



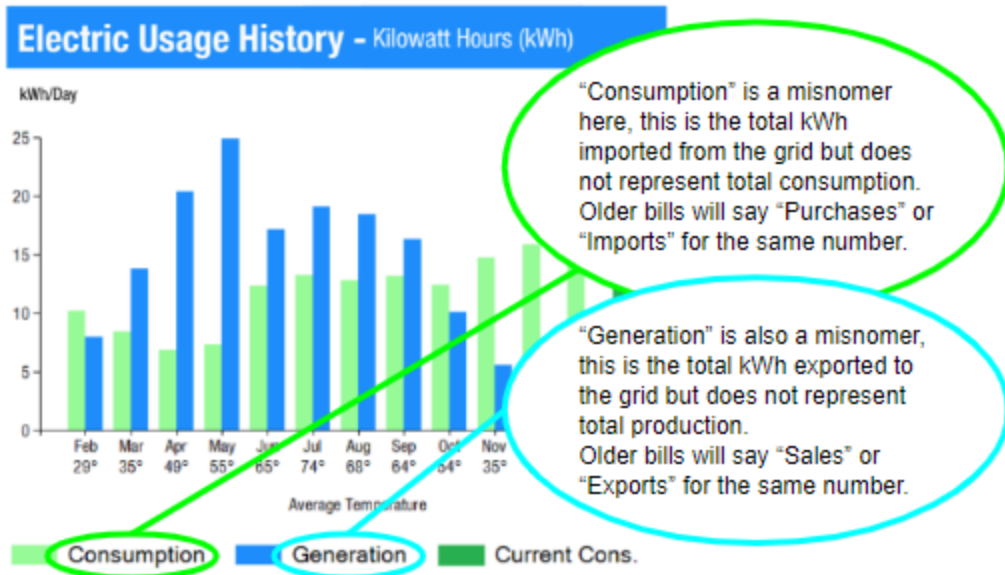
Understanding your Eversource Bills with Solar

In early 2024, Eversource revamped the formatting of their electric bills, which included several significant changes to the wording regarding the flow of energy to/ from a site with solar energy. We have prepared the following guide to help decode these changes, and are always happy to receive direct questions from clients needing additional support or clarification.

Basic Terminology

- **Net-Exporter** - You have exported/sold more energy to the grid than you have imported/purchased from your utility provider during a given billing cycle.
- **Net-Importer** - You have imported/purchased more energy than you have exported/sold during a given billing cycle.
- **Utility Net Meter** - A standard utility meter measures the flow of electricity from the grid to your home/business. When solar energy is installed, the utility provider replaces this with a Net Meter which measures energy going in and out, and tracks the net total.
- **Total Consumption** - All of the electricity used by your property over the course of a given billing cycle, including direct from your panels and imported from the grid.

Example: Eversource Page 1 (with Solar)



Ultimately, this chart is a nice visual representation of a given site’s balance between seasons of net-import (using more than you produce) and net-export (sending excess to the grid). It is NOT an indication of Total Consumption and Total Production, though it could easily be misinterpreted that way. These terms are inaccurate because the numbers do not account for total gross solar production, or on-site consumption of that solar production that will never be read or measured by the Utility Net Meter.

Example: Eversource Page 2 (with Solar & SMART Program)

Svc Addr [Redacted] Data from: Utility Net Meter						
Rate R1-Residential Non-Heating Cycle 20 Service from 01/30/24 - 02/28/24 30 Days Next read date on or about: Mar 28, 2024						
Meter Number	Current Read	Previous Read	Current Usage	Reading Type		
[Redacted]	23185	22787	398	Consumption		
[Redacted]	25836	25544	292	Generation		
Service Reference: Consumption of 398 kWh Generation of 292 kWh = 106 Net kWh Usage						
Monthly kWh Use						
Feb	Mar	Apr	May	Jun	Jul	Aug
64	0	0	0	0	0	0
Sep	Oct	Nov	Dec	Jan	Feb	
0	69	303	389	390	106	
Svc Addr [Redacted] Data from: SMART Production Meter						
Rate R1-Residential Non-Heating Cycle 20 Service from 01/30/24 - 02/28/24 30 Days Next read date on or about: Mar 28, 2024						
Production Meter No.	Current Read	Previous Read	Current kWh	Reading Type		
[Redacted]	95	93	2	Consumption		
[Redacted]	34484	34064	420	Production		
Service Reference: Production of 420 kWh Consumption of 2 kWh = 418 Net kWh Usage						

