

## Marblehead Municipal Light Department (MMLD) Residential Electric Vehicle Charging Rebate Program

### **Program Basics:**

In an effort to accelerate clean transportation alternatives in Massachusetts, while simultaneously minimizing the demand and cost the charging of such vehicles place on the electric system, Marblehead Municipal Light Department (MMLD) is offering to provide to its residential customers one (1) free or discounted Wi-Fi equipped Level 2 electric vehicle (EV) home charger. Customers wishing to receive a free or discounted Wi-Fi equipped home charger must agree to the terms and conditions of the MMLD's Residential Electric Vehicle Charging Rebate Program (Program), as listed below, and agree to accept scheduled charging as well as emergency scheduling in the event of a major event for a term of 3 years from receipt of the home charger.

### **Description of the Program:**

As part of the MMLD's commitment to maintaining low cost, reliable electric services for our customers, while fostering clean energy usage, we are always looking for new and innovative ways to help manage our electricity supply for our customers. One such way to achieve these objectives is to manage the impacts of new electric vehicle load by scheduled EV charging.

By agreeing to this Program of scheduled charging and emergency curtailments, you are helping MMLD maintain a reliable power distribution system for you and your neighbors and helping to keep power costs low. By limiting charging to the overnight hours, you are doing your part to help the environment and help your neighbors.

Level 2 EV home chargers are designed to fully charge a modern electric vehicle overnight in 4 to 8 hours. Such rapid charging and high output means the amount of power the chargers draw is equivalent to adding two new electric clothes dryers to your home energy load and running them simultaneously with your other appliances. While a home electrical panel of at least 100 amp service is more than capable of serving this charger, the increase in load when multiple chargers are in use will place a costly burden on the MMLD distribution system.

Most EV drivers plug in to charge when they arrive home. This coincides with MMLD's highest energy usage demand for the day. The addition of charging EVs at this time would involve an expansion of service by MMLD with additional costs for upgrades to the distribution system that serves Marblehead in addition to added costs for the production and delivery of electricity to our town.

### **Charging Curtailment:**

By accepting a free or discounted Wi-Fi equipped Level 2 EV home charger from MMLD, you will be accepting that your charger will not be allowed to charge between the hours of 5:00 p.m. and 9:00 p.m. during non-holiday weekdays. During this period, when MMLD is seeing its highest energy usage of the day, your home charger will not be capable of delivering power.

After 9:00 p.m., the system will automatically unlock and allow your vehicle to continue charging at the full rated Level 2 output of the charger, until the vehicle has been completely charged.

### **Charging Curtailment (Continued):**

The operation is seamless and unnoticeable, and by doing this you are helping to contain energy costs by charging overnight when energy usage is lowest, rather than in the afternoon/evening when it is highest.

In addition to allowing for scheduled charging, you would authorize MMLD to curtail EV charging temporarily in emergency situations. This emergency scheduled curtailment would only be done during situations where the local distribution system or regional power grid was under extreme stress and our operators deemed curtailment in the best interest of our overall electric system. These curtailments are not expected to be frequent and should not last long.

MMLD agrees never to extend a curtailment past 9:00 p.m., so overnight EV charging will always be possible for our customers. MMLD estimates emergency curtailments would occur no more than three to five times per year under a worst-case scenario and will likely occur only in the summer months. Examples of when a curtailment may occur could include:

- On a hot summer day with temperatures over 95 degrees, MMLD operators could curtail charging starting at 2:00 p.m. rather than 5:00 p.m. in the afternoon, due to high energy consumption from air conditioning usage
- If a major power plant in the area is forced to go offline unexpectedly, operators could temporarily curtail charging during the day for two- to three hours, until other area power plants could be brought online or increase their production to make up for this deficit
- If the New England area is experiencing a peak power usage day and conservation is required by the grid operator to maintain grid stability and keep power prices stable

### **Program Responsibilities:**

Below is a listing of responsibilities and requirements of the Program. In signing this document, you agree to abide by the terms and conditions of this Program and to operate within the limits of this agreement as listed below. As agent and provider for Energy & Demand Services to MMLD, the Massachusetts Municipal Wholesale Electric Company (MMWEC) has NextZero program specialists available to speak with you regarding program specifics. If you have any questions or concerns regarding the program or processing of these home chargers, please call (413) 308-1311 or email the NextZero program at [help@nextzero.org](mailto:help@nextzero.org). A NextZero energy efficiency specialist would be happy to assist you.

