



# Co-Generation Rate Explained

Washington Electric Cooperative, Inc.

March 2022

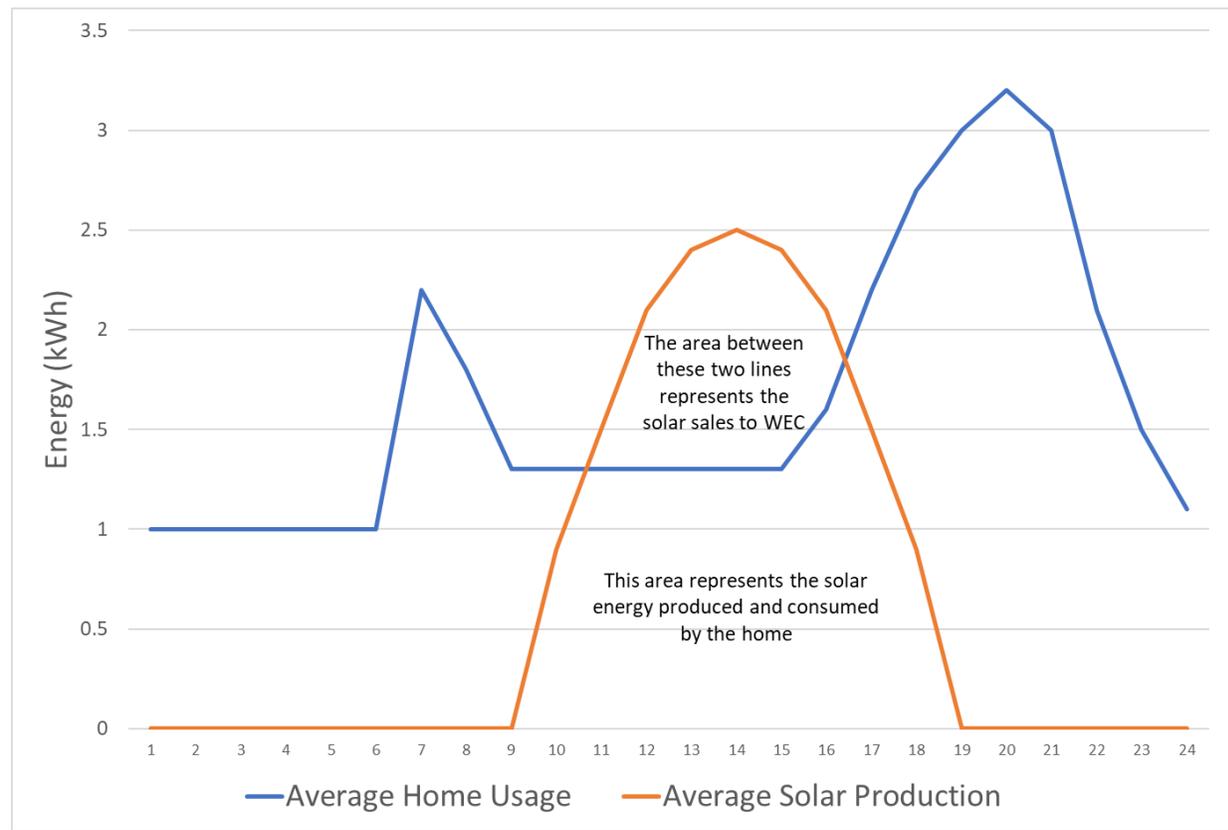
Hour	Energy - measured in kWh			
	Home Usage	Solar Production	Purchases from WEC When Home Usage is > Than Solar Production	Sales to WEC When Solar Production is > Than Home Usage
1	1	0	1	0
2	1	0	1	0
3	1	0	1	0
4	1	0	1	0
5	1	0	1	0
6	1	0	1	0
7	2.2	0	2.2	0
8	1.8	0	1.8	0
9	1.3	0	1.3	0
10	1.3	0.9	0.4	0
11	1.3	1.5	0	0.2
12	1.3	2.1	0	0.8
13	1.3	2.4	0	1.1
14	1.3	2.5	0	1.2
15	1.3	2.4	0	1.1
16	1.6	2.1	0	0.5
17	2.2	1.5	0.7	0
18	2.7	0.9	1.8	0
19	3	0	3	0
20	3.2	0	3.2	0
21	3	0	3	0
22	2.1	0	2.1	0
23	1.5	0	1.5	0
24	1.1	0	1.1	0
<b>Daily Total</b>	<b>39.5</b>	<b>16.3</b>	<b>28.1</b>	<b>4.9</b>
<b>Monthly Total<sup>1</sup></b>	<b>1185</b>	<b>489</b>	<b>843</b>	<b>147</b>

