



# **SHELD 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, South Hadley Electric Light Department is offering to provide to its residential customers one (1) free Wi-Fi-equipped Level 2 electric vehicle home charger capable of 7.7KW maximum output (a \$650 value). Customers wishing to receive a free Wi-Fi-equipped home charger must agree to the terms and conditions of the South Hadley Electric Light Department **Scheduled Charging 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 South Hadley Electric Light Department 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 South Hadley Electric Light Department maintain a reliable power distribution system for you and your neighbors and helping to keep power costs low. By limiting your charging to the overnight hours, you are doing your part to help the environment and help your neighbors.

Level 2 electric vehicle home chargers are designed to fully charge a modern electric vehicle overnight in four- to eight hours. Such rapid charging and high output means the amount of power the chargers draw is equivalent to adding four 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 South Hadley Electric Light Department distribution system.

Most EV drivers plug in to charge when they arrive home. This coincides with South Hadley Electric Light Department highest energy usage demand for the day. The addition of charging electric vehicles at these time, would involve an expansion of service by South Hadley Electric Light Department with additional costs for upgrades to the distribution system that serves South Hadley in addition to added costs for the production and delivery of electricity to our town.





## **Charging Curtailment**

By accepting a free Wi-Fi-equipped Level 2 EV home charger from South Hadley Electric Light Department, you will be accepting limited charging between the hours of 5:00 p.m. and 9:00 p.m. during non-holiday weekdays. During this period, when South Hadley Electric Light Department is seeing its highest energy usage of the day, your home charger will only be capable of delivering 1.25KW of power. This is about the same amount of charging power you would see if you plugged into a standard wall outlet.

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. This means that even with a brand new Tesla 3, with an estimated range of over 240 miles, your vehicle would be able to be fully charged overnight. 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 South Hadley Electric Light Department 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.

South Hadley Electric Light Department agrees never to extend a curtailment past 9:00 p.m., so overnight EV charging will always be possible for our customers. South Hadley Electric Light Department 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, South Hadley Electric Light
  Department operators could curtail charging starting at 2:00 rather than 5:00 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 South Hadley





Electric Light Department, the Massachusetts Municipal Wholesale Electric Company has 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 or email the Massachusetts Municipal Wholesale Electric Company (MMWEC), at EV@mmwec.org or 413-589-0141. An energy efficiency specialist or program administrator would be happy to assist you.

# South Hadley Electric Light Department Responsibilities:

- 1. South Hadley Electric Light Department agrees to provide one (1) Level 2 Wi-Fi-equipped home charger (Chargepoint Home Model), per residential metered customer with the purchase or lease of a new 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. South Hadley Electric Light Department 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.
- 3. South Hadley Electric Light Department agrees to provide for any and all monitoring costs associated with third -party monitoring and scheduling (by SHELD) of the Level 2 Wi-Fi-equipped home charger for 18 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. South Hadley Electric Light Department 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 from Chargepoint, which shall be transferable directly to the end user. Operations, warranty and technical issues associated with the charger shall be reported to South Hadley Electric Light Department, but shall be the responsibility of the customer and the equipment manufacturer.
- 5. South Hadley Electric Light Department 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 South Hadley Electric Light Department 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 qualified electrician within 30 days. The electrician will pick up the charger from SHELD. 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 South Hadley Electric Light Department) and register the charger as part of the South Hadley Electric Light Department charging system though the ChargePoint Connections App. Instructions for registration are included with the 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 South Hadley Electric Light Department 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 at standard Level 2 7.7KW charging output. Following the end of the curtailment period the unit will unlock and charge at the normal level 2 rate which shall recharge all standard EV's 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 South Hadley Electric Light Department retains the right to utilize data on charger time-of use, magnitude of charging and duration. This data will be collected through the Chargepoint Home charger and utility electric meter and utilized by South Hadley Electric Light Department and our energy efficiency partner MMWEC, to better manage our distribution system as well as develop new, effective strategies for managing EV charging. No data shall be distributed for the use by any third party other than South Hadley Electric Light Department, MMWEC, and Chargepoint without expressed written consent from the homeowner.
- 6. Customer agrees to hold South Hadley Electric Light Department 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 South Hadley Electric Light Department 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.
- 7. In signing and accepting this charger, customer agrees to participation in South Hadley '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 South Hadley Electric Light Department service area, relinquishes electric vehicle, losses connectivity to Wi-Fi or is unable to abide by any of the terms and conditions as listed above South Hadley Electric Light Department reserves the right to remove the customer from South Hadley 's Residential Electric Vehicle Charging Program 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 or email MMWEC, at EV@mmwec.org or 413-589-0141. An energy efficiency specialist
or program administrator would be happy to assist you.
Street Address

Customer Signature & Date

Meter Number (Billing Number)