Attachment 3

2011+ Regional Conservation Allocation between Rates and Facilities Charges

In August 2009, the Operating Board kicked off a discussion of how to recover the costs of the regional conservation program beginning January 2011. The contract specifies that conservation is a New Supply cost, and the Operating Board has authority to allocate the costs between rates and Facilities Charges.

A subcommittee was formed and met four times between December and February. The subcommittee analyzed various issues including:

- 1. Whether to recover costs through rates or Facilities Charges
- 2. How many years of conservation to consider a facility (in other words, how often to recalculate the Facilities Charge)
- 3. How to recognize the costs of the program (cash basis or utility cost basis)
- 4. Why the current Facilities Charge balance is so high
- 5. Whether to switch the cost basis used for the 1% program, and in effect remove it from the Facilities Charge cost pool at the end of 2010

Recommendation

In summary, the subcommittee recommends that:

- 2011+ conservation is allocated to the Facilities Charge cost pool
- Each 3 year increment be considered a "Facility"
- Seattle continues to recognize the costs of the 1% program on a utility cost basis
- Seattle recognizes the cost of the 2011+ program on a cash basis
- This procedure is automatically used for each three year increment unless results warrant a re-examination or change by the Operating Board
- Seattle provides additional context to the Operating Board about the Facilities Charge cost pool as part of the True Up out briefing (for example, using multi-year charts such as the one on page 2)
- The Operating Board revisit and change the procedures as needed

Based on these recommendations, the Facilities Charge for 2011-2014 should be between \$750 and \$900 per $\frac{3}{4}$ " connection. The exact amount will depend on the budget for the regional conservation program. As reference, the current cost is \$713 per $\frac{3}{4}$ " connection, and has been since 2003.

Rates versus Facilities Charges, and how many years to consider a "Facility"

The subcommittee preferred that conservation costs be recovered through Facilities Charges based on the growth pays for growth concept. This also allows wholesale customers to choose whether to pass along the charge as part of the cost of a new connection or to rate base the cost.

The subcommittee examined various scenarios that broke conservation into 2 year, 3 year, and 5 year increments. The number of years had minimal impact on the charge itself, so the advantage to more frequent updating is to better react to trends in conservation spending and the pace of new connections. However, too short an update period can create instability as results from an individual year are used to adjust a charge rather than allowing some averaging with results from other years. Three years was settled on as a good compromise of update frequency, stability, and administrative burden.

Cost recognition and the current Facilities Charge balance

One of the issues examined by the subcommittee was the current large balance in the Facilities Charge cost pool. The balance is large enough that is has hit the upper limit set by the contracts and \$4.1M in surplus has moved to the rates cost pool, reducing commodity rates.



The underlying reason for the large balance is that costs of the 1% conservation were recognized using the utility cost basis rather than a cash basis. Both methods are allowed under the contract, but in hindsight, the cash basis would have been more appropriate for a program that has annual spending such as conservation. (For a more detailed explanation, see Appendix A).

Because of this, the subcommittee recommends that the cash basis be used for recognizing costs of the 2011+ conservation program. This more closely aligns the revenues and costs into the same year.

The situation above brought up another question: what to do with the remaining costs of the 1% program? Because of the inherent delay in cost recognition under the utility basis cost method, it is estimated that there will be approximately \$10M of 1% conservation costs remaining at the end of 2010. The options are:

- Continue to use utility basis cost for the 1% program and slowly "use up" the \$10M Facilities Charge balance. (Note: the are no additional transfers to rates projected under this option)
- Recognize all of the remaining costs in 2010, deplete the Facilities Charge balance, and begin 2011 with a balance near zero.

The subcommittee recommended continuing to use the utility cost basis for the 1% program in order to provide a cushion against lower than expected revenues causing the balance to go negative, especially with the unknowns in the housing market.

Projected Results

Implementing the recommendations of the subcommittee is projected to produce the results shown in the chart below. Based on the budget currently in development, the 2011-2013 Facilities Charge amount is expected to range from \$750 to \$900 per $\frac{3}{4}$ " connection.



Appendix A – Mechanics of cost recognition

The contracts allow costs to be recognized either as cash is spent to create an asset (cash basis) or as the asset is in service over its accounting life (utility cost basis, which is based on depreciation).

