

CITY OF ALBANY CITY COUNCIL AGENDA STAFF REPORT

Agenda Date: July 2, 2018

Reviewed by: NA

SUBJECT: Resolution No. 2018-95 "A Resolution of the Albany City Council

Adopting a Rate and Time Limit Policy for City-Owned Electric Vehicle Charging Stations" and Proposed Amendments to Section 9-1 "General Provisions" and Section "9-10" Stopping, Standing

and Parking" of the Albany Municipal Code

REPORT BY: Claire Griffing, Sustainability and Resilience Manager

SUMMARY

This agenda item provides an update on the status of electric vehicle (EV) charging stations set to be installed by the City and requests that Council adopt a charging rate and time limit policy for publicly available City-owned charging stations along with an amendment to the Albany Municipal Code that will authorize enforcement of the policy.

TRAFFIC & SAFETY COMMISSION RECOMMENDATION

That the Council establish fees for City-owned electric vehicle (EV) charging stations of \$1.50 per hour for the first three (3) hours, \$5 per hour thereafter or as soon as the vehicle is fully charged, and a maximum fee of \$10 for the overnight period of 9:00 PM to 7:00 AM in order to meet the policy goals presented by staff. The recommendation called for staff to review policy progress periodically and consider changes as necessary.

STAFF RECOMMENDATION

That the Council:

- 1. Adopt Resolution No. 2018-95 "A Resolution of the Albany City Council Adopting a Rate and Time Limit Policy for City-Owned Electric Vehicle Charging Stations."
- 2. Introduce for first reading Ordinance No. 2018-06 approving amendments to Section 9-1 "General Provisions" and Section "9-10" Stopping, Standing and Parking" of the Albany Municipal Code.

BACKGROUND

Albany's Climate Action Plan (CAP), adopted in 2010, establishes a goal of reducing greenhouse gas (GHG) emissions by 25% by the year 2020. The City's General Plan

includes additional reduction goals of 60% by 2035 and net zero emissions by 2050. In the Bay Area, tailpipe emissions from on-road motor vehicles account for more than 40% of the criteria air pollutants targeted by the Air District and about 36% of GHGs emitted. To address CAP goals, the City is working to incentivize alternative fuel vehicles such as electric vehicles (EVs) and plug-in hybrid vehicles through the development of EV charging infrastructure. According to Department of Motor Vehicles statistics on registered electric vehicles in the Bay Area, the City of Albany had about 240 registered EVs in 2016, a 34% increase from 2015.

The Bay Area Air Quality Management District (Air District) awarded the City of Albany \$12,000 for the purchase of four ChargePoint Level 2 electric vehicle charging stations, to be installed at the four City-owned lots listed below.

Facility	Address
Library/Community Center Parking Lot	1249 Marin Ave
Ocean View Park Parking Lot	900 Buchanan Street
Civic Center Parking Lot	1000 San Pablo Ave
Public Works Center Parking Lot	540 Cleveland Ave

A fifth additional charging station will be installed in the parking lot behind the Public Works Center to accommodate future City fleet EVs. A policy for charging City fleet EVs will be established at a later date.

This project is included in the City's Capital Improvement Plan (CIP) and chargers are scheduled for installation in early fall 2018. The City is responsible for setting user fees and time limits, maintaining stations, and monitoring stations' use. The City will pay for the electricity used at the charging stations, and ChargePoint will reimburse the cost of electricity usage at 90%.

DISCUSSION

Policy Goals

Before determining rates and time limits, the Traffic & Safety Commission set policy goals. These include:

- Meeting grant usage requirements
- Meeting City Council's Strategic Plan goals
- Encouraging EV use
- Providing EV charging options for Albany residents that do not have access to home charging infrastructure (e.g. multi-family residents and renters)
- Advancing equity
- Recuperating electricity costs

Rates

City staff analyzed EV charging policies in 28 cities and towns throughout the Bay Area and determined the average rate is \$1.37/hour and the range is free to \$5/hour. In the Albany area, which includes the cities of Berkeley and El Cerrito, the average rate is

\$1.31/hour and the range is free to \$3/hour. See Attachment 3 for a comprehensive list of EV charging station rates throughout the Bay Area.

