# Topics in Cost Allocation - I 

Presentation to the Energy Committee<br>Tony Kilduff, April 08, 2015

## Denny Substation - A Test Case

The Committee has asked:
"How would rates be different if the portion of the new Denny Substation that will support the South Lake Union network were to be allocated to network customers?"

## Some Basics - I

- City Light has 14 load-serving substations
- Three serve the main downtown network
- 11 do not support any part of any network
- The new Denny Substation will eventually support both a network to be built in South Lake Union and non-network parts of the City


## Some Basics - II

To answer the question without a great deal of detailed analysis, we made the following simplifying assumptions:

- The Denny Substation will be fully committed to the network; and
- Loads and Revenue Requirements are those currently assumed in the Strategic Plan for 2016.


## Some Basics - III

## Denny's planned capacity is 225 MVA

Total substation capacity (including Denny) will be 4,188 MVA

Thus, Denny is $225 / 4,188=5.4 \%$ of total substation capacity of the system in 2016

## Some Basics - IV

Total Revenue Requirements for substations in 2016 is $\$ 41.1$ million. $5.4 \%$ of that is $\$ 2.2$ million

Allocating that amount to the 2016 costs for the existing downtown network (since we do not yet have a South Lake Union network) gives the following change in rates:

## Chanoein Rates

|  | Residential | Small GS | Medium <br> GS | Large GS | High <br> Demand | Street <br> lights |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Seattle Non- <br> network | $-0.2 \%$ | $0.0 \%$ | $-0.3 \%$ | $-0.3 \%$ | $-0.3 \%$ | $-0.1 \%$ |
| Seattle |  |  |  |  |  |  |
| Network |  |  | $1.5 \%$ | $1.6 \%$ |  |  |
| Shoreline | $-0.3 \%$ | $-0.3 \%$ | $-0.3 \%$ | $-0.3 \%$ |  |  |
| Tukwila | $-0.3 \%$ | $-0.3 \%$ | $-0.3 \%$ | $-0.3 \%$ | $-0.3 \%$ |  |
| Other Suburbs | $-0.3 \%$ | $-0.3 \%$ | $-0.3 \%$ | $-0.3 \%$ |  |  |

## Questions?

## Next Steps?

