



## REGULAR MEETING MINUTES

**Date:** 7/17/2019  
**Time:** 6:00 p.m.  
**City Hall – “Downtown” Conference Room**  
**701 Laurel St., Menlo Park, CA 94025**

EQC Commissioner Josie Gaillard participated by phone from:  
39586 North Cotton Patch Hills  
Bethany Beach, Delaware 19930

### A. Call To Order

Vice Chair Payne called the meeting to order at 6:16 p.m.

### B. Roll Call

**Present:** Gaillard, London, Vice Chair Payne, Turley  
**Absent:** Kabat, Martin, Chair Ryann Price  
**Staff:** Sustainability Specialist Joanna Chen and Sustainability Manager Rebecca Lucky

### C. Public Comment

No public comment was received.

### D. Regular Business

- D1. Review and discuss a recommendation to the City Council regarding a proposed pricing structure for public use of city owned electric vehicle charging stations

Sustainability Manager Rebecca Lucky made a presentation on behalf of Climate Corps Fellow Elise Doan (Attachment).

**ACTION:** Motion and second (Gaillard/Vice Chair Payne) to recommend to the City Council the proposed pricing structure for the public to use of city owned electric vehicle charging stations, with the following additions:

- Use the pricing structure as a pilot program for six months and report back to analyze effectiveness of the pricing structure
- Allocate the escalation fee for future electric vehicle charging station installations as first priority then climate action plan as second priority
- Strategize ways to designate electric vehicle charging stations for City employees to for free charge and/or ensure space is available when needed
- Explore gas tax option instead to fund future electric vehicle charging infrastructure and provide free charging to further incentive electric vehicle purchases

Motion passed (4-0-3, Kabat, Martin and Price absent).

- D2. Strategize on how to execute the 2019-2021 Environmental Quality Commission work plan and

discuss formation of work plan subcommittees

Vice Chair James Payne introduced the item.

The Commission prioritized updating the climate action plan and formed a new climate action plan subcommittee.

**ACTION:** Motion and second (Vice Chair Payne/London) to prioritize the climate action plan update in 2019-2021 Environmental Quality Commission work plan and form a climate action plan subcommittee consisting of Commissioner Gaillard, Kabat, and Payne to lead and coordinate the process with the commission, passed (4-0-3, Kabat, Martin and Price absent).

Item D3 moved to September 18, 2019

D3. Discuss the Environmental Quality Commission's quarterly report to the City Council

D4. Discuss September's Environmental Quality Commission agenda

Vice Chair James Payne introduced the item. Items coming up include the Heritage Tree Ordinance update, climate action plan subcommittee report, and City Council quarterly report

D5. Approve the June 19, 2019, Environmental Quality Commission meeting minutes (Attachment)

Vice Chair Payne introduced the item.

**ACTION:** Motion and second (Gaillard/Vice Chair Payne) to approve June 19, 2019 Environmental Quality Commission meetings minutes, passed (4-0-3, Kabat, Martin and Price absent).

## **E. Reports and Announcements**

E1. Commission reports and announcements

Commissioner Gaillard requested a 10-minute presentation on the impact of sea level rise in October or November and reported on meeting with other commissioners from neighboring cities to discuss climate action plan strategies.

E2. Staff update and announcements

None.

E3. Future agenda items

None.

## **F. Adjournment**

Vice Chair Payne adjourned the meeting at 9:07 p.m.

Minutes prepared by Joanna Chen.

These minutes were approved at the Environmental Quality Commission meeting of September 18, 2019.



## STAFF REPORT

### Environmental Quality Commission

**Meeting Date:** 7/17/2019

**Staff Report Number:** 19-009-EQC

#### Regular Business:

**Review and discuss a recommendation to the City Council regarding a proposed pricing structure for public use of city owned electric vehicle charging stations**

### Recommendation

Staff recommends that the Environmental Quality Commission (EQC) recommend the proposed pricing fee outlined in this report for public use of City owned electric vehicle charging stations to recover operational and initial installation costs, increase space turnover, and support local multifamily developments that don't have access to charging stations.

### Policy Issues

This recommendation is consistent with how the City establishes rates and fee structures to recover costs for owning, operating, and maintaining utility services (e.g., solid waste and water rates.) The adoption of a pricing structure for public use of city owned electric vehicle charging stations is consistent the City's climate action plan and will help in achieving the City Council adopted target of reducing communitywide greenhouse gas (GHG) emissions by 27 percent by 2020 from 2005 levels.

### Background

The City currently owns and operates four public electric vehicle (EV) charging stations. Two chargers are located in the City's Civic Center parking lot with two more located in the City's downtown Parking Plaza II on Crane Street. With the rise of EVs in the market and an increasing demand for public access to available EV charging stations, a pricing structure is needed to better utilize the stations, increase efficiency, and continue to promote the usage of EVs to further reduce local GHG emissions.