The City's average cost of energy is 21 cents per kilowatt (kW) hour and level 2 chargers deliver approximately 6.6 kW per hour of charging. To recoup the cost of energy only, the City would need to set a rate of approximately \$1.39/hour.

In determining charging rates, the Commission considered a number of important factors, including the average rate in the area, the cost of energy, ChargePoint fees (transaction costs and O&M costs), and total project costs (construction and installation, software, and maintenance).

Time Limits

It takes an average of 4 hours to fully charge an EV with a level 2 charger, though in general, users spend about 1-3 hours charging their vehicle in commercial locations while running errands.

Public charging station owners often set time limits on stations to encourage equitable use and turnover. In the Bay Area, municipalities increase charging rates after about 2-3 hours. The City also has the option to set a strict limit on connection time. The Commission determined time limits that encourage equitable use of charging stations and are easily enforceable by City staff.

Policy Recommendation

The Commission recommended an EV charging policy based on project goals. To incentivize equitable EV use and remain competitive with other jurisdictions in the Bay Area, the Commission recommended a daytime rate of \$1.50/hour for the first 3 hours of charging or until the vehicle is fully charged and \$5/hour thereafter to encourage turnover. To help serve Albany residents that do not have access to home charging infrastructure, a flat rate fee of \$10 during the nighttime hours of 9 PM to 7 AM was established.

Ordinance Changes

Ordinance No. 2018-06 amends the Municipal Code to allow for the ticketing and/or removal of vehicles by the City of Albany that are illegally parked at designated EV charging spaces. The amendment to the Code states that the Police Department may ticket and/or remove a vehicle if the vehicle is: 1) parked in an EV charging space and not an EV, or 2) an EV that is parked in an EV charging space and not performing active charging.

This provision addresses the "worst-case" scenario of a vehicle parked in an EV charging space for a prolonged period. Voluntary compliance will be the City's primary goal.

SUSTAINABILITY IMPACT

Installing publicly available charging stations will support use of EVs, reduce transportation sector emissions, and reduce vehicle miles traveled to nearby cities for charging.

FINANCIAL IMPACT

Estimated project costs will be approximately \$109,000, which includes costs of the stations (less the Air District's funding), construction and installation, software, and 3 years of maintenance.

Based on recommended rates, staff estimates that the financial impact of electricity usage will be minimal. Each charging station's financial impact is yet to be determined, as we do not have an estimate of usage. Staff will review policy progress periodically consider changes to rates and time limits as necessary.

Attachments

- 1. Resolution No. 2018-95 "A Resolution of the Albany City Council Adopting a Rate and Time Limit Policy for City-Owned Electric Vehicle Charging Stations"
- 2. Ordinance No. 2018-06 "An Ordinance of the Albany City Council Amending Section 9-1 'General Provisions' and Section 9-10 'Stopping, Standing, and Parking' of the Albany Municipal Code"
- 3. Bay Area Electric Vehicle Charging Rates and Time Limits

RESOLUTION NO. 2018-95

A RESOLUTION OF THE ALBANY CITY COUNCIL ADOPTING A RATE AND TIME LIMIT POLICY FOR CITY-OWNED ELECTRIC VEHICLE CHARGING STATIONS

WHEREAS, Albany's Climate Action Plan, adopted in 2010, establishes a goal of reducing greenhouse gas emissions by 25% by the year 2020, and the General Plan includes additional reduction goals of 60% by 2035 and net zero emissions by 2050; and

WHEREAS, through the Climate Action Plan, the City of Albany has adopted a policy to incentivize electric and plug-in hybrid vehicles through development of automobile charging infrastructure and preferential street parking spaces; and

WHEREAS, according to Department of Motor Vehicles statistics on registered electric vehicles in the Bay Area, the City of Albany experienced a 34% increase in electric vehicle ownership from 2015 to 2016; and