In a traditional project, cash is spent in year 0, which would create very lumpy rates, so the utility basis cost is the preferred option. (Another option under the cash basis is to track the exact bonds used to build the facility and track the payments over the life of the bonds, but this is administratively cumbersome, especially when bonds are refunded multiple times. For example, this mechanism is employed under the 1982 contracts and it takes approximately 2 weeks to update each year.) The chart below shows the difference between cash basis and utility basis for a traditional \$20M project with a 10 year accounting life.



A project like conservation is different because the cash is spent each year, and each year begins another layer of depreciation that will extend 10 years. For this type of project, the cash basis produces smoother rates.



In practice, the difference in cost recognition becomes even more important in the Facilities Charge cost pool because of the way the contract specifies that the Facilities Charge amount be calculated. It is set to recover the cost of the program over the time taken to "grow into the facility," which was projected to be ten years. In other words, the FC amount is set to recover the cost over ten years, but the costs are actually spread out over 20 years.

Because we have been using the utility cost basis for costs from 2002 to 2010, a large balance has built up in the Facilities Charge cost pool (as shown in the graph on page 2). If we had used the cash basis, costs and revenues would have been more closely matched.

Appendix B – Relevant sections of the Contracts (Formatting added)

Sections concerning Allocation of Conservation to rates or Facilities Charges

Section IV.B.3:

Conservation.

Costs incurred by Seattle for regional conservation shall be allocated to the Wholesale Customers through rates or FCs as determined by the Operating Board in the New Supply Cost Pool.

Section IV.C.1.b:

i. <u>Water supply resources developed in the future ("New Supply Resources") that expand the</u> <u>capacity of the Seattle Water Supply System</u>, including the costs of the 1% conservation program from January 1, 2002 through 2010 and a portion of the cost of the Tacoma Second Supply Project (as allocated from the Tacoma Second Supply Project Cost Pool as set forth in Section IV.E. 7), <u>shall</u> <u>be included in the New Supply Cost Pool.</u> If any portion of a New Supply Resource project enhances reliability of Existing Supply Resources, the costs thereof may be allocated to the Existing Supply Cost Pool if the Operating Board and Seattle both agree.

ii. <u>The cost of New Supply Resources plus Rate of Return on Investment may be recovered</u> <u>through FCs charged annually to the holders of Full Requirements Contracts, Partial</u> <u>Requirements Contracts and Seattle or through new supply rates based on the costs of such</u> <u>facilities</u>. Such costs which are not recovered on an annual basis through FCs shall be recovered through new supply rates. The new supply rate shall be applied to all holders of Full Requirements Contracts and Partial Requirements Contracts and Seattle.

iii. <u>The Operating Board shall determine the portion of the New Supply Resource costs that</u> <u>shall be recovered through FCs or through new supply rates</u>. The FCs and new supply rates may be scalable to create an incentive for developers to build housing or commercial units with efficient water usage levels. Water Utility, as well as each other Wholesale Customer and Seattle in setting rates for retail customers shall be free to choose the method of incorporating FCs or new supply rates into their own retail rates and charges.

Sections concerning Setting the Facilities Charge

Section IV.E.10

Rate Setting.

The structure of FCs water rates for water charged to the holders of Full Requirements Contracts and Partial Requirements Contracts shall be determined by Seattle, in its sole discretion, except that the price may not, without the consent of Water Utility, be set to collect more than the costs forecast under Section IV hereof and Rate of Return on Investment. FCs shall be calculated as set forth on page 1 of Exhibit VI.

Exhibit VI:

Calculation of ERU's as a Part of Facilities Charges The ERU Fee is:

• the flat debt service payment required to finance the facility providing the ERU over the lesser of (i) the facility life or (ii) the period over which new demand will fully utilize the facility's supply

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• the number of new ERU's of demand expected in each year.

Seattle's Average Cost of Debt shall be used as the interest rate in this calculation. In the event that several new supply facilities are added simultaneously, the facilities may be considered together as providing a total new supply capacity for a total construction cost.

Example: A new facility costing \$100 million is built with a capacity of 100,000 ERU's. Growth of 5,000 ERU's per year is expected over the next 20 years, so the facility is projected to be supplying its full capacity in 20 years. Were this facility financed over 20 years at 6% interest, the flat annual debt service payment would be \$8.7 million. Each ERU would cost 0.02% of this annual amount, or about \$1,740.

