



Washington Electric Cooperative, Inc.

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TO: East Montpelier Selectboard
CC: B. Johnson, P. Richards
FROM: Bill Powell
RE: WEC offer to install Type II EV charging station
DATE: 8 January 2016; as updated 12 October 2017

WEC was awarded a grant in 2015 by VLITE, an entity within the governance of VELCO, the state’s transmission provider. The grant is to deploy Type II EV charging stations, along with the network service and full service contract provided by the manufacturer, ChargePoint. WEC has so far deployed four of the five stations; the East Montpelier Park ‘n Ride installation will be the fifth.

The Proposal: There are two components of value to each installation. The equipment itself is a dual port Type II EV station. Based on a 2015 quotation by the Co-op’s contractor (Middlesex Electric (Don Pierce) the value of the station installed is:

Type II EV (CT4000) dual charging station	\$ 6,561
Middlesex Electric installation	\$ 4,950
5 years ASSURE service contract dual station	\$ 4,790
	\$16,301

The ASSURE service contract is a five year, full warranty and service contract. Separately provided is an ASSURE summary of what this contract includes; this is a full service contract which holds the Town harmless for any/all expense of repair or maintenance.

There is no cost to the town for the EV station or the service contract. The only potential cost for the first five years, depending on how the Selectboard decides to operate the station, will be for electricity. After ASSURE contract expires the board, if it chooses to continue with the station and the service contract, would be responsible for the associated costs.

At its February 1, 2016 meeting, the Selectboard accepted the WEC offer. Town Administrator Johnson was authorized to complete the formal agreement between WEC and the town. This agreement is complete in principle, awaiting only the details on the installation. Agreement signing and station installation should occur in the very near future now that the park ‘n ride facility is nearing completion.

Discussion for the October 16, 2017 Selectboard meeting:

Network Service: The station manufacturer (ChargePoint) is the market leader for EV charging stations. For a public location such as the proposed park/ride, the EV owner will have their own ChargePoint card. When a driver parks their EV to be charged, all the transactions occur via

cellular communication to the Type II station. The ChargePoint cellular network service provides the billing and notification to users of the station.

Account management: ChargePoint’s account management involves setting up “rules” for (1) who is allowed to use the station, (2) under what cost per charging event, and (3) any variations the host (Town of East Montpelier) of when or how long an EV can use the facility. The “rules” are set up by the host/Selectboard, and can be easily revised.

I have included an EV charging “tariff” from Stowe Electric for your consideration. The reason to consider this design is (1) it is a simple, understandable method for a rate to be collected by the Town, and (2) this design could easily be adapted to East Montpelier’s proposed Type II station.

I have assisted other host members with the setup of their account; the process is relatively easy, and once set up does not require on-going time commitment.

Revenue from the station: Any revenue from this station’s use is handled automatically by ChargePoint. The revenue is collected, and ChargePoint takes a 10% fee from any revenue collected. The remaining revenue is either returned to the Town in a check, or via ACH on a monthly basis.

The cost of electricity: WEC’s service to the future park/ride would be under the Rate 3 tariff (commercial, energy only).

WEC’s January 2016 rates for same sort of commercial tariff (#3):

Monthly service charge	\$12.19
Kilowatthour (kwh) cost	.17897

IF the Town decides to set a charging rate to “break even” then what I recommend is (1) based on a similar structure as the Stowe Electric Department’s EV tariff, and (2) makes up for the 10% “take” of the ChargePoint back room service. So for a .18/kwh cost, the net rate should be around .20/kwh.

A first hour of EV charging can use up to 6 kwh’s, so a first hour rate (to collect) should be around \$1.20 (6 * .20/kwh). Some vehicles will come into the park/ride and have less than a full charge “need”; others may connect and stay on for a couple hours. For those instances where the Town wants to discourage EV “squatters” there should be a rate component after a base time, where the rate increases significantly. This would only need to occur when/if there was evidence of “squatting” and preventing another user from gaining access. What I’ve been recommending to other host members is to consider the issue, but not worry about getting the “final” rate model initially. See what happens, and learn from the actual utilization of the station. The data on utilization will be available to the town and WEC.

Reminder: There will be 4 Type I charging stations at the park ‘n ride – 120 volt outlets in the bases of the light poles; there is no way to measure or charge for the public’s use of those outlets.

Stowe Electric Department
Electric Vehicle Charging Station Rate 35

AVAILABILITY:

For use at electric vehicle charging stations for public use which are owned and maintained by Stowe Electric Department (SED).

TERMS:

Payment for services will be required by approved credit card or a prepaid service card accepted by the network service vendor selected by SED for payment processing on its charging stations.

RATES:

Rate will consist of a flat fee of \$2.00 regardless of actual charging time plus an additional fee of \$.50 per hour while connected to the charging station for the initial four (4) hours and \$1.00 per hour thereafter.

There will be no other fees or charges associated with use of the charging stations.

EFFECTIVE:

For charging station use on and after October 15, 2013.