WHEREAS, offering publicly-owned charging stations will provide charging opportunities for residents and visitors with electric vehicles; and

WHEREAS, the Bay Area Air Quality Management District awarded the City of Albany \$12,000 for the purchase of four ChargePoint Level 2 electric vehicle charging stations; and

WHEREAS, this project is included in the City's Capital Improvement Plan and chargers are scheduled for installation in 2018; and

WHEREAS, the City of Albany will operate and maintain the stations for its intended purpose of providing public electric vehicle charging sources for a minimum of three years; and

WHEREAS, the Traffic & Safety Commission recommended an electric vehicle charging rate and time limit policy for City-owned charging stations that shall meet grant usage requirements, meet City Council's Strategic Plan Goals, encourage electric vehicle use, provide charging options for multi-family residents and renters, advance equity, and recuperate electricity costs.

NOW, THEREFORE, BE IT RESOLVED, that the Albany City Council hereby establish fees for City-owned electric vehicle charging stations of \$1.50 per hour for the first three (3) hours, \$5 per hour thereafter or as soon as the vehicle is fully charged, and a maximum fee of \$10 for the overnight period of 9:00 PM to 7:00 AM to be incorporated into a future update of the Master Fee Schedule.

PEGGY MCQUAID, MAYOR

ORDINANCE NO	. 2018-06
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AN ORDINANCE OF THE ALBANY CITY COUNCIL AMENDING SECTION 9-1

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2.	

"GENERAL PROVISIONS" AND SECTION 9-10 "STOPPING, STANDING AND PARKING" OF THE ALBANY MUNICIPAL CODE

WHEREAS, Albany's Climate Action Plan, adopted in 2010, establishes a goal of

reducing greenhouse gas emissions by 25% by the year 2020, and the General Plan includes additional reduction goals of 60% by 2035 and net zero emissions by 2050; and

WHEREAS, through the Climate Action Plan, the City of Albany has adopted a policy to incentivize electric and plug-in hybrid vehicles through development of automobile charging infrastructure and preferential street parking spaces; and

WHEREAS, the Bay Area Air Quality Management District awarded the City of Albany \$12,000 for the purchase of four ChargePoint Level 2 electric vehicle charging stations; and

WHEREAS, this project is included in the City's Capital Improvement Plan and chargers are scheduled for installation in early fall 2018; and

WHEREAS, the City of Albany will operate and maintain the stations for its intended purpose of providing public electric vehicle charging sources for a minimum of three years; and

WHEREAS, updates to Chapter IX of the Albany Municipal Code – Motor Vehicles and Traffic are necessary to keep regulations current to include the evolving automobile industry.

