvd         10.30         10.30         0.00           Samsung         7.89         8.42         0.53         6.3%         Samsung         10.30         10.30         0.00           Somsion         5.66         4.93         0.67         8.43         0.67         8.43         0.03         0.03         0.03         0.00           Somsion Bive of Texas         9.08         9.51 <th< td=""><td>Residential</td><td></td><td></td><td></td><td></td><td>Residential</td><td>\$10.30</td><td>10.30</td><td>0.00</td><td>0.0%</td></th<>	Residential					Residential	\$10.30	10.30	0.00	0.0%	
Residential CAP         Residential CAP         Residential CAP         Residential CAP         0.00         0.00         0.00           Block 1         4.90         3.76         (1.14)         -30.3%         Presidential CAP         Presidential CAP	Block 1	\$4.90	5.16	0.26	5.1%						
Block 1 Block 2         4.90 9.94         3.76 7.63         (1.14) (2.31)         -30.3% -30.3%         Multi-Family         10.30         10.30         0.00           Multi-Family         9.20         9.52         0.32         3.4%         Multi-Family         10.30         10.30         0.00           Commercial         9.26         9.51         0.25         2.6%         Commercial         10.30         10.30         0.00           Large Volume         5         8.52         9.27         0.73         7.9%         Multi-Family         10.30         10.30         0.00           William Cannon         8.52         9.27         0.73         7.9%         Works         10.30         10.30         0.00           William Cannon         8.52         8.99         0.47         5.2%         Samsung         10.30         10.30         0.00           Novati         7.63         8.30         0.67         8.42         0.53         6.3%         Samsung         10.30         10.30         0.00           Novati         7.65         8.30         0.67         8.42         0.53         6.3%         Novati         10.30         10.30         0.00           Mold Tex Utilities (Avana Sub)	Block 2	\$9.94	10.47	0.53	5.1%						
Block 2         9.94         7.63         (2.31)         -30.3%           Multi-Family         9.20         9.52         0.32         3.4%         Multi-Family         10.30         10.30         0.00           Commercial         9.26         9.51         0.25         2.6%         Commercial         10.30         10.30         0.00           Large Volume	Residential CAP					Residential CAP	0.00	0.00	0.00	0.0%	
Multi-Family         9.20         9.52         0.32         3.4%         Multi-Family         10.30         10.30         0.00           Commercial         9.26         9.51         0.25         2.6%         Commercial         10.30         10.30         0.30         0.00           Large Volume         Spansion         7.95         8.52         0.57         6.7%         Spansion         10.30         10.30         10.30         0.00           W William Cannon         8.52         9.25         0.73         7.9%         Ed Bluestein Blvd         10.30         10.30         10.30         0.00           Samsung         7.89         8.42         0.53         6.3%         Samsung         10.30         10.30         10.30         0.00           Working         7.89         8.42         0.53         6.3%         Samsung         10.30         10.30         10.30         0.00           Working         7.89         8.42         0.53         6.3%         Samsung         10.30         10.30         10.30         0.00           Moretin         Comanche Canyon (WCID17)         3.88         3.95         (0.03)         -0.7%         Mid Tex Utilities (Avana Sub)         10.30         10.30	Block 1	4.90	3.76	(1.14)	-30.3%						
Commercial         9.26         9.51         0.25         2.6%         Commercial         10.30         10.30         0.00           Large Volume         Large Volume         Spansion         7.95         8.52         0.77         7.9%         Ed Bluestein Blvd         10.30         10.30         0.00           W William Cannon         8.52         9.99         0.47         5.2%         0.73         7.9%         Ed Bluestein Blvd         10.30         10.30         0.00           Novati         7.63         8.30         0.67         8.34         0.63         8.35         0.00         William Cannon         10.30         10.30         0.00           Wholesale         Morati         0.39         0.43         4.5%         Morati         0.10.30         10.30         0.00           Manor, City of         5.66         4.93         (0.73)         -1.49%         Mid Tex Utilities (Avana Sub)         10.30         10.30         0.00           Manor, City of         5.66         4.93         (0.26)         -4.4%         Mid Tex Utilities (Avana Sub)         10.30         10.30         0.00           Manor, City of         5.64         5.35         1.40         25.2%         North Austin MUD         5.1.00	Block 2	9.94	7.63	(2.31)	-30.3%						
