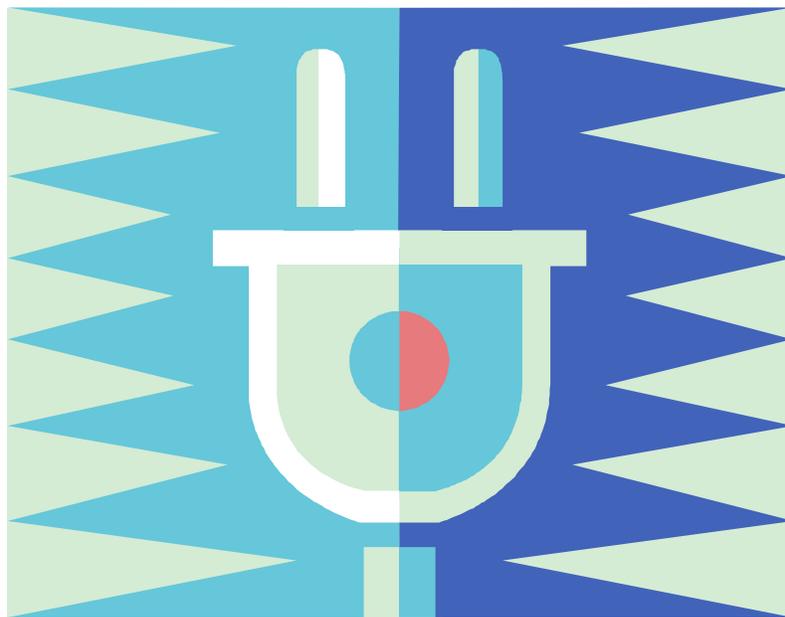


# Seattle City Light

Electrical Rates Forum 2006

Discussion Guide

For Business Customers



# Network Rates



## What are we talking about?

Customers in the Downtown, First Hill, and University neighborhoods receive different service than is available elsewhere in Seattle. These customers are served by a “network” which means that a significant portion of the service is located in underground vaults. In addition, there is a great deal of redundancy built into the network system; if one part of the system breaks down, there are other distribution lines and transformers that automatically take over to deliver uninterrupted power.

This type of network service costs much more to deliver and maintain than the service that is provided to customers in other parts of City Light’s service territory. However, the network system offers greater reliability. Currently, the medium and large general service customers who benefit from the downtown network do pay higher rates but these rates cover only 50% of the increased cost required to provide network service. Customers in First Hill and University District pay the same rates as non-network customers.

## What are the questions?

Should City Light continue with the policy of gradualism and increase rates for medium and large general service customers served by the downtown network?

Should network rates be established for the medium and large general service customers on First Hill and the University District who benefit from network service?

## What are the pros and cons?

For example, an increase from 50% to 75% of network costs would mean estimated increases in rates of between one to four percent for larger commercial customers currently in the downtown network.

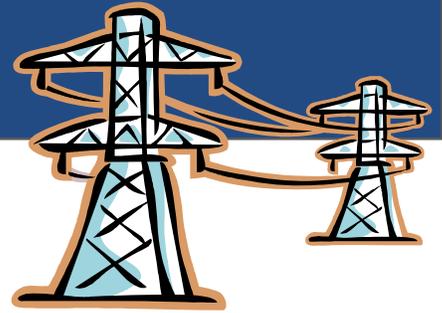
All non-network customers are paying for the downtown network, but the effect is relatively minimal. For most residential customers, about one percent of their bill goes, every month, to support the network. For most small general service customers, it is about three tenths of one percent.

Lower network rates may serve as a general incentive to businesses to locate and grow their enterprises in the Seattle area, which is beneficial to our economy as a whole.

## What do you think?

Should network rates be kept the same, expanded, and/or raised? What leads you to this conclusion?

# New Large Loads



## What are we talking about?

In 2000, there was concern that a significant number of very large, new customers (12.5 MVA-plus) would locate their businesses within City Light's service territory, requiring the utility to make major investments in new distribution infrastructure in order to serve that load. As a result, the Seattle City Council adopted a new large load ordinance. This required developers to reimburse City Light for the cost of new distribution and substation capacity needed to serve the new, large loads. In response to this ordinance, City Light developed standard fees, to be paid up front and, to help defray the anticipated costs of these infrastructure requirements. So far, developers have avoided paying these fees by breaking new, large loads up into separate electrical services. Therefore, there are currently no customers receiving service on this rate.