1	NOW, THEREFORE, THE ALBANY CITY COUNCIL ORDAINS AS
2	FOLLOWS:
3	
4 5	SECTION 1: CHAPTER 9 OF THE ALBANY MUNICIPAL CODE, SECTION 9-1
6	TITLED "GENERAL PROVISIONS" IS HEREBY AMENDED AS FOLLOWS:
7	9-1 GENERAL PROVISIONS.
8	9-1.1 Definitions.
9	Editor's Note: For State law definitions contained in Vehicle Code, see Veh. C.A. §§100 to 676.
0	a. Whenever any words or phrases used in this Chapter are not defined herein, but are now
1	defined in the Vehicle Code, such definitions are incorporated herein and shall be deemed to
2	apply to such words and phrases used in this Chapter as though set forth in this subsection in
3	full.
4	b. The following words and phrases when used in this Chapter shall, for the purposes of this
5	Chapter, have the meanings respectively ascribed to them in this subsection:
6	
7	Active charging means that the connector from the charger is inserted into the electric vehicle
	inlet and electrical energy is being transferred for the purpose of recharging the batteries on
8	board the electric vehicle.
9	
0	Electric vehicle means any motor vehicle registered to operate on California public roadways
1	and operates, either partially or exclusively, on electrical energy. "Electric vehicle" includes but
2	is not limited to: a battery electric vehicle and a plug-in hybrid electric vehicle.
3	
4	Electric vehicle charging space means a parking space in the public right-of-way or on City
25	property designated for public use that is served by battery charging station equipment that has
	as its primary purpose the transfer of electrical energy to a battery or other energy storage device
26	in an electric vehicle.
27	
28	Holidays where used in this chapter or on official signs, shall mean the following days: Page 2
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1	New Year's Day (January 1)
2	Martin Luther King, Jr. Day (third Monday in January)
3	President's Day (third Monday in February)
4 5	Memorial Day (last Monday in May)
6	• Independence Day (July 4)
7	Labor Day (first Monday in September)
8	Columbus Day (second Monday in October)
9	• Veterans Day (November 11)
10	Thanksgiving Day (fourth Thursday in November)
11	• Christmas Day (December 25)
12	If any of the holidays enumerated above shall fall upon a Sunday, then the Monday following
13	shall be considered as the holiday.
14	
15	Loading Zone shall mean the space adjacent to a curb reserved for the exclusive use of vehicles
16	during the loading or unloading of passengers or materials.
17	
18	Official time standard. Whenever certain hours are named in this Chapter, they shall mean
19	Standard Time or Daylight Saving Time, as may be in current use in the City.
	Oversized validas shall mean any valida or combination of valida and trailer or delly the
20	Oversized vehicles shall mean any vehicle or combination of vehicle and trailer or dolly the dimension of which exceed twenty-two (22') feet in length, or ninety (90") inches in width, or
21	ninety-six (96") inches in height or has a gross vehicle weight of eight thousand (8,000) pounds or
22	greater.
23	greater.
24	Park shall mean to stand or leave standing any vehicle, whether occupied or not, otherwise than
25	temporarily for the purpose of, and while actually engaged in loading or unloading of passengers
26	or materials.
27	
28	Parkway shall mean that portion of a street other than a roadway or a sidewalk.
20	Page 3

1	
2	Passenger loading zone shall mean the space adjacent to a curb reserved for the exclusive use of
3	vehicles during the loading or unloading of passengers.
4	
5	Pedestrian shall mean any person afoot.
6	
7 8	Police Officer shall mean every Officer of the Police Department of this City, or any Officer
9	authorized to direct or regulate traffic or to make arrests for violation of traffic regulations.
10	
11	Recreational Vehicle shall mean both of the following:
12	a. A motor home, travel trailer, truck camper, or camping trailer, with or without motive power,
13	designed primarily for human habitation for recreational, emergency, or other occupancy that
	meets all of the following criteria:
14	1. It is built on a single chassis.
15	2. It is either self-propelled, truck-mounted, or permanently towable on the highways
16	without a permit.
17	b. A park trailer, as defined in Section 18009.3 of the Health and Safety Code. (Amended Sec. 2,
18	Ch. 566, Stats. 2000. Effective January 1, 2001.)
19	
20	Stop when required, shall mean complete cessation of movement.
21	
	Stop or stand when prohibited shall mean any stopping or standing of a vehicle, whether
22	occupied or not, except when necessary to avoid conflict with other traffic, or in compliance with
23	the direction of a Police Officer or official traffic-control device.
24	(Ord. #58-016, Art. I, §§1 to 8, 10, 11; 1958 Code §20.1; New; Ord. #97-08; Ord. #2010-05, §1)
25	
26	SECTION 2: CHAPTER 9 OF THE ALBANY MUNICIPAL CODE, SECTION 9-10
27	TITLED "STOPPING, STANDING AND PARKING" IS HEREBY AMENDED AS
28	FOLLOWS:
-	Page 4