Large Volume         Large Volume         Large Volume           Spansion         7.95         8.52         0.57         6.7%         Spansion         10.30         10.30         0.00           Ed Bluestein Blvd         8.52         9.25         0.73         7.9%         Ed Bluestein Blvd         10.30         10.30         0.00           W William Cannon         8.52         8.99         0.47         5.2%         W William Cannon         10.30         10.30         0.00           Samsung         7.63         8.30         0.67         8.1%         W William Cannon         10.30         10.30         0.00           University of Texas         9.08         9.51         0.43         4.5%         University of Texas         10.30         10.30         0.00           Wholesale	Multi-Family	9.20	9.52	0.32	3.4%	Multi-Family	10.30	10.30	0.00	0.0%	
Spansion         7.95         8.52         0.57         6.7%         Spansion         10.30         10.30         0.00           Ed Bluestein Blvd         8.52         9.25         0.73         7.9%         Ed Bluestein Blvd         10.30         10.30         0.00           W William Cannon         8.52         8.99         0.47         5.2%         W William Cannon         10.30         10.30         0.00           Samsung         7.63         8.30         0.67         8.1%         Novati         10.30         10.30         0.00           University of Texas         9.08         9.51         0.43         4.5%         University of Texas         10.30         10.30         0.00           Wholesale             6.64         4.93         (0.73)         -14.9%         Mid Tex Utilities (Avana Sub)         10.30         10.30         0.00           Comanche Canyon (WCID17)         3.98         3.95         (0.03)         -0.7%         Comanche Canyon (WCID17)         10.30         10.30         0.00           Mort Austin MUD         4.23         5.54         1.31         23.7%         North Austin MUD         10.30         10.30         0.00           North	Commercial	9.26	9.51	0.25	2.6%	Commercial	10.30	10.30	0.00	0.0%	
Ed Bluestein Blvd         8.52         9.25         0.73         7.9%         Ed Bluestein Blvd         10.30         10.30         0.00           W William Cannon         8.52         8.99         0.47         5.2%         W William Cannon         10.30         10.30         0.00           Samsung         7.89         8.42         0.53         6.3%         Samsung         10.30         10.30         0.00           Novati         7.63         8.30         0.67         8.4%         Novati         10.30         10.30         0.00           University of Texas         9.08         9.51         0.43         4.5%         University of Texas         10.30         10.30         0.00           Wholesale              Mid Tex Utilities (Avana Sub)         10.30         10.30         0.00           Comanche Canyon (WCID17)         3.98         3.95         (0.03)         -0.7%         Mid Tex Utilities (Avana Sub)         10.30         10.30         0.00           Manor, City of         5.64         5.38         (0.26)         -4.8%         Manor, City of         10.30         10.30         0.00           North Austin MUD         4.23         5.54	Large Volume					Large Volume					
W William Cannon         8.52         8.99         0.47         5.2%         W William Cannon         10.30         10.30         0.00           Samsung         7.89         8.42         0.53         6.3%         Samsung         10.30         10.30         0.00           Novati         7.63         8.30         0.67         8.1%         Novati         10.30         10.30         0.00           University of Texas         9.08         9.51         0.43         4.5%         Novati         10.30         10.30         0.00           Wholesale	Spansion	7.95	8.52	0.57	6.7%	Spansion	10.30	10.30	0.00	0.0%	
Samsung Novati         7.89         8.42         0.53         6.3%         Samsung         10.30         10.30         0.00           Novati         7.63         8.30         0.67         8.1%         Novati         10.30         10.30         0.00           University of Texas         9.08         9.51         0.43         4.5%         Novati         10.30         10.30         0.00           Wholesale         Mid Tex Utilities (Avana Sub)         5.66         4.93         (0.73)         -14.9%         Mid Tex Utilities (Avana Sub)         10.30         10.30         0.00           Comanche Canyon (WCID17)         3.98         3.95         (0.03)         -0.7%         Comanche Canyon (WCID17)         10.30         10.30         0.00           Manor, City of         5.64         5.38         (0.26)         -4.8%         Manor, City of         10.30         10.30         0.00           North Austin MUD         4.15         5.55         1.40         25.2%         North Austin MUD         10.30         10.30         0.00           Rollingwood         5.67         5.39         (0.28)         -5.1%         North Austin MUD         10.30         10.30         0.00           Shady Hollow         5.71	Ed Bluestein Blvd	8.52	9.25	0.73	7.9%	Ed Bluestein Blvd	10.30	10.30	0.00	0.0%	
Novati University of Texas         7.63         8.30         0.67         8.1%         Novati         10.30         10.30         0.00           Wholesale	W William Cannon	8.52	8.99	0.47	5.2%	W William Cannon	10.30	10.30	0.00	0.0%	