## What are the questions?

Should we revise the new large load ordinance, reducing the large load threshold?

Should we include the cost of transformers and network protectors for customers over a certain size (e.g. 1,000 kVA) in installation charges? Are there other options?

## What are the pros and cons?

Acting on any of the questions is revenue neutral. No costs will be shifted to other customer classes.

Implementing some type of installation/distribution fees for new large loads ensures that growth is paying for growth.

The new large load fees may serve as a disincentive for new businesses to locate in Seattle or for businesses to stay here and grow.

## What do you think?

Should the city repeal or revise the new large load ordinance? Keep it as it is? What leads you to this conclusion?

# Power Factor Charge



## What are we talking about?

Some commercial customers have “low power factors.” This means that a large amount of magnetizing energy is required for operating the motors at their facilities. The electricity that these customers use for magnetizing energy is called “reactive power”, and is not billed as either kW or kWh under normal rates. These loads are problematic for City Light, because they cause voltage control problems that affect other customers and because City Light needs additional capacity available to serve them.

In order to correct for the low power factor (less than .97 out of a maximum of 1.00), either City Light or the customer must install capacitors. Although City Light charges these customers a special rate, that rate has not been changed since 1984. The current charge is not high enough to motivate many customers with low power factors to install their own capacitors. It is cheaper to continue to operate with the low power factor than it is to buy, install, and maintain capacitors.

An increase in the power factor rate would serve as an incentive for these customers to install capacitors. There are currently about 2,600 power factor meters installed throughout City Light’s service area; this represents about 6% of the utility’s commercial customers. Most of them register a power factor of less than .97 several months per year, thereby incurring the low power factor charge. About half of the 2,600 meters register a power factor that is even below City Light’s minimum required level (.85) at least one month per year; of these, about 350 (less than 1% of commercial customers) have power factors below that minimum level during the entire year. (Note: Seattle’s rate ordinance states that the utility is not obligated to deliver electricity to any customer whose power factor falls below .85.)

## What are the questions?

Should City Light increase the power factor charge in order to cover the costs of maintaining the capacity to provide this power and to motivate customers to install their own capacitors?

## What are the pros and cons?

For those customers who currently operate with a low power factor, the rate could be set at a level that will provide an incentive to install the necessary equipment to correct their power factor.

The low-grade power is a detriment to the system as a whole. If the power factor rate were increased to \$.0040/kVarh and low power factor customers did not correct their power factor, up to \$4.5 million in revenue could be paid by these low power factor customers, rather than being paid by other customers.

The actual rate impact on other customers, however, would be minimal. At the most, other customers classes would see a rate decrease of about one-half of one percent.

## What do you think?

Should City Light increase the power factor charge? What leads you to this conclusion?

# Pole Attachment Rates



## What are we talking about?

Various customers use City Light poles for approved non-electrical purposes, such as, communication and television signals. These customers pay a rental fee to City Light for the use of poles; this is the “pole attachment rate.” The current rates are about 26% lower than they should be in order to allow City Light to recover the costs of leasing and maintaining the poles. These rates have not changed since 2002.

The largest pole attachment customers are generally very large organizations: cable television, cell-phone operators, and/or large educational institutions.

## What are the questions?

Should City Light increase the pole attachment rates sufficiently to cover the utility’s costs?

## What are the pros and cons?

Pole attachment customers would be paying for the cost of providing this service. The total amount of revenue generated by a 26% increase would be about \$165,000 more than would be generated under the current rates.

There would be little impact on other customer classes by making this change.

## What do you think?

Should City light increase the pole attachment rates by 26%? Why or why not? What leads you to this conclusion?

# Interruptible Rates



## What are we talking about?

Under such a rate agreement, large general service customers pay a lower rate for electricity than is charged to other large general service customers. In return, the customer agrees that City Light can interrupt service to the business if necessary — for example, if demand for electricity in the Seattle area is very high, or if City Light has to pay a high price to buy power from other sources to meet that demand. City Light has served one large general service customer on an interruptible rate schedule since January 2002.