For the last year, the City has seen a high utilization of the four publicly available stations and an increase in EV owners as the market shifts toward electric modes of transportation. Due to this high use, the City has received a number of reports from City staff and residents indicating the difficulty to find an open, designated space to charge their EV, as well as experiencing community conflicts at the stations. The main problem is many EVs are not being moved from a charging space once fully charged. This creates frustrations for other users that need to charge and can discourage EV use and purchase when stations are not available due to slow space turnover. A pricing structure can help with higher turnover of public EV charging stations.

### Analysis

The proposed pricing structure should be consistent across each station to reduce confusion and maintain equity and transparency. The intended outcome for the pricing structure is to recover the operational costs of the stations and increase EV space turnover through a penalty or escalation fee after an establish time frame.

The escalation fee provides a self-regulating system and reduces City resources to deter EV drivers from staying in the EV space once their vehicle is fully charged.

The operational and maintenance costs for the charging stations is \$33,656 per year. In addition, the initial cost of installation for the four public stations totaled \$98,000. This excludes the cost of the charging stations and some of the installation cost as a result of the City receiving a grant. The City is authorized to collect funds from users to operate, maintain, recover the capital costs, and replace the charging stations.

Therefore, staff recommends a four tiered pricing fee structure where the first tier is an access fee, the second is an equitable energy-based fee, the third is an escalation fee, and the fourth is an off-peak pricing fee. The access fee will allow the City to recover the initial costs of the four public stations when they were installed within seven years. The energy-based pricing structure is an equitable price for the various EV models to recover operational costs. The escalation fee will encourage EV charging space turnover and the additional revenue will support the City's climate action plan. The off-peak pricing fee will support local multifamily development EV owners with limited access to at home charging stations by keeping prices minimal.

Staff recommends the following pricing structure:

- Tier 1 - Access fee: \$1.00
- Tier 2 - Energy-based fee: between \$0.23 and \$0.25 per kWh. This will also be charged if battery is fully charged and still parked in the space to encourage higher turnover rates.
- Tier 3 - Escalation fee: \$5 per hour after allotted 3 hour charging time frame with a 15 minute grace period to move the vehicle
- Tier 4 - Off-peak fee: between \$0.10 per and \$0.12 kWh with no escalation penalty fee between 7 p.m. and 7:30 a.m. with no escalation fee or continued charges once battery is fully charged.
- Employee Benefit: Access fee charge and free for first 3 hours with \$5 escalation fee after 15 minute grace period

Staff will better determine the energy-based fee and the off-peak fee when more data is acquired from stations. The second tiered energy-based fee estimated cost for EV owners for the 3 hour allotted time period varies between EV models and their battery acceptance rate. The table below compares costs for a three hour charge between a Nissan Leaf and Chevy Bolt.

| Table 1: EV model cost comparison for 3 hours during peak use |  |
|---|--|
| Nissan Leaf   | Chevy Bolt                               |
| Energy draw rate: 3.3 kWh                                     | Energy draw rate: 7.2 kWh                |
| \$1 access fee applied (Tier 1)                               | \$1 access fee applied (Tier 1)          |
| \$3.28 for energy used (Tier 2 @ \$0.23)                      | \$4.97 for energy used (Tier 2 @ \$0.23) |
| Total is \$3.28 for three hour charge                         | Total is \$5.97 for three hour charge    |

The off-peak pricing for EV drivers will only be charged the first access fee (\$1) and Tier 4 off-peak pricing fee up to \$0.12/kwh.

The final consideration is an employee benefit where staff EV owners will not be charged for the first 3 hours, but will be charged the \$5 escalation fee after the 15 minute grace period.

Revenue forecasts for the first access fee, second energy-based fee, and fourth off-peak pricing fee is

estimated between \$50,040 and \$54,360 per year with a seven year pay back for the initial station installation costs. This would cover the cost of operation and maintenance and recover the capital costs for installation over seven years. The cost recovery could allow future purchases of public EV charging stations or promote other EV infrastructure programs.

The escalation fee revenue based on data indicating May 2019 idle hours as 747 is estimated to be about \$44,820 per year. Once an escalation price is in place, the number of idling hours is likely to significantly drop, and is estimated to be \$11,000 per year. These funds could be used for other activities in the climate action plan or for EV related projects, policies, and programs.

Almost all Bay Area cities surveyed that operate publically owned EV charging stations have implemented a pricing fee structure (Attachment A). While some jurisdictions have instituted an hourly or time-based fee, it was found through research that hourly fees are not equitable for slower charging EV models and unintentionally benefits faster charging EV models. Additionally, the escalation fee is consistent with Bay Area Climate Collaborative recommendation to use an escalation fee that is five times greater than the charging fee. Furthermore, once the four public stations have recovered their initial operational costs, the access fee will be removed where the stations will result to a three tiered pricing fee structure.

