Electric Vehicle Charging Policy- DRAFT for DISCUSSION January 22, 2021

Intent of the Policy: The Town of Ulysses wishes to promote the use of climate-saving alternative energies while managing the costs to Town taxpayers. The Ulysses Town Board believes that those using a service should pay some portion of the cost where feasible.

Background: The Town of Ulysses became a Climate Smart Community in 2018. By committing to energy saving policies and practices, the Town became eligible to receive a grant from New York State to pay for the installation and operation of an electric vehicle (EV) charging station. The EV charging station is capable of charging two vehicles at once and was installed behind the Town Hall. It has been added to a database of available charging stations to help EV owners find charging sites. The Town Hall sign directs drivers to the EV station.

Under the terms of the grant, the Town's EV charging station offered local residents and those visiting the shops and restaurants on Main Street in Trumansburg free charging for a pilot period. The grant also included the annual subscription fee with ChargePoint, the service company, at no cost to the Town for the first 3 years. The subscription includes a dashboard to monitor and analyze current and cumulative data on number of users, kilowatt hours of energy used, average length of charging sessions, and the associated reductions in greenhouse gas emissions avoided and number of gallons of gasoline saved.

Current Use, Environmental Benefits, and Costs of EV charging station

In 2019, there were a total of 661 sessions when a user hooked up to a charging port. In the last 6 months there were an average of 12-15 different users/month. This means a number of users are frequent users.

Average use in 2019 was 1.6 users/day. The highest number was 6 users on 2 days; 4 users on 18 days; 3 users on 102 days; 2 users on 101 days; 1 user on 102 days and 0 users on 73 days.

The average length of a charging session was 1.5 - 2 hours.

The current cost of energy to the Town of Ulysses is $.06/kilowatt hour.

Since 2018, the Charging Station has avoided 4,974 kg of Green House Gases which is like planting 128 trees and letting them grow for 10 years.

4,228 kilowatt hours were used in 2019- this time frame seems the most reasonable since 2018 was the first year and 2020 was a pandemic limiting tourism. The monthly average was 350kwh/month. In the last 30 days we have dispensed 268kwh.

4228 x .06/kwh = $253/ year spent by the Town on dispensing electricity to EV chargers.

In 2020, the grant-funded subscription ended and the Town received its first annual fee of $760 for the two stations.

Annual cost to the Town of Ulysses is estimated to be $1,013.

Charging Policy Options

- Most public and non-profit organizations that offer charging stations do NOT charge to plug in.
- Those that do charge vary in how they charge:
    - Some charge a fixed amount for each hour the vehicle is plugged in.
    - Some charge one amount for charging time and then a larger amount for time after charging when the vehicle remains plugged in, denying others access to the charging station.
    - Some charge a fee based on a rate/kilowatt hour.

User Costs and Town Revenue estimates based on various charging policies:

Based on 2019 analytics,

- Average charging time was 1 hour 31 minutes for a total of 1005 hours
- Average length of a session was 2 hours for a total of 1328 hours
- Average kwh dispensed/session was 6.4 kwh or annual total of 4228

1. **Charge only for electricity used:**
    a. AVG of 6.4 kwh/session x $.06/kwh = $.52/session for users REV = $.06 x 4228 = $254/yr
    b. AVG of 6.4 kwh/session x $.15/kwh = $1.30/session for users REV = $.15 x 4228= $634/yr
    c. AVG of 6.4kwh/session x $.25/kwh = $2.18/session for users REV =$ .25 x 4228=$1,057/yr

2. **Charge by the hour:**
    a. AVG charge time was 1.5 hours and time hooked to charger averaged 2 hours/session
    b. If we charged $1.00 for time hooked up; Cost to user would average: $2.00/session REV =$1328/yr