### **Marblehead Municipal Light Department Responsibilities:**

1. MMLD agrees to provide one (1) Level 2 Wi-Fi-equipped home charger or charger incentive, per residential metered customer with the purchase or lease of an electric vehicle. The intention of this Program is to provide one and only one charger per household. Multifamily homes, townhouses or other dwellings with separate individual meters may be eligible for separate chargers. MMLD and its Energy & Demand Services partner, MMWEC, have sole discretion in administration of Wi-Fi-equipped home vehicle chargers.
2. Owners of existing electric vehicles may petition for a charger.

### Marblehead Municipal Light Department Responsibilities (Continued):

3. MMLD agrees to provide for any and all monitoring costs associated with third -party monitoring and scheduling (by MMLD) of the Level 2 Wi-Fi-equipped home charger for 36 months. No costs for cloud-based operation of the charger shall be borne by the end user during this period, unless the end users select to purchase future options above and beyond services currently provided.
4. MMLD will not be responsible for any warranty or operational issues associated with the chargers provided under this Program. All chargers are provided with a 3 Year manufacturer's warranty which shall be transferable directly to the end user. Operations, warranty and technical issues associated with the charger shall be reported to MMLD, but shall be the responsibility of the customer and the equipment manufacturer.
5. MMLD's and Energy & Demand Services partner MMWEC, shall not be held responsible for any damage, defects, failures, fires, vehicle damage or other damages to person or property associated with the proper or improper installation or operation of the EV home charger. In so signing this document, the customer agrees to absolve MMLD and MMWEC of any liabilities associated with the usage of this product. Indemnification for any losses associated with operation of the product shall be with the charger manufacturer or the installer.

### Customer Responsibilities:

1. Customer agrees, upon receipt of the EV charger, to have **installation performed by a licensed electrician within 30 days**. Please note that a requirement of this program is that the home charger is connected to Wi-Fi at all times. As such, customers and installers shall ensure that the installed location of the charger is within range of the customers home Wi-Fi.
2. Customer agrees to, upon installation of the charger, connect the charger to a home Wi-Fi system (responsibility of the customer, not MMLD) and enroll the charger with the third party company responsible to shedding the EV charger
3. Customer agrees to maintain Wi-Fi connectivity to the charger and ensure that the unit can be scheduled and curtailed under emergency situations. Connectivity will be monitored by MMLD and its Energy & Demand Services partner MMWEC and repeated loss of connection will send an alert to our system operators. This may prompt communication with the customer regarding the repeated loss of connectivity and inability to provide emergency curtailment as needed.
4. Customer agrees to allow the charger to be curtailed during scheduled non-holiday weekday hours (5:00 p.m.to 9:00 p.m.). During these curtailment hours, the charger will be incapable of providing a charge to the vehicle. Following the end of the curtailment period, the unit will unlock and charge at the normal level 2 rate which shall recharge all standard EVs in 4-8 hours.
5. Customer agrees to allow emergency curtailment of the charger during periods of high stress on the electrical distribution system. Emergency curtailment shall never last past 9:00 p.m.
6. Customer agrees that MMLD retains the right to utilize data on charger time-of use, magnitude of charging and duration. This data will be collected through the charger network and utility electric meter and utilized by MMLD and our energy efficiency partner MMWEC, to better manage our distribution system as well as develop new, effective strategies for managing EV charging.

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**Customer Responsibilities (Continued):**

7. Customer agrees to hold MMLD and MMWEC free of liability for any damage, defects, failures, fires, vehicle damage or other damages to person or property associated with the proper or improper installation or operation of the EV home charger. In so signing this document, the customer agrees to absolve MMLD and MMWEC of any liabilities associated with the usage of this product. Indemnification for any losses associated with operation of the product shall be with the charger manufacturer or the installer.
8. In signing and accepting this charger, customer agrees to participation in MMLD's Residential Electric Vehicle Charging Program for a term of no less than 3 years. During this term, customer agrees to all responsibilities listed above. If during this term customer moves outside of the MMLD service area, relinquishes electric vehicle, loses connectivity to Wi-Fi or is unable to abide by any of the terms and conditions as listed above, MMLD reserves the right to remove the customer from MMLD's Residential Electric Vehicle Charging Program and recover the pro-rated cost of the charger on any subsequent electric bills.

In so signing, you agree to the terms and conditions as well as responsibilities noted in the agreement above. If you have any questions or concerns, or wish to speak with a program specialist, please call (413) 308-1311 or email MMWEC's NextZero program, at [help@nextzero.org](mailto:help@nextzero.org).

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Street Address

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Meter Number (Billing Number)

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Customer Name

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Customer Signature & Date