#### Next steps:

City Council approval and rate adoption is the next step in this process. If adopted by the City Council, rates would need to be updated regularly to reflect current energy and maintenance costs.

### **Impact on City Resources**

The City is currently providing electricity, network fees and maintenance to all EV charging stations at no cost to the charging station users. The proposed pricing structure will provide an opportunity for the City to recover the operational costs of the stations while creating a new revenue stream to support purchase of additional charging stations as well as support implementation of the City's climate action plan. This requires little staff resources to implement as ChargePoint administers the billing system used for the charging stations.

### **Environmental Review**

This action is not a project within the meaning of the California Environmental Quality Act (CEQA) Guidelines § 15378 and 15061(b) (3) as it will not result in any direct or indirect physical change in the environment.

### **Public Notice**

Public notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting.

### **Attachments**

A. San Francisco Bay Area EV charge prices

Report prepared by:

Elise Doan, Climate Corps Fellow

Reviewed by:

Peter Ibrahim, Management Analyst II

Rebecca Lucky, Sustainability Manager  
Clay Curtin, Assistant to the City Manager

| EV Pricing Policies in the Bay Area                    |                     |               |                             |            |                              |                   |                                 |          |            |                          |
|--|---------------------|---------------|-----------------------------|------------|------------------------------|-------------------|---------------------------------|----------|------------|--------------------------|
| Location   | City                | # of Chargers | Level Charger               | Access Fee | Hourly Fee                   | Power per kWh Fee | Escalation Fee                  | Off-Peak | Time Limit | Parking Fee              |
| City of Berkeley                                       | Berkeley            |               |                             |            | \$1.50/ hr.                  |                   |                                 |          |            |                          |
| Brisbane Village                                       | Brisbane            |               | 50 kW DCFC                  |            |                              | \$0.20/ kWh       | \$5/ hr. after 45 min           |          |            | Evening flat rate at \$8 |
| Brisbane Marina *not owned by the City                 | Brisbane            |               | Level 2                     |            |                              | \$0.52/ kWh       | \$3/ hr. w/ 15 min grace period |          |            |                          |
| Burlingame City Hall                                   | Burlingame          | 2             | Level 2                     |            |                              | \$0.30/ kWh       |                                 |          |            |                          |
| Downtown Burlingame                                    | Burlingame          | 4             | Level 2                     |            |                              | \$0.30/ kWh       |                                 |          |            |                          |
| City of Fremont  | Fremont             | 17            |                             |            |                              | \$0.35/ kWh       |                                 |          |            | \$1 between 8 AM to 6 PM |
| County of San Mateo                                    | County of San Mateo |               | Level 2                     |            | \$1.00/ hr. for first 4 hrs. |                   | \$7.50/ hr. after first 4 hrs.  |          |            |                          |
| City of Pleasant Hill                                  | Pleasant Hill       |               | Level 2                     |            |                              | \$0.20/ kWh       |                                 |          |            |                          |
| City of Redwood City                                   | Redwood City        |               | Level 2                     |            | \$2.00/ hr.                  |                   |                                 |          | 4 hrs.     |                          |
| City of Petaluma                                       | Petaluma            | 12            | 9 - Level 2;<br>3 - Level 1 |            | \$1.00/ hr.                  |                   |                                 |          |            |                          |
| Palo Alto CA High #3 (*Price set by City of Palo Alto) | Palo Alto           | 8             | Level 2                     |            |                              | \$0.23/ kWh       | \$2/ hr. w/ 20 min grace period |          |            |                          |
| City of Palo Alto                                      | Palo Alto           | 4             | 3 - Level 2;<br>1- Level 1  |            |                              | \$0.23/ kWh       | \$2/ hr. w/ 20 min grace period |          |            |                          |
| Simon Stanford   | Menlo Park          | 2             | Level 2                     |            |                              | \$0.40/ kWh       |                                 |          |            |                          |

|   |                  |                |         |                              |                                   |   |
|---|------------------|----------------|---------|------------------------------|-----------------------------------|---|
| CTR 1 & 2<br>(price set by<br>Simon<br>Property<br>Group) |                  |                |         |                              |                                   |   |
| City of<br>Mountain<br>View                               | Mountain<br>View | 5/ 10 ports    | Level 2 | \$1/ hr. for<br>first 2 hrs. | \$4/ hr.<br>after first 2<br>hrs. | 4 hrs.                                    |
| City of San<br>Jose                                       | San Jose         | 50<br>stations |         | \$1.25                       | \$0.25/<br>kWh<br>during day      | \$0.20/<br>kWh (9:30<br>PM to<br>8:30 AM) |