CLAIMS:

1. A system for controlling a vehicle-to-everything (V2X) compatible electric vehicle charger, the system comprising:

a multi-port meter comprising:

a grid port configured for connecting the meter to an electric power grid;

an auxiliary port configured for connecting the meter to an electric vehicle charger;

a load port configured for connecting the meter to a premises load;

a grid switch connected to the grid port and configured for connecting the grid port to the load port;

a bi-directional communication channel configured for communications between the system and the electric vehicle charger or an electric vehicle connected to the electric vehicle charger;

and

a control unit, the control unit comprising one or more processors configured for processing power grid data measured by the meter and controlling states of the grid switch;

wherein the system is configured to:

open the grid switch to electrically disconnect the grid port and the load port;

transmit a signal to the electric vehicle charger to turn on its V2X output to an output mode; and

provide the output of the electric vehicle charge to the premises load via the auxiliary port and the load port.

2. The system of claim 1, wherein the system is configured to open the grid switch in response to the system detecting a loss of power from the electric power grid.

3. The system of claim 1 or 2, wherein the system is configured to open the grid switch in response to an indication that electricity unit prices from the electric power grid have exceeded a threshold value.

4. The system of any one of claims 1 to 3, wherein the system is configured to open the grid switch in response to an indication that usage of the electric power grid has exceeded a threshold proportion of its total capacity.

5. The system of any one of claims 1 to 4, wherein the system is configured to:

transmit a second signal to the electric vehicle charger to turn off its V2X output; and

close the grid switch.

6. The system of claim 5, wherein the system is configured to receive a confirmation signal from an electric vehicle charger indicating that the V2X output has been turned off; and

wherein the system is configured to close the grid switch in response to the receipt of the confirmation signal by the system.

7. The system of any one of claims 1 to 6, wherein the multi-port meter is an ANSI Form 43S multi-port meter.

8. A method of controlling a vehicle-to-everything (V2X) compatible electric vehicle charger, method comprising:

operatively connecting a multi-port meter to an electric power grid via a grid port of a multi-port meter;

operatively connecting the multi-port meter to an electric vehicle charger via an auxiliary port of the multi-port meter;

operatively connecting the multi-port meter to premises load via a load port of the multi-port meter;

opening a grid switch to electrically disconnect the grid port and the load port;

transmitting a signal to the electric vehicle charger to turn on its V2X output to an output mode; and

providing the output of the electric vehicle charge to the premises load via the auxiliary port and the load port.

9. The method of claim 8, wherein the method comprises opening the grid switch in response to detecting a loss of power from the electric power grid.

10. The method of claim 8 or 9, wherein the method comprises opening the grid switch in response to an indication that electricity unit prices from the electric power grid have exceeded a threshold value.

11. The method of any one of claims 8 to 10, wherein the method comprises opening the grid switch in response to an indication that usage of the electric power grid has exceeded a threshold proportion of its total capacity.

12. The method of any one of claims 8 to 11, comprising:

transmitting a second signal to the electric vehicle charger to turn off its V2X output; and

closing the grid switch.

13. A method of controlling a vehicle-to-everything (V2X) compatible electric vehicle charger, method comprising:

operatively connecting a multi-port meter to an electric vehicle charger via an auxiliary port of the multi-port meter;

responsive to a first condition, determine that the electric vehicle charger should cease charging a battery of an electric vehicle;

transmit a signal to the electric vehicle charger to cease charging the battery of the electric vehicle;

responsive to a second condition, determine that the electric vehicle charger should resume charging the battery of the electric vehicle; and

transmit a second signal to the electric vehicle charger to resume charging the battery of the electric vehicle.

14. The method of claim 13, wherein the first condition is a price of energy from the electric power grid being above a threshold price, and wherein the second condition is the price of energy from the electric power grid being below a second threshold price.

15. The method of claim 13 or 14, wherein the method comprises:

responsive to a third condition, determine that the electric vehicle charger should output energy to the electric power grid;

transmit a third signal to the electric vehicle charger to turn on its V2X output to an output mode; and

provide the output of the electric vehicle charger to the electric power grid via the auxiliary port and the grid port.