## What are the questions?

Should City Light establish an interruptible rate option for large customers over a certain size? Under this rate arrangement, these customers would agree to voluntarily shut down when the wholesale purchase price of electricity faced by the utility is higher than a certain amount, or when system load exceeded a certain threshold. They would also be able to buy through the requested interruption at a relatively higher rate.

Should the utility establish an interruptible rate schedule with a lower demand charge for customers who agree to be interrupted automatically by City Light when demand reaches a certain level in the distribution system?

Should City Light continue offering interruptible rates? Or, should the utility stop offering any interruptible rate schedules?

## What are the pros and cons?

There may be some financial benefits. While City Light would receive less revenue by charging a lower rate to interruptible rate customers, the utility might also be able to forestall the very significant levels of investment required for anticipated new capacity and all customer rates could be kept lower. City Light would receive less revenue but also avoid higher power costs if it simply avoided paying for high-cost wholesale power purchases under a rate schedule which allowed voluntary interruptibility.

While it is a good idea in theory, customers do not like to have their power interrupted. They may not react negatively, however, if they have a buy-through provision, even if that means a temporarily higher rate for energy.

## What do you think?

Should City Light begin charging customers to reserve additional capacity in the system? What leads you to this conclusion?

# Distribution Capacity Reserve Charge



Some large customers in non-network areas have been asking City Light to reserve a portion of a separate distribution feeder; they want this capacity to be available to them if/when their normal feeder goes down. If City Light complies with these requests, distribution capacity that could be used to serve other customers would be held in reserve instead. City Light does not currently have a rate to charge these large customers for essentially putting distribution capability “in reserve” for possible use in the future. And, as excess capacity is used up by such requests, City Light will be required to install more distribution facilities.

## What are the questions?

Should City Light continue to allow customers to reserve additional distribution capacity at no charge?

Should City Light adopt a charge in order to discourage excessive customer requests and to reflect the additional cost of service?

## What are the pros and cons?

A reservation charge would encourage large customers to be more realistic in their requests for backup reserved capacity. They would need to carefully define their possible needs. The estimated charge would range from 20 to 40 cents per kilowatt. On average, customers who paid the charge would see an increase in their electricity bills of about one percent.

Anticipated revenues/rate shifts are minimal; less than \$200,000 per year would be generated, and potentially used by, other customer classes.

## What do you think?

Should City Light begin charging customers to reserve additional capacity in the system? What leads you to this conclusion?

# Variable Rate Schedules



## What are we talking about?

Since 1996, City Light has had rate schedules for high demand customers (those with peak loads equal to or greater than 10,000 kW/month) that allow them to receive energy at a market-based price rather than on a fixed rate. Initially, four high demand customers thought they could save money by purchasing power directly from other providers rather than through City Light. They stayed on the variable rates for different lengths of time but all had gone back to the regular high demand rate schedule by mid-1998.

Because of the rapid increases in energy prices over the 1996-1998 period, the energy charges these customers paid were higher than they would have been under the fixed high demand rates charged by Seattle City Light.

## What are the questions?

Should City Light discontinue the variable rate schedules?

Should City Light continue with the variable rate schedules in order to give high demand customers more market choices?

## What are the pros and cons?

High demand customers will have more market choices available to them under the variable rate schedules.

The variable rate schedules do pose some risks to Seattle City Light. Although it is highly unlikely to occur, if the price of power on the wholesale market does drop below City Light's average power cost, variable rate customers could choose to purchase their power from the market. This would leave City Light with "stranded costs", that is, the utility has power costs associated with its own generation facilities as well as long-term contracts for purchases that are included in its energy charges, and these costs might not be covered.

The energy purchased by variable rate customers would still flow through our distribution system and City Light would charge them for distribution service and for public purpose (e.g., low-income, conservation, etc) elements. Plus, the utility could also sell the now surplus energy on the market. The challenge is to look at the "net" effect on the utility as well as the customer.

Why should City Light take these risks at all, given that no customers are currently using the variable rate schedules, and given that no customers have chosen this option since 1998?

## What do you think?

Should City Light continue with the variable rate schedules? Why or why not? What leads you to this conclusion?