University of Texas         9.08         9.51         0.43         4.5%         University of Texas         10.30         10.30         0.00           Wholesale         Mid Tex Utilities (Avana Sub)         5.66         4.93         (0.73)         -14.9%         Mid Tex Utilities (Avana Sub)         10.30         10.30         0.00           Comanche Canyon (WCID17)         3.98         3.95         (0.03)         -0.7%         Mid Tex Utilities (Avana Sub)         10.30         10.30         0.00           Manor, City of         5.64         5.38         (0.26)         -4.8%         Manor, City of         10.30         10.30         0.00           North Austin MUD         4.23         5.54         1.31         23.7%         North Austin MUD         51.00         10.30         (49.70)         -4.8%           Rollingwood         5.67         5.35         1.40         25.2%         North Austin MUD         60.00         10.30         (49.70)         -4.8%           Shady Hollow         5.73         5.47         (0.26)         -4.8%         Shady Hollow         10.30         10.30         0.00           Sunset Valley MUD         5.71         5.39         (0.32)         -6.0%         Sunset Valley MUD         10.30         10.30 <td>Samsung</td> <td>7.89</td> <td>8.42</td> <td>0.53</td> <td>6.3%</td> <td>Samsung</td> <td>10.30</td> <td>10.30</td> <td>0.00</td> <td>0.0%</td>	Samsung	7.89	8.42	0.53	6.3%	Samsung	10.30	10.30	0.00	0.0%	
Wholesale         Wholesale         Wholesale         Mid Tex Utilities (Avana Sub)         5.66         4.93         (0.73)         -14.9%         Mid Tex Utilities (Avana Sub)         10.30         10.30         0.030         0.00           Comanche Canyon (WCID17)         3.98         3.95         (0.03)         -0.7%         Comanche Canyon (WCID17)         10.30         10.30         0.00           Manor, City of         5.64         5.38         (0.26)         -4.8%         Manor, City of         10.30         10.30         0.00           North Austin MUD         4.23         5.54         1.31         23.7%         North Austin MUD         51.00         10.30         (40.70)         -           Rollingwood         5.67         5.39         (0.26)         -4.8%         North Austin MUD         10.30         10.30         (40.70)         -           Rollingwood         5.75         1.40         25.2%         Northhown MUD         10.30         10.30         (40.70)         -           Rollingwood         5.73         5.47         (0.26)         -4.8%         Shady Hollow         10.30         10.30         0.00           Sunset Valley MUD         5.71         5.39         (0.32)         -6.0%         Sunset Valley	Novati	7.63	8.30	0.67	8.1%	Novati	10.30	10.30	0.00	0.0%	
Mid Tex Utilities (Avana Sub)         5.66         4.93         (0.73)         -14.9%         Mid Tex Utilities (Avana Sub)         10.30         10.30         0.00           Comanche Canyon (WCID17)         3.98         3.95         (0.03)         -0.7%         Comanche Canyon (WCID17)         10.30         10.30         0.00           Manor, City of         5.64         5.38         (0.26)         -4.8%         Manor, City of         10.30         10.30         0.00           North Austin MUD         4.23         5.54         1.31         23.7%         North Austin MUD         51.00         10.30         (40.70)         -           North Austin MUD         4.15         5.55         1.40         25.2%         North Austin MUD         60.00         10.30         (49.70)         -           Rollingwood         5.67         5.39         (0.28)         -5.1%         Rollingwood         10.30         10.30         0.00           Shady Hollow         5.73         5.47         (0.26)         -4.8%         Shady Hollow         10.30         10.30         0.00           Susset Valley MUD         5.71         5.39         (0.22)         -6.0%         Sunset Valley MUD         10.30         10.30         0.00	University of Texas	9.08	9.51	0.43	4.5%	University of Texas	10.30	10.30	0.00	0.0%	
Comanche Canyon (WCID17)         3.98         3.95         (0.03)         -0.7%         Comanche Canyon (WCID17)         10.30         10.30         0.00           Manor, City of         5.64         5.38         (0.26)         -4.8%         Manor, City of         10.30         10.30         0.00           North Austin MUD         4.23         5.54         1.31         23.7%         North Austin MUD         51.00         10.30         (40.70)         -           North Austin MUD         4.15         5.55         1.40         25.2%         North Austin MUD         60.00         10.30         (49.70)         -           Rollingwood         5.67         5.39         (0.28)         -5.1%         Rollingwood         10.30         10.30         0.00           Shady Hollow         5.73         5.47         (0.26)         -4.8%         Shady Hollow         10.30         10.30         0.00           Sunset Valley MUD         5.71         5.39         (0.32)         -6.0%         Sunset Valley MUD         10.30         10.30         0.00           Steiner Ranch (WCID17)         3.80         4.43         0.63         14.3%         Steiner Ranch (WCID17)         10.30         10.30         0.00	Wholesale					Wholesale					
