



 **Seattle City Light**

Amp Fee Proposal

City Council Energy Committee Briefing
September 10, 2014

PROPOSED NEW AMP FEE IS AN UPFRONT CHARGE FOR NEW INSTALLATIONS

Charge for all new and enlarged electrical services over 200 amps, applied per panel amp.

- Financial incentive for builders/developers to right-size installed service capacity.
- Minimizes potential for costly distribution system expansions over the long term.
- Collecting upfront avoids risk of costs getting spread to other customers in the event that speculative construction fails to yield expected load addition.
- No charge for first 200 amps means most residential and all smaller non-residential installations would be excluded.

Provides similar financial incentive as an unpopular existing SMC provision, which City Light proposes to replace.

BACKGROUND: EXISTING LOC/CASH DEPOSIT REQUIREMENT

SMC 21.49.110 (X) requires developers of new or enlarged Large/High Demand-sized services to provide a letter of credit (LOC) or cash deposit to City Light.

- LOC/deposit amount determined by material and labor costs of transformers and associated equipment.
- If the customer uses 80% of the installed capacity within three years, the LOC/deposit is returned.

Problem with status quo:

- Change in credit markets has reduced developer liquidity, making LOC more costly. LOC or cash deposit ties up developer capital.
- Tracking whether or not the condition is met across three years is onerous for both City Light and the customer. Condition may encourage false loading to achieve 80%.
- Complaints that the all-or-nothing nature of the 80% threshold is too punitive.

IMPLEMENTATION AND FINANCIAL IMPACT

Implementation

- Amp fee replaces LOC/deposit requirement of SMC 21.49.110 (X).
- Administration of amp fee is implemented along with SMC change by adding to City Light's existing schedules of installation charges via DPPs (500 P III-417 and 422).

Financial Impacts

- Panel amp is a non-negotiable quantity determined by National Electric Code (NEC) standards and the type of electricity-consuming equipment installed in a building.
- Fee applies consistently to all customers, though the 200 Amp credit (the size of a typical residential panel) effectively exempts residential and smaller commercial services from this charge.
- Revenues from Amp Fee would be booked as a contribution in aid of construction(CIAC), which offsets capital requirements.

DERIVATION OF AMP FEE

Amp fee is derived from a percentage of the typical cost of transformers and associated equipment for single- and three-phase services of different voltages.

$$\text{Amp Fee} \left(\frac{\$}{\text{Amp}} \right) = \frac{\text{Average Cost } \$ \times \text{Demand Factor } \%}{\left(\frac{k \text{ Volt Amp} \times 1,000}{\text{Volt}} \right)}$$

Service Type	Typical Transformer & Associated Equipment Costs in \$2014	Typical KiloVolt-Ampere	Volts	Estimated Demand Factor	Amp Fee \$/Amp
Single Phase/ Residential	\$4,000 - \$8,000	40-120	120	10%-30%	\$3.74
Three Phase	\$13,000- \$100,000	40-1500	208	30%	\$10.48

Consistent with Snohomish PUD Amp Fee methodology. By comparison, Snohomish PUD amp fees range from about \$4 to \$14 per amp depending on service type.

EXAMPLE CUSTOMER IMPACTS

Cost Comparison Current LOC/Deposit vs. Amp Fee

Customer	Phase	Panel Amps	LOC/Deposit Amount*	Amp Fee Charge
Large Building 1	Three	25,140	\$1,301,534	\$235,638
Large Building 2	Three	12,570	\$650,767	\$116,874
Large Grocery Store	Three	3,000	\$0	\$26,455
Small Grocery Store	Three	1,200	\$0	\$9,448
Small Business Owner	Three	400	\$0	\$1,890
Small Business Owner	Single	400	\$0	\$675
Small Business Owner	Single	200	\$0	\$0
New Residential Service	Single	200	\$0	\$0

**Returned to customer in most cases—when required demand level is reached.*