"Consumption" is a misnomer here, this is the total kWh imported from the grid but does not represent total consumption. Older bills will say "Purchases" or "Imports" for the same number.

"Generation" is also a misnomer, this is the total kWh exported to the grid but does not represent total production. Older bills will say "Sales" or "Exports" for the same number.

"Net kWh Usage" is the same measurement as on previous bills, this is the Net calculation between energy flowing to and from the site as captured by the Utility Net Meter. A positive number indicates net-imports for the month, a negative number indicate net-exports.

"Consumption" in this section indicates the consumption from the SMART meter itself as it requires a small amount of electricity to function. Typically less than 5 kWh per billing cycle.

"Production" here is total solar production production for this billing cycle, as measured by the SMART meter. This number will vary slightly from inverter-based measurements due to variations in equipment parameters.

Total Consumption = "Net kWh Usage" + "Production"

In this example, the SMART Production Meter measured a total of 420 kWh produced by the solar array, while the Utility Net Meter measured a Net-Import of 106 kWh. What's not shown anywhere on the bill is the actual Total Consumption of the site. To calculate this, we would add together the Net kWh Usage from the Utility Net Meter, and the Production from the SMART Production Meter.

106 kWh (Net kWh Usage) + 420 kWh (Total Production) = 526 kWh*

*This calculation was validated by running the numbers on several sites that also include Consumption Meters.

Example: Eversource Page 2 (with Solar & SREC/REC Program)

Data from: Utility Net Meter

Rate R1-Residential Non-Heating Cycle 08 Service from 01/12/24 - 02/09/24 29 Days Next read date on or about: Mar 12, 2024				
Meter Number	Current Read	Previous Read	Current Usage	Reading Type
	60611	58695	1916	Consumption
	59070	58990	80	Generation

Service Reference:
Consumption of 1916 kWh Generation of 80 kWh = 1836 Net kWh Usage

Monthly kWh Use						
Feb	Mar	Apr	May	Jun	Jul	Aug
1410	687	0	0	0	0	0
Sep	Oct	Nov	Dec	Jan	Feb	
0	0	174	1085	1516	1836	

Total Consumption = "Net kWh Usage" + Production*

*Production is not shown anywhere on this bill, because the gross total is never measured by Eversource.

"Consumption" is a misnomer here, this is the total kWh imported from the grid but does not represent total consumption. Older bills will say "Purchases" or "Imports" for the same number.

"Generation" is also a misnomer, this is the total kWh exported to the grid but does not represent total production. Older bills will say "Sales" or "Exports" for the same number.

"Net kWh Usage" is the same measurement as on previous bills, this is the Net calculation between energy flowing to and from the site as captured by the Utility Net Meter. A positive number indicates net-imports for the month, a negative number indicate net-exports.

In this example, the Utility Net Meter measured a Net-Import of 1836 kWh, but we need to look elsewhere for the Total Production. This can be gathered from inverter monitoring data, or a separate Production Meter (if present) which will give a "Revenue Grade" measurement in terms of accuracy. To calculate the Total Consumption, we would add together the Net kWh Usage from the Utility Net Meter, and the Production data from the Inverter or third party Production Meter.

1836 kWh (Net kWh Usage) + 302 kWh (Total Production from Inverter) = 2,138 kWh*

*This calculation was validated by running the numbers on several sites that also include Consumption Meters.

Reach out for more - If you have questions or need additional support with your system or net metering, please contact our service team at service@pvsquared.coop!