

As of 3/29/2019

## **COMMERCIAL SOLAR PROGRAM PILOT – PRICING OVERVIEW**

To support the solar market and provide more certainty in investment decisions, City Light intends to establish a large commercial solar program open to customers with photovoltaic (PV) systems greater than 100 kW and not greater than 2 MW.

# **Program Enrollment Criteria**

Customers can enroll in this pilot program through 2021. The enrollment date may be extended at City Light's discretion.

# **Compensation Overview**

The program design rewards rooftop PV systems that are aligned and sized to the load of the building, which delivers similar value to energy efficiency, City Light's priority energy resource. Customers benefit from all solar production because energy generated will offset the retail energy that otherwise would have been purchased. All energy exported back onto City Light's grid will be compensated at an export rate.

#### **Export Rate**

All energy exported onto City Light's system will be compensated at an annual rate. Export rates will be set every two years. The export rate may contain the following components:

- 1. Energy Value
- 2. Transmission and Distribution Value
- 3. Environmental Attribute Value

For the first two years, the annual **Energy Value** will be based on a two-year outlook of monthly Mid-C wholesale market prices. The monthly weighting will be determined by the relative monthly solar output for a typical Seattle solar PV system. As data becomes available, daily and/or hourly customer export profiles may be used to weight market prices to more accurately reflect the value of the solar generation being exported to City Light and/or the wholesale energy market. An avoided generation capacity benefit will also be evaluated.

The **Transmission and Distribution Credit** will be based on the following: avoided distribution losses, deferred distribution investment at a system level, increased or decreased transmission sales and net transmission loss impacts. Note that locational (customer specific) deferred distribution investment credits may be included in the future with a separate rate and/or incentive at City Light's discretion.

**Environmental Attributes:** Customers will retain the "greenness" of both the solar energy exported to City Light's system and the energy used on site. It is the customer's responsibility to certify any environmental attributes if certification is required to meet their environmental goals. This credit will continue to be re-examined to ensure that value is attributed appropriately to conform with the laws and regulations applicable.

#### **Export price floor**

The initial annual export price will be the higher of the calculated price (above) and 1.8 cents per kWh.

## **Program Duration**

Participants in the program will be guaranteed offsetting retail energy services and an export rate equal to or greater than 1.8 cents per kWh until Dec 31, 2034.

# **2019 AND 2020 EXPORT RATE**

Seattle City Light Commercial Customer Solar Pilot		
Export Rate (cents per kWh)	2019	2020
Components Evaluated		
Energy value	2.43	2.18
Deferred investment generation capacity	-	-
Transmission sales (decrease)	-	-
Transmission loss benefit	-	-
Deferred investment distribution capacity	-	-
Distribution loss benefit	0.13	0.12
Ancillary services	-	-
Environmental benefit	-	-
Total Export Price	2.57	2.30

Export Price		
Components Evaluated		
for 2019-2020	<u>Notes</u>	
Energy value	Monthly Mid-C market forward price weighted by an expected monthly shape for a typical solar PV system in Seattle.	
Deferred investment generation capacity	City Light is currently surplus on generation capacity, so no value is attributed to exported solar.	
Transmission sales	City Light sells its surplus transmission capacity to the Mid-C market on a forward basis. With more surplus generation, Seattle will take more generation to market and will have less surplus transmission to sell. Value can be assigned based on the current transmission market. For the first two years the impact is very small and so no cost is assigned to solar generation.	
Transmission losses	Since Seattle is a surplus generation utility, lower retail load will reduce the losses of bringing power to City Light's service territory but will be offset by increased losses of bringing more power to market. Net reduced transmission losses occur when City Light is a net purchaser (typically only in August) and currently represents a very small amount annually so no value was attributed to exported solar.	
Distribution capacity	Distribution capacity value is primarily local and not assigned on a system basis. Data from this program will allow City Light to better assess the value of the export energy to the distribution system and locational distribution benefits may be attributable in the future.	
Distribution losses	Estimated at 5.4% of total value.	
Ancillary services	For utilities with the responsibility to ensure reliability of the bulk power system and power deliveries, there are costs associated with variability and intermittency in load and generation. There will be no value assigned initially for the first two years of this program. Data from this program will allow City Light to better assess the integration costs of the exported power.	
Environmental benefit	Customer retains all the environmental attributes of the solar production.	