

Council Agenda Report

From:	Brian Cowen, Acting Chief Building Official
Subject:	Adoption of an Ordinance, adding Chapter 17.25 to Title 17 of the Municipal Code and creating an expedited permitting process for Electric Vehicle Charging Stations
Date:	September 19, 2017

Facts

- 1. The State of California has determined that the implementation of consistent statewide standards to achieve the timely and cost-effective installation of electric vehicle charging stations is a matter of statewide concern.
- 2. The Intent of the Legislature is that local agencies not adopt ordinances that create unreasonable barriers and not unreasonably restrict the installation of electric vehicle charging stations.
- 3. It is the policy of the State to promote and encourage the use of electric vehicle charging stations and to limit obstacles of their use.
- 4. The Intent of the Legislature is that local agencies would minimize the cost of permitting for charging stations, so long as the action does not supersede the building official's authority to identify and address higher priority life-safety situations.
- 5. In 2015, the State adopted Assembly Bill (AB) 1236 (Chapter 598, Statutes 2015), requiring local agencies to adopt an ordinance that creates an expedited and streamlined permitting process for electric vehicle charging stations.

Options

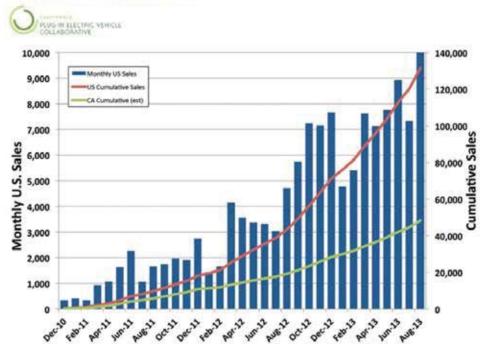
- 1. Do nothing (This would create a conflict with a State manadated Local Building Code Amendment)
- 2. Introduce the proposed ordinance for first reading.
- 3. Refer back to staff for additional analysis.

Analysis and Conclusions

AB 1236 requires the City to adopt an ordinance creating an expedited, streamlined permitting process for electric vehicle charging stations. The City is to adopt a checklist of all requirements with which electric vehicle charging stations shall comply in order to be eligible for expedited review. The checklist and other required permitting documents are to be made available on the City website. The City is to allow for electronic submittal of applications for electric vehicle charging station permits. The Governor's Office of Planning and Research has developed a model checklist for this purpose. The Governor's Office of Planning and Research has also developed "Zero-Emission Vehicles in California: Community Readiness Guidebook," for the City to refer to and make available to applicants (refer to Attachment 3).

Upon confirmation by the City that an application and supporting documents are complete, meet the requirements of the checklist, and are consistent with the ordinance, the City is to approve the application and issue the permit as a ministerial action. This process is very similar to the City's existing permitting process and not expected to create any significant impacts on staff since due to the low volume of Electric Vehicle Charging Stations permit applications. In order comply with AB 1236, the City must:

- Adopt an ordinance.
- Make available the "Zero-Emission Vehicles in California: Community Readiness Guidebook."
- Make all required submittal documents available on the city website.
- Issue the building permit within a reasonable period of time



Plug-in Electric Vehicle Sales

Plug-in Electric Vehicle Sales- Governor's Office of Planning and Research.

The draft ordinance amends Title 17, the Local Buildings and Construction Ordinance of the Municipal Code to create an expedited, streamlined permitting process for electric vehicle charging stations, in compliance with AB 1236 (Chapter 598, Statutes 2015).

Council may choose to amend, modify, or refer the draft ordinance back to staff. Any action the City Council takes needs to be consistent with State's requirements under AB 1236.

Fiscal Impact

None.

Recommendation

Introduce for first reading, Ordinance XXX N.S., adding Chapter 17.25 to Title 17 of the City of El Paso De Robles Municipal Code, creating an expedited permitting process for electric vehicle charging stations.

Attachments

- 1. Ordinance XXX N.S.
- 2. Plug In Electric Vehicle Infrastructure Permitting Checklist
- 3. Zero-Emission Vehicles in California: Community Readiness Guidebook
- 4. Legal Notice

ORDINANCE NO. XXXX-N.S.