1	9-10.27 Electric Vehicle Parking Regulations.
2	No person shall park any non-electric vehicle in a parking space that is designated as an electric
3	vehicle charging space. Further, no person shall park an electric vehicle in an electric vehicle
4	charging space when not performing active charging. No person shall park an electric vehicle in
5	an electric vehicle charging space beyond the days and hours specified. The City Manager or
7	his/her designee shall designate the location, days, and hours when electric vehicle parking is
8	regulated by this section. The amount of the fine for violation of any of the provisions in this
9	section shall be established in the Master Fee Schedule. The Police Department may remove and
10	impound any vehicle that is in violation of any of the provisions in this section.
11	
12	SECTION 3: PUBLICATION AND EFFECTIVE DATE.
13	This ordinance shall be posted at three public places within the City of Albany and shall become
14	effective thirty days after the date of its posting.
15	
16	PASSED AND ADOPTED by the City Council of the City of Albany at its meeting on the
17	[DATE], by the following vote:
18	AYES:
19	NOES:
20	ABSENT:
21	ABSTAIN:
22	
23	
24	PEGGY MCQUAID, MAYOR
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28	

Bay Area Electric Vehicle Charging Rates and Time Limits

Location	Rate	Number of Stations	Comments
Albany (Little Star Pizza)	first 8 hours \$3/hour then \$1.50	2	
Antioch	\$0.20/kWh	1	
Benicia	\$0.62 session fee plus \$1.50/hour	2	
Berkeley (City-owned)	\$1.50/hour	7	2-4 hour charging limits from 8am to 6pm; parking fees apply in garages
Berkeley (4 th Street)	first 2 hours \$1/hour then \$1.50	1	
Burlingame	8am to 6pm \$1/hour plus \$0.30/kWh, other times \$0.30/kWh	2	day rates inc. \$1 hr, night no hourly fee
Campbell	8am to 8pm \$0.30/hour plus \$0.25/kWh, other times \$0.25/kWh	12	day rates inc. \$.30 hr fee, night no hourly fee
Concord	\$1.75/hour	1	
Cupertino	\$1.50/hour	6	
Danville	\$0.30/kWh	3	
Dublin	first 2 hours free then \$2/hour	3	
El Cerrito (City Hall)	\$1.25/hour	1	
El Cerrito (Natural Grocery)	free	1	One hour limit
Fairfax	\$0.50/hour, min \$0.50	3	
Half Moon Bay	\$1 session fee plus \$1/hour	1	
Hayward	\$1/hour, minimum \$1	1	
Healdsburg	7:05am to 5:55pm \$0.50/hour, other times free	4	free from 6 pm - 7 am
Oakland (Jack London Sq.)	\$1/hour	1	
Los Altos	\$0.32/kWh	3	
Los Gatos	\$1 session fee, first 4 hours \$1/hour then \$5/hour	8	first 4 hours \$1/hour then \$5/hour
Marina	\$2/hour	2	
Martinez	\$1/hour	2	
Mill Valley	\$1/hour	1	
Morgan Hill	\$1.25 session fee plus \$0.25/kWh	5	
Mountain View	first 2 hours \$1/hour then \$4/hour	5	1st 2 hrs \$1/hr, then \$4/hr
Petaluma	\$1/hour, minimum \$2	6	
Pittsburg	\$2 session fee, up to 24 hours	1	up to 24 hours
Pleasant Hill	\$0.20/kWh	3	
Pleasanton	\$1/hour, minimum \$1	5	
Portola Valley	first 1 hour free, then \$4/hour	2	1st hour free, then \$4 hr
Redwood City	\$1.50/hour	12	
Richmond	first 3 hours \$1/hour, then \$5/hour	3	1st 3 hrs \$1/hr, then \$5/hr
Rohnert Park	\$1/hour	1	
Roseville	\$0.30/kWh	3	
San Jose	\$1.25 session fee plus 9:30pm to 8:30am \$0.20/kWh, other times \$0.25/kWh	57	9:30 pm - 8:30 am \$.20 kWh, then \$.25
San Leandro	\$1.50/hour	3	
San Mateo	\$0.25/kWh	2	
San Ramon	\$2/hour, minimum \$2	2	
Santa Rosa	\$1/hour, minimum \$2	10	
Saratoga	\$1/hour, minimum \$1	5	