energy strategies

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To: SCL Advisory Panel

From: The Manufacturing Industrial Council

Date: July 16, 2012

Re: SCL Cost of Service Study Analysis

Background

Energy Strategies has been retained by the Manufacturing Industrial Council (MIC) to analyze Seattle City Light's (SCL) 2007/2008 adopted[1] cost of service (COS) analysis that was used to develop rates during the 2007/2008 rate period. This analysis examined key areas to determine the reasonableness of SCL's COS study and if it favors certain customer classes over others. The COS analysis is a complex model, and although a utility's purpose is generally to determine each class' share of costs, the analysis can be constructed to favor one customer class over another. Based on our analysis, we discovered areas where SCL made decisions that unreasonably shifted costs from Residential customers to High Demand customers like Nucor.

There are two basic approaches to class COS allocation used in the U.S. - the average (embedded) cost methodology and the marginal cost methodology. The more common of the two is the embedded cost approach, but utilities in the Pacific Northwest, including SCL, tend to use the marginal cost approach. According to SCL, this basic COS framework has been used since 1980. SCL's use of a marginal cost approach was "largely a product of the set of circumstances existing in the last half of the 1970's."[2] The last SLC rate adjustment that included an adopted analysis of the cost to serve each rate class was in December 2006. In that analysis, the rate adjustment covered a two-year time period - calendar years 2007 and 2008. The following table details the SCL's adopted 2007/2008 revenue requirement. The table also includes the relevant cost shares used to allocate the High Demand class its share of the revenue requirement.

[1] SCL's *Adopted Cost of Service and Cost Allocation Report 2007-2008 was adopted in December 2006*

[2] SCL's *Adopted Cost of Service and Cost Allocation Report 2007-2008*, Section 4.2, pp. 28-29, "Marginal Cost Approach Used for Cost of Service Analysis".

Areas of Concern in Class Cost of Service Model

Energy Strategies has identified the following issues that should be addressed regarding COS allocation methods used by SCL. These are based on a review of the COS study adopted in December 2006 that SCL used to set 2007/2008 retail rates.

Issue #1 - Allocation of Net Wholesale Revenues

Prior to 2006 (when net wholesale revenues were negligible), net wholesale revenues (NWR) were assigned to the Energy Function (production of energy, purchased power, long distance transmission and conservation) for purposes of allocation. This assignment is in keeping with standard practice across the country. In the adopted 2007/2008 COS, the allocation of NWR was changed because of the size of the revenues. SCL indicates that the basis for this change was that the previous method, which had been used for decades, "provide(d) more benefit to energy-intensive customers than to those which did not consume as much, even though they share equally in the financial risk of NWR falling short of the forecast"[3]

We question the validity of deviating from a principle-based allocation simply because the magnitude of the variable has changed. In the 2007/2008 adopted COS study, NWR were allocated based on each class' share of the total revenue requirement - -the Energy Function *plus* the Retail Service Function (distribution, local transmission, wires, transformers, etc) – in other words, areas that are NOT related to the production of energy. This change significantly and unfairly disadvantages the large energy users, from small businesses to High Demand customers, who represent nearly 40,000 of the 399,000 customers, and 67% of the energy sales (2010 data).

In the adopted 2007/2008 budget, NWR significantly impact SCL's net revenue requirement for the combined 2007/2008 revenue requirement as shown in the table below:

Comparison of Pre-2006 and Adopted 2007/2008 NWR Allocation

	2007	2008	2007 + 2008
Total Revenue Requirement			
Excluding Net Wholesale Revenues	$720,801,364	$697,082,580	$1,417,883,944
Net Wholesale Revenues	($189,599,163)	($149,798,266)	($339,397,429)
Net Revenue Requirement[4]	$531,202,201	$547,284,314	$1,078,486,515

A comparison of the allocation factors using the pre-2006 method of and adopted 2007/2008 method is shown in the following table for the Total Service Territory

[3] SCL's *Adopted Cost of Service and Cost Allocation Report 2007-2008,* Chapter 3, p. 27

[4] SCL's *Adopted Cost of Service and Cost Allocation Report 2007-2008,* Section 2.2, Table 2.1, p. 7.