At the time a new supply facility is added, the ERU price for this supply shall be calculated. This ERU price shall then be averaged with the then-current ERU Fee. This average shall be weighted by the number of unpurchased ERU's available at the then-current ERU fee and the number of new ERU's being added at the new ERU price. This weighted average shall be the new ERU Fee, and the number of ERU's available at the fee shall be the sum of the unsold ERU's at the previous fee and the ERU capacity of the new facility.

Example: 10 years ago, a \$100 million facility was constructed that can supply 100,000 ERU's. Growth and demand projections have proven accurate, and now 50,000 ERU's have been purchased, each for \$1,740. The facility also has an additional 50,000 ERU's still available at the same price. This year, we construct a facility worth \$70 million, with a capacity of 40,000 ERU's. Based on demand projections, this facility (on it's own) would be fully utilized in 10 years, and it's ERU price is therefore \$2,375. The average price of any of the 90,000 available ERU's is therefore \$2,022.

EXHIBIT VI

Connection Size	Number of ERU's
³ / ₄ " and smaller	1
1"	2
1 1/2"	5
2"	8
3"	22
4"	31
6"	66
8"	112
10"	169
12"	238

ERU's by Connection Size

ERU Proving Methodology

The size of the water service connection used to serve an establishment depends upon both the total demand of that establishment and the instantaneous flow required by that establishment. For this reason, connection size is only a general indicator of the annual demand placed on water supplies by the establishment.

Sections concerning the Facilities Charge true up

Section IV.E.7:

<u>Facilities Charge Revenues.</u> Supply FC revenues shall offset infrastructure costs in the New Supply Cost Pool allocated to the Supply FC by the Operating Board. Surpluses and deficits in actual Supply FC revenues over cost allocated to the Supply FC shall be carried forward and earn simple interest at Seattle's Average Cost of Debt.

Any current-year <u>deficit</u> (including any surplus balance available from previous years) shall be paid by rates for the New Supply Cost Pool. New Supply Cost Pool rates shall be discounted by surplus Supply FC revenues until any deficit Supply FC balance is repaid, except the amount of this discount shall not exceed, without the agreement of the Operating Board, twice the maximum annual deficit paid by the rate for the New Supply Cost Pool in any one year.

In the event that Supply FC **surplus** balances exceed the Net Book Value of assets whose costs are allocated to the Supply FC, the difference between the Supply FC balance and the Net Book Value of these assets shall be used to discount the rate for the New Supply Cost Pool (and the Supply FC surplus balance shall reduced by the amount of this discount). The use and accounting for transmission FCs shall be done in a like manner to supply FCs. Seattle and Water Utility agree that FC revenues are the sole property of Seattle.

Section IV.E.2:

Infrastructure Costs

Each cost pool shall include the infrastructure costs for its respective facilities, calculated on a utility, cash or other basis depending upon the facility and the cost pool as set forth below.

a. <u>Utility Basis</u>. The utility basis shall be used to calculate the infrastructure costs for all Existing Supply Facilities and Existing Transmission Facilities, as well as their replacements and betterments. <u>The utility basis may also be used for new supply facilities and new transmission facilities in</u> <u>Seattle's discretion</u>. Under the utility basis, the infrastructure cost for a facility in any year shall be the sum of (i) the annual depreciation expense recorded for that facility and (ii) the product of the net book value of that facility and the Rate Of Return On Investment.

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b. <u>Cash Basis</u>. <u>The cash basis may be used in Seattle's discretion for new supply facilities and</u> <u>new transmission facilities, or a portion thereof</u>. Under the cash basis, the infrastructure cost for a facility in any year shall be the actual cash expenditure made by Seattle in that year for either the payment of construction costs or actual principal and interest costs on debt issued to finance its construction. In the event that the depreciation lifetime of the facility is less than the term of the debt issued to finance all or a portion of the facility, debt maturities will be selected such that the construction cost of the facility will be fully amortized at the end of its depreciation lifetime.

c. <u>Other Basis</u>. Seattle, with the approval of the Operating Board may determine one or more other bases on which to calculate infrastructure costs and may apply these bases to facilities in the New Supply and New Transmission Cost Pools.