

Council:

For your review, please find answers to the 5 questions asked by Finance Committee last week regarding the proposed electrical vehicle charging station.

Question 1: Can the City charge for electrical use?

Answer 1: Because the city is not a utility, under state law it cannot sell electricity. However, while we cannot charge per kWh, we *can* charge per unit time. ChargePoint's platform allows for a wide variety of pricing structures, including for different intervals (e.g., \$1/hr for the first 3 hours, then \$15/hr thereafter) which can be used as an incentive for people to move their car once it's had a reasonable time to charge (thus increasing usage). MPU can work with the city and ChargePoint to figure out a pricing scheme that fits with the city's priorities.

Question 2: What would be an advisable pricing point to break even / make a profit?

Answer 2: Take as an example an electric vehicle with a 70 kWh battery (typical battery sizes run 50-100 kWh). As the person charging is unlikely to be at zero, let's assume an average user is 50% charged, needing 35 kWh. The charging station we're talking about charges at 7.2 kW, which would take 4.8 hours to supply 35 kWh. The city takes service at that meter, I believe, under the GS-1 tariff, which has an energy rate of \$0.0854/kWh. Thus, the city's cost for a 35 kWh charge is \$2.99. If the city charged users \$1/hr, it would take in \$4.80, easily covering the cost of the power (and actually making a small profit). Under the cost assumptions just given, the break-even point for a per-hour user-charge would be \$0.63/hr. We would work with MPU and Chargepoint to hone in on the desirable fee.

Question 3: What is the user interface for using the charging station?

Answer 3: ChargePoint has a user platform and EV owners have access to networks identifying charging stations across the country. Through the ChargePoint lease, this station would be part of that network. Most electric vehicle users have apps as their man interface tool in the vehicle.

Question 4: Who pays for installation & maintenance of the Chargepoint station?

Answer 4: City would pay to put in the concrete base (approximately \$500) and make electrical connections to the breaker along Quay Street, which has already been prepped to receive this. Installation beyond this and maintenance is included in the 5-years lease. MPU is bearing the cost of the lease.

Question 5: Is there a need for an electrical vehicle charging station?

Answer: Please see the article below for recent perspective showing strong growth in EV stations.

<https://www.publicpower.org/periodical/article/nrel-report-says-ev-charging-stations-continued-strong-growth-early-2020>

Should you have any questions, please do not hesitate to contact me.

Regards,

Nick

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