Manor, City of North Austin MUD         5.64         5.38         (0.26)         -4.8%         Manor, City of         10.30         10.30         0.00           North Austin MUD         4.23         5.54         1.31         23.7%         North Austin MUD         51.00         10.30         (40.70)         -           North Austin MUD         4.15         5.55         1.40         25.2%         North Austin MUD         60.00         10.30         (49.70)         -           Rollingwood         5.67         5.39         (0.28)         -5.1%         Rollingwood         10.30         10.30         0.00           Shady Hollow         5.73         5.47         (0.26)         -4.8%         Shady Hollow         10.30         10.30         0.00           Sunset Valley MUD         5.71         5.39         (0.32)         -6.0%         Sunset Valley MUD         10.30         10.30         0.00           Steiner Ranch (WCID17)         3.80         4.43         0.63         14.3%         Steiner Ranch (WCID17)         10.30         10.30         0.00	Mid Tex Utilities (Avana Sub)	5.66	4.93	(0.73)	-14.9%	Mid Tex Utilities (Avana Sub)	10.30	10.30	0.00	0.0%	
North Austin MUD         4.23         5.54         1.31         23.7%         North Austin MUD         51.00         10.30         (40.70)         -           North Austin MUD         4.15         5.55         1.40         25.2%         North Austin MUD         60.00         10.30         (49.70)         -           Rollingwood         5.67         5.39         (0.28)         -5.1%         Rollingwood         10.30         10.30         0.00         0.00           Shady Hollow         5.73         5.47         (0.26)         -4.8%         Shady Hollow         10.30         10.30         0.00         0.	Comanche Canyon (WCID17)	3.98	3.95	(0.03)	-0.7%	Comanche Canyon (WCID17)	10.30	10.30	0.00	0.0%	
Northtown MUD         4.15         5.55         1.40         25.2%         Northtown MUD         60.00         10.30         (49.70)         -           Rollingwood         5.67         5.39         (0.28)         -5.1%         Rollingwood         10.30         10.30         0.00         0.00           Shady Hollow         5.73         5.47         (0.26)         -4.8%         Shady Hollow         10.30         10.30         0.00         0.00           Sunset Valley MUD         5.71         5.39         (0.32)         -6.0%         Sunset Valley MUD         10.30         10.30         0.00           Steiner Ranch (WCID17)         3.80         4.43         0.63         14.3%         Steiner Ranch (WCID17)         10.30         10.30         0.00	Manor, City of	5.64	5.38	(0.26)	-4.8%	Manor, City of	10.30	10.30	0.00	0.0%	
Rollingwood         5.67         5.39         (0.28)         -5.1%         Rollingwood         10.30         10.30         0.00           Shady Hollow         5.73         5.47         (0.26)         -4.8%         Shady Hollow         10.30         10.30         0.00           Sunset Valley MUD         5.71         5.39         (0.32)         -6.0%         Sunset Valley MUD         10.30         10.30         0.00           Steiner Ranch (WCID17)         3.80         4.43         0.63         14.3%         Steiner Ranch (WCID17)         10.30         10.30         0.00	North Austin MUD	4.23	5.54	1.31	23.7%	North Austin MUD	51.00	10.30	(40.70)	-395.1%	
Shady Hollow         5.73         5.47         (0.26)         -4.8%         Shady Hollow         10.30         10.30         0.00           Sunset Valley MUD         5.71         5.39         (0.32)         -6.0%         Sunset Valley MUD         10.30         10.30         0.00           Steiner Ranch (WCID17)         3.80         4.43         0.63         14.3%         Steiner Ranch (WCID17)         10.30         10.30         0.00	Northtown MUD	4.15	5.55	1.40	25.2%	Northtown MUD	60.00	10.30	(49.70)	-482.5%	
Sunset Valley MUD         5.71         5.39         (0.32)         -6.0%         Sunset Valley MUD         10.30         10.30         0.00           Steiner Ranch (WCID17)         3.80         4.43         0.63         14.3%         Steiner Ranch (WCID17)         10.30         10.30         0.00		5.67	5.39	(0.28)	-5.1%	Rollingwood	10.30	10.30	0.00	0.0%	
Steiner Ranch (WCID17)         3.80         4.43         0.63         14.3%         Steiner Ranch (WCID17)         10.30         10.30         0.00	Shady Hollow	5.73	5.47	(0.26)	-4.8%	Shady Hollow	10.30	10.30	0.00	0.0%	
	Sunset Valley MUD	5.71	5.39	(0.32)	-6.0%	Sunset Valley MUD	10.30	10.30	0.00	0.0%	
Wells Branch MUD         4.14         5.56         1.42         25.5%         Wells Branch MUD         51.00         10.30         (40.70)         -		3.80			14.3%		10.30		0.00	0.0%	
	Wells Branch MUD	4.14	5.56	1.42	25.5%	Wells Branch MUD	51.00	10.30	(40.70)	-395.1%	
Westlake Hills         5.68         5.41         (0.27)         -5.0%         Westlake Hills         10.30         10.30         0.00	Westlake Hills	5.68	5.41	(0.27)	-5.0%	Westlake Hills	10.30	10.30	0.00	0.0%	