AN ORDINANCE OF THE CITY OF EL PASO DE ROBLES, ADDING CHAPTER 17.25-ELECTRIC VEHICLE CHARGING STATIONS, TO TITLE 17 OF THE MUNICIPAL CODE (BUILDINGS AND CONSTRUCTION)

WHEREAS, the State has determined that the implementation of consistent statewide standards to achieve the timely and cost-effective installation of electric vehicle charging stations is a matter of statewide concern; and

WHEREAS, the intent of the Legislature is that local agencies not adopt ordinances that create unreasonable barriers and not unreasonably restrict the installation of electric vehicle charging stations; and

WHEREAS, it is the policy of the State to promote and encourage the use of electric vehicle charging stations and to limit obstacles to their use; and

WHEREAS, the intent of the Legislature is that local agencies would minimize the cost of permitting for charging stations, so long as the action does not supersede the building official's authority to identify and address higher priority life-safety situations; and

WHEREAS, the State has adopted Assembly Bill 1236, requiring local agencies to adopt an ordinance that creates an expedited and streamlined permitting process for electric vehicle charging stations; and

WHEREAS, it is in the interest of the health, safety and welfare of the residents of the City to provide an expedited, streamlined permitting process for electric vehicle charging stations, in accordance with the requirements of AB 1236.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF PASO ROBLES DOES HEREBY ORDAIN AS FOLLOWS:

Section 1. All of the above recitals are true and correct and are incorporated herein by reference.

<u>Section 2.</u> The City Council hereby ordains as follows:

Chapter 17.25 of Title 17 of the City of El Paso De Robles Municipal Code, is added to read:

CHAPTER 17.25 – Electric Vehicle Charging Stations

17.25.010 - Purpose.

17.25.020 - Definitions.

17.25.030 - Expedited Permitting Process.

17.25.040 - Permit Application Processing.

17.25.050 - Technical Review.

17.25.060 - Electric Vehicle Charging Station Installation Requirements.

17.25.010 - Purpose.

The purpose of this Chapter is to promote and encourage the use of electric vehicles by creating an expedited, streamlined permitting process for electric vehicle charging stations.

17.25.020 - Definitions.

(a) "Electric vehicle charging station" or "charging station" means any level of electric vehicle supply equipment station that is designed and built in compliance with Article 625 of the

California Electrical Code, as it reads on the effective date of this Chapter, and delivers electricity from a source outside an electric vehicle into a plug-in electric vehicle.

- (b) "Specific, adverse impact" means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified, and written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.
- (c) "Electronic submittal" means the utilization of one or more of the following:
 - a. Electronic mail or email.
 - b. The internet.
 - c. Facsimile.

17.25.030– Expedited Permitting Process.

Consistent with Government Code Section 65850.7, the Building Official shall implement an expedited, streamlined permitting process for electric vehicle charging stations, and adopt a checklist of all requirements with which electric vehicle charging stations shall comply with in order to be eligible for expedited review. The expedited, streamlined permitting process and checklist may refer to the recommendations contained in the most current version of the "Plug-In Electric Vehicle Infrastructure Permitting Checklist" of the "Zero-Emission Vehicles in California: Community Readiness Guidebook" as published by the Governor's Office of Planning and Research. The City's adopted checklist shall be published on the City's website.

17.25.040 – Permit Application Processing.

- (a) Prior to submitting an application for processing, the applicant shall verify that the installation of an electric vehicle charging station will not have specific, adverse impact to public health and safety and building occupants. Verification by the applicant includes but is not limited to: electrical system capacity and loads; electrical system wiring, bonding and overcurrent protection; building infrastructure affected by charging station equipment and associated conduits; areas of charging station equipment and vehicle parking.
- (b) A permit application that satisfies the information requirements in the City's adopted checklist shall be deemed complete and be promptly processed. Upon confirmation by the Building Official that the permit application and supporting documents meets the requirements of the City adopted checklist, and is consistent with all applicable laws and health and safety standards, the Building Official shall, consistent with Government Code Section 65850.7, approve the application and issue all necessary permits. Such approval does not authorize an applicant to energize or utilize the electric vehicle charging station until approval is granted by the City. If the Building Official determines that the permit application is incomplete, he or she shall issue a written correction notice to the applicant, detailing all deficiencies in the application and any additional information required to be eligible for expedited permit issuance.
- (c) Consistent with Government Code Section 65850.7, the Building Official shall allow for electronic submittal of permit applications covered by this Ordinance and associated supporting documentation. In accepting such permit applications, the Building Official shall also accept electronic signatures on all forms, applications, and other documentation in lieu of a wet signature by any applicant.