	Pre-2006[5]	Adopted 2007/2008[6]	Difference
Residential	33.706%	38.464%	4.758%
Small	12.792%	12.377%	(0.415%)
Medium	24.733%	22.537%	(2.196%)
Large	15.909%	14.789%	(1.120%
High Demand	11.904%	9.702%	(2.202%)
Lights	0.956%	2.130%	1.174%
Total	100.000%	100.000%	0.000%

Clearly, as the table illustrates, the decision to change the allocation of NWR benefitted the Residential and Lighting classes at the expense of the Small, Medium, Large, and High Demand classes - a loss of 1/6 of the NWR credit. The combined impact for all the commercial and industrial customers (assuming $170 M in average annual NWR) was $10.1 million annually. For High Demand customers alone, the impact was $3.74 million annually.

A key issue going forward is the proposed $126.3 million reduction of the projected NWR as part of the six-year Strategic Plan. There is no discussion in the Plan regarding the reduction of the Rate Stabilization Account (RSA), which was created to provide immediate funds to SCL when the projected NWR are lower than the actual revenues. Once the RSA drops below $90 million, a surcharge is placed on customer bills to recover the funds needed to cover the insufficient NWR. Without making any changes to the RSA - currently over $100 million - and simultaneously reducing the NWR, the utility will unnecessarily have two methods to ensure that it meets its NWR projection and thus, unnecessarily increase the amount of funds collected from the customers to meet its projected revenue requirement and most likely"over-collect" revenue from customers. With the current NWR allocation in place, the $126.3 million NWR reduction over the six years of the Strategic Plan will cost High Demand customers an additional $1.5 million annually and $9 million over the six-year period (with a corrected NWR allocation, the impact would be even greater.)

Recommendation

As noted above, prior to 2006, NWR were appropriately assigned to the Energy Function. The proper amount of resource acquisition is determined by the energy needs of the SCL system, not its retail services function. Thus, these wholesale energy revenues are clearly energy-related. Under this approach each rate class' share of the NWR would be its share of the Energy Function costs. This approach would be consistent with standard industry practice throughout the U.S. and would properly recognize that NWR are *not* related to the Retail Function or the Franchise adjustment.

In addition, if the RSA remains in place throughout the six-year Strategic Plan period, MIC recommends the following:

1. The RSA should be reduced to $50 million, which is more than adequate funding to cover any shortage in the NWR as the budget projections decline. The liquidated $50

[5] Energy Function allocation factors from SCL's *Adopted Cost of Service and Cost Allocation Report 2007-2008*, Section 6.8, Table 6.7, p. 69.

[6] Total Share of Allocated Revenue Requirement factors from SCL's *Adopted Cost of Service and Cost Allocation Report 2007-2008*, Section 10.4, Table 10.4, p. 158.

million could be used to reduce the six-year rate increases proposed in the Strategic Plan.

2. Financial policies can be relaxed or reduced because the utility will be recovering more revenue requirement up front from customers – reducing SCL's likelihood of ever needing to use the RSA. With increased revenue requirement from customers and the RSA in place, the utility's hydro uncertainty risk will be significantly reduced. MIC recommends the current Debt Coverage Ratio be reduced from 1.8 to 1.7.
3. An automatic mechanism should be put into place so that when actual annual NWR exceeds the projected amount by a minimum of 15%, the dollars are automatically returned to customers at the beginning of the year in reduced rates.
4. SCL should be required to have a full rate review no longer than every three years, which would include a reset of "base" power costs in rates.

Issue #2 - Allocation of Franchise Agreement Revenues

In the 2007/2008 Adopted Cost of Service report, SCL noted that its franchise agreements with Tukwila and other suburbs resulted in an additional $13 million of revenue. This additional $13 million of revenue was "credited to those considered to be the owners of the Department's assets, i.e. Seattle residential customers."[7]

Given that all customers, both Residential and Non-residential, are essentially paying for the assets of the utility it seems more equitable for all customers to share in the franchise-related revenue. This could be accomplished by allocating the revenue based on each class' share of the total revenue requirement.

Recommendation

Allocate Tukwila and other suburb franchise agreement revenue on the basis of each rate class' share of the total revenue requirement instead of just the Residential rate class. In the 2007/2008 rate period, this would have resulted in an annual revenue requirement reduction for High Demand customers of $1.27 M.

Summary

Based on our review of SCL's adopted 2007/2008 cost of service study, we believe there are two key areas where decisions have been made that are disadvantageous to commercial and industrial customers:

- Improper allocation of NWR among customer classes, as well as changes in the Strategic Plan that reduce the NWR projections while keeping the RSA intact.
- Improper allocation of franchise agreement revenues

[7] See SCL's *Adopted Cost of Service and Cost Allocation Report 2007-2008*, Section 10.3, p. 155.