Net Metering Frequently Asked Questions

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Customers participating in the Net Metering program are not always sure how to interpret the information provided by the revenue meter. This paper is intended to answer the most common Frequently Asked Questions (FAQs).

Q: What do the displayed values represent on my Net Meter?

A: For a <u>kWh only Net Meter</u>, typically installed on a residential service with Photovoltaic (PV, or "solar") generation, the new AMR meters (meters with "Gxxxx NET METER" and "METER READ REMOTELY" on the nameplate, where "xxxx" is a 4 digit group code – typically "0203" or "2503"), the following photos and descriptions apply:



Typical nameplate for a G0203 Net Meter (kWh only)



Display ID 01 represents the total <u>delivered kWh</u> (Energy from Eversource delivered to the customer). This photo also shows a

"voltage present" indicator and the LCD segments that indicate

the direction and rate of energy flow **Decrementation**. Movement from left to right (arrow pointing right) indicates "delivered" kWh. The opposite indicates "received" kWh (excess generation).



Display ID 02 represents the total <u>received kWh</u> (excess energy generated by the customer and exported to Eversource).

For <u>Net Demand Meters</u>, we use a different type of meter (Itron type C2SO), and the display layout is different, but the information is similar except another item is added to show the maximum delivered demand value.



Typical nameplate for a G0204 Net Demand Meter (kWh and maximum delivered kW demand).



Display ID 01 represents the total <u>delivered kWh</u> (Energy from Eversource delivered to the customer); 17 kWh in this example. This photo also shows the LCD segments that indicate the direction and rate of energy flow **delivered**. Movement from left to right (arrow pointing right) indicates "delivered" kWh. The opposite indicates "received" kWh (excess generation).

Display ID 02 (not shown) represents the total received kWh.

Display ID 107 (not shown) represents the <u>Program ID</u> of the software instruction set used to configure the meter and define how it should operate.



Display ID 11 represents the maximum delivered kW Demand



An "all segments" display is shown to verify the LCD segments are all functioning correctly.

Q: How can I tell if I'm generating more energy than I'm using at my house?

A: When the LCD segments simulating the movement of a meter "disk" and indicating the direction and rate of energy flow appear to move from right to left, that indicates "received" kWh (excess generation) is being measured by the meter. That would indicate you are <u>producing</u> more energy than you are using and the excess energy is being exported to "the grid" (the Eversource distribution system).

Those LCD segments will cycle from left to right with the arrow pointing right (example: **second second**) to indicate "delivered" kWh. That would indicate you are <u>using</u> more energy than you are producing.

Note that for GE meters, every time one of the LCD segments change (turn on or off), the meter has registered another "Kt" worth of energy in the direction indicated. A complete cycle of all the indicators represents another "Kh" worth of energy. The "Kt" and "Kh" values are shown on the meter's nameplate, and are typically set as Kt=1.0 wh/segment, Kh=10.0 wh/cycle.

For Itron meters, every time one of the LCD segments change (turn on or off), the meter has registered another "Kh" worth of energy in the direction indicated. The "Kh" value is shown on the meter's nameplate, and is typically set as Kh=1.0 wh/segment.

It takes 1000 watthours to make 1 kWh (kilowatthour), and the displayed energy values are in units of kWh.

Q: Why does the GE meter display show "busy"?

A: The GE I-210+C family of meters are designed to display the word "busy" when the meter is communicating internally to the communication option board. In the case of the Net AMR meters, that board is the Itron ERT module that transmits data back to the remote collector. After a brief start up period when it is initially energized, the meter communicates with the ERT module every 60 seconds to update it with the most recent energy consumption readings. While that brief communication occurs, the meter will show "busy" on the display. This is normal behavior for the GE meters. It does <u>not</u> represent the ERT data transmission (that happens every 3 seconds or so), it is only the internal "board-to-board" data communication between the meter (register) and the ERT communication board inside the meter assembly. Itron meters operate differently, so you won't see such a message on the Itron AMR meters.