17.25.050 - Technical Review.

(a) It is the intent of this Ordinance to encourage the installation of electric vehicle charging stations by removing obstacles to permitting for charging stations so long as the action does not supersede the Building Official's authority to address higher priority life-safety situations.

If the Building Official makes a finding based on substantial evidence that the electric vehicle charging station could have a specific adverse impact upon the public health or safety, as defined in this Chapter, the City may require the applicant to apply for a use permit.

(b) In the technical review of a charging station, consistent with Government Code Section 65850.7, the Building Official shall not condition the approval for any electric vehicle charging station permit on the approval of such a system by an association, as that term is defined by Civil Code Section 4080.

17.25.060 – Electric Vehicle Charging Station Installation Requirements.

- (a) Electric vehicle charging station equipment shall meet the requirements of the California Electrical Code, the Society of Automotive Engineers, the National Electrical Manufacturers Association, and accredited testing laboratories such as Underwriters Laboratories, and rules of the Public Utilities Commission or a Municipal Electric Utility Company regarding safety and reliability.
- (b) Installation of electric vehicle charging stations and associated wiring, bonding, disconnecting means and overcurrent protective devices shall meet the requirements of Article 625 and all applicable provisions of the California Electrical Code.
- (c) Installation of electric vehicle charging stations shall be incorporated into the load calculations of all new or existing electrical services and shall meet the requirements of the California Electrical Code. Electric vehicle charging equipment shall be considered a continuous load.
- (d) Anchorage of either floor-mounted or wall-mounted electric vehicle charging stations shall meet the requirements of the California Building or Residential Code as applicable per occupancy, and the provisions of the manufacturer's installation instructions. Mounting of charging stations shall not adversely affect building elements.

<u>Section 3.</u> Severability. If any section, subsection, sentence, clause, phrase, or portion of this ordinance is for any reason held invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 4. Effective Date. This Ordinance shall be in full force and effect 30 days after its passage and adoption as provided by Government Code section 36397.

Section 5. Publication. The City Clerk shall certify as to the adoption of this Ordinance and shall cause a summary thereof to be published at least five (5) days prior to the meeting at which the proposed Ordinance is to be adopted and shall post a certified copy of the proposed Ordinance in the Office of the City Clerk. Within fifteen (15) days of the adoption of the Ordinance, the City Clerk shall cause a summary of the Ordinance to be published, including the vote for and against the same, in accordance with Government Code Section 369633.

INTRODUCED at a regular meeting of the City Council held on September 19, 2017, for first reading by the City Council of the City of El Paso de Robles, and adopted on the ____ day of _____, 2016, by the following vote:

AYES: NOES: ABSENT: ABSTAIN:

Steven W. Martin, Mayor

Attest:

Kristen L. Buxkemper, Deputy City Clerk



Plug-In Electric Vehicle Infrastructure Permitting Checklist

	Residential	Non-Residential
Phase 1	✓ Understands intended use of the	✓ Obtain an address for the location
Pre-Work Contractor	EVSE (i.e. personal)	✓ Determine the ownership of the site and/or
		authorization to install equipment at site
		 ✓ Understands intended use of the EVSE (i.e.,
		fleet, employee, customer, visitor, etc.)
		✓ Determine number of vehicles charging and
		connectors per charging station
		✓ Determine source of power and
		authorization to use source
	✓ Determine type of vehicle(s) to be cha	rged at EVSE
	✓ Evaluate mounting type options (i.e., I	pollard, pole-mount, wall-mount, ceiling-mount)
	 ✓ Clarify communication requirements (i.e., Ethernet, cellular, Wi-Fi, none or other)
	✓ Determine the NEMA Enclosure type	
	✓ Determine the physical dimensions of	
	 Inspect the type of circuit breaker pan 	
Phase 2	✓ Identify incentives or rate structures t	
Pre-Work Customer	✓ Determine size of electrical service at	
		ermit office(s) to identify specific requirements,
	including local fire, environmental, co	nstruction, building, concealment and engineering
	requirements	
	✓ Identify incentives available through le	ocal, state or federal programs
	 Contact insurance company to acquire needed 	e additional insurance or separate coverage as
		ials with all subcontractors; ensure electrical
	contractor's license for electrical work	
Phase 3	✓ Verify EVSE meets UL requirements ar	nd is listed by UL or another nationally recognized
On-Site Evaluation	testing laboratory	
	✓ Verify EVSE has an appropriate NEMA	rated enclosure (NEC 110.28) based on
	environment and customer needs, suc	ch as weatherization or greater levels of resistance
	to water and corrosive agents	
	✓ Determine the level or charger meets	customer's PEV requirements (most vehicles
	require the maximum of a 240V/32A (40A breaker)
	✓ Based on proposed EVSE location, det	ermine if cord length will reach a vehicle's
	charging inlet without excessive slack	and does not need to be more than 25' in length
	(NEC 625.17)	
		ve been considered to reduce the risk of tripping
	hazards and accidental damage to the	
	✓ Mounting type selection based on req	-
	 Determine whether EVSE communicat local utility 	tion options are beneficial to customer and/or

Phase 4	✓ Ensure overhead doors and vehicle	✓ Space(s) should be visible to drivers and
On-Site Survey	parking spot do not conflict with	pedestrians
	EVSE location	 Determine proximity to building entrance
	✓ Place EVSE in a location convenient	(could be considered an incentive for PEV
	to charging port on vehicle and	use)
	typical orientation of the vehicle in	 Select spaces proximate to existing
	garage (i.e., backed in or head-first)	transformer or panel with sufficient
	 Ensure functionality of lighting in 	electrical capacity
	the garage to meet NEC code 210-70	 EVSE installation should maintain a
		minimum parking space length to comply
		with local zoning requirements
		 ✓ If available, use wider spaces to reduce the
		risk of cord damage and minimize the
		intersection of cords with walking paths
		 Ensure sufficient lighting at proposed
		space(s) to reduce the risk of tripping and
		damage to charging station from vehicle
		impact or vandalism; light levels above two
		foot candles are recommended
		✓ Address accessibility requirements (refer to
		the Plug-In Electric Vehicle Infrastructure
		and Equipment Accessibility section of the
		Guidebook for more information)
		 Determine availability of space for
		informative signing
		 EVSE with multiple cords should be placed to quoid processing other parking spaces
		to avoid crossing other parking spaces
		 All available charging station mounting options should be considered and optimized
		for the space
		 Determine if hazardous materials were
		located at the site
		PARKING DECKS
		✓ Place EVSE towards the interior of a parking
		deck to avoid weather-related impacts on
		equipment
		PARKING LOTS
		 ✓ Avoid existing infrastructure and
		landscaping to mitigate costs, potential
		hazards and other negative impacts
		ON-STREET
		 Install on streets with high foot and vehicle
		traffic to mitigate vandalism
		✓ Avoid existing infrastructure to mitigate
		costs, potential hazards and other negative
		impacts

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	 ✓ Address accessibility requirements (refer to 		
	the Plug-In Electric Vehicle Infrastructure		
	and Equipment Accessibility section of the		
	Guidebook for more information)		
	✓ For pull-in spaces, EVSE should be placed in		
	front of the space and either centered on		
	the space if placed between two spaces (if		
	two connectors are available); EVSE with		
	more than two connectors should not be		
	used in on-street applications		
	 ✓ For parallel parking locations, the charging 		
	station should be installed at the front third		
	of the parked vehicle and based on the		
	direction of traffic flow; EVSE with a single		
	connector is recommended to reduce		
	potential trip hazards		
	✓ Mount the connector at a height between 36" and 48" from the ground (NEC 625.29)		
	unless otherwise indicated by the manufacturer		
	✓ Install wall or pole-mount stations and enclosures at a height between 36" and 48"		
	✓ Ensure sufficient space exists around electrical equipment for safe operation and		
	maintenance (NEC 110.26); recommended space is 30" wide, 3' deep and 6'6" high		
	 Minimize tripping hazards and