Of the total 489 kWh of solar production, 342 kWh were consumed by the home, and 147 kWh were sold to WEC.

Delivered to Member

Received From Member

The table to the left and the chart below represent an example of home energy usage and solar energy production, and how this energy is determined for billing/crediting purposes with the WEC Co-Generation Rate.



<sup>1</sup> Assumes each day of the month looks exactly the same as this example day.

# Sample WEC Co-Generation Rate Bill

## Delivered to Member

$$\begin{array}{ccccccc}
 ( & 43595 & - & 42752 & ) & \times & 1 & = & 843 \text{ kWh} \\
 \text{CURRENT READING} & & & \text{PREVIOUS READING} & & \text{METER MULTIPLIER} & & & \text{KWH USAGE}
 \end{array}$$

## Received from Member

$$\begin{array}{ccccccc}
 ( & 18201 & - & 18054 & ) & \times & 1 & = & 147 \text{ kWh} \\
 \text{CURRENT READING} & & & \text{PREVIOUS READING} & & \text{METER MULTIPLIER} & & & \text{KWH USAGE}
 \end{array}$$

FACILITY CHARGE	\$	39.00
ENERGY CHARGE	\$	35.95
GENERATION & TRANSMISSION	\$	78.94
CO-GENERATION CREDIT	\$	-11.32
<b>CURRENT CHARGES</b>	<b>\$</b>	<b>142.57</b>
<b>TOTAL AMOUNT DUE</b>	<b>\$</b>	<b>142.57</b>
CO-GENERATION RESERVE - FORWARD	\$	0.00
CO-GENERATION RESERVE - CURRENT	\$	0.00
CO-GENERATION RESERVE - AFTER	\$	0.00

← “Delivered to Member” represents the total energy delivered to the member when the home usage is greater than the solar production throughout the billing month.

<b>Daily Total</b>	39.5	16.3	28.1	4.9
<b>Monthly Total</b> <sup>1</sup>	1185	489	843	147

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$$\begin{matrix} ( & \mathbf{43595} & - & \mathbf{42752} & ) & \times & \mathbf{1} & = & \mathbf{843 \text{ kWh}} \\ \text{CURRENT READING} & & & \text{PREVIOUS READING} & & \text{METER MULTIPLIER} & & & \text{KWH USAGE} \end{matrix}$$

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“Received from Member” represents the total energy received by WEC when solar production is greater than the home usage throughout the billing month.

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# Sample WEC Co-Generation Rate Bill

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CURRENT READING      PREVIOUS READING      METER MULTIPLIER      KWH USAGE

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← “Facility Charge” represents the fixed monthly cost to simply have electric service available to the member. The present monthly rate is \$39.00 per month and is charged regardless of the amount of solar production.

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“Energy Charge” represents the distribution energy charge (presently \$0.038 per kWh) and state taxes required to be collected.

Dist Energy Chg = 843 kWh x \$0.038 = \$32.03

State Taxes = 843 kWh x \$0.00465 = \$3.92

Total Energy Chg = \$32.03 + \$3.92 = \$35.95

# Sample WEC Co-Generation Rate Bill

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CO-GENERATION RESERVE - AFTER	\$	0.00

“Generation & Transmission” charge represents a pass-through, with no markup, of the cost that WEC pays to our wholesale power supplier for power that is generated and transported to the WEC substations for delivery across the WEC distribution system to our members.

The amount charged per kWh is calculated monthly based on the wholesale power costs and energy purchased for the previous month, so this will fluctuate from month-to-month. For this particular example, the G&T charge is \$0.093642 per kWh.

$$\$0.093642 \times 843 = \$78.94$$

# Sample WEC Co-Generation Rate Bill

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CO-GENERATION RESERVE - FORWARD	\$	0.00
CO-GENERATION RESERVE - CURRENT	\$	0.00
CO-GENERATION RESERVE - AFTER	\$	0.00

“Co-Generation” credit represents a credit applied to the bill for the energy that is sold to WEC (energy received from the member) during those hours when solar production is greater than the home’s usage needs.

The amount per kWh of the credit is based on an avoided cost rate calculated by our wholesale power provider. This amount will fluctuate from year-to-year, and is presently calculated at \$0.077 per kWh for 2022.



$$\$0.077 \times 147 = \$11.32 \text{ credit}$$

# Sample WEC Co-Generation Rate Bill

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CO-GENERATION RESERVE - FORWARD	\$	0.00
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CO-GENERATION RESERVE - AFTER	\$	0.00

“Current Charges” equals the sum of each charge component and the co-generation credit.

NOTE that the co-generation credit can be used to offset the Distribution Energy Charge and Generation & Transmission Charge, but cannot be used to reduce the Facility Charge or state taxes. Therefore, the minimum bill each month will be at least the Facility charge and state taxes.

# Sample WEC Co-Generation Rate Bill

## Delivered to Member

$$\left( \begin{array}{c} \mathbf{43595} \\ \text{CURRENT READING} \end{array} - \begin{array}{c} \mathbf{42752} \\ \text{PREVIOUS READING} \end{array} \right) \times \begin{array}{c} \mathbf{1} \\ \text{METER MULTIPLIER} \end{array} = \begin{array}{c} \mathbf{843 \text{ kWh}} \\ \text{KWH USAGE} \end{array}$$

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CO-GENERATION RESERVE - FORWARD	\$	0.00
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CO-GENERATION RESERVE - AFTER	\$	0.00



Should the co-generation credit exceed the current month's Distribution Energy Charges and Generation & Transmission Charges, then the remaining balance is forwarded on to be used on future months bills and accumulated in the "Co-Generation Reserve – Forward" balance.

"Co-Generation Reserve – Forward" = any previous balance of co-generation reserves.

"Co-Generation – Current" = current month's co-generation credit in excess of charges that can be offset on this month's bill.

"Co-Generation Reserve – After" = co-generation reserves forward + current.

# Co-Generation Rate Savings

In our example, how much was saved on this month's power bill as compared to if there had not been solar installed?

<b>Daily Total</b>	39.5	16.3	28.1	4.9
<b>Monthly Total</b> <sup>1</sup>	1185	489	843	147

The home's energy needs for the month were 1185 kWh, and this represents how many kWh the member would have purchased from WEC if solar was not present.

<sup>1</sup> Assumes each day of the month looks exactly the same as this example day.

# Calculated WEC Bill With No Solar Production

Facility Charge = \$39.00 per month	\$39.00
Distribution Energy Charge = $\$0.038 \times 1185 \text{ kWh} =$	\$45.03
State Taxes = $\$0.00465 \times 1185 \text{ kWh} =$	\$5.51
Total Energy Charge = $\$45.03 + \$5.51 =$	\$50.54
Generation & Transmission = $\$0.093642 \times 1185 =$	\$97.32
Total Amount Due =	\$186.86

# Co-Generation Rate Savings

In our example, with solar production of 489 kWh (342 kWh consumed by the home and 147 kWh sold to WEC), the total bill to WEC was \$142.57.

With no solar production, the bill to WEC was \$186.86

Total savings on the WEC power bill for the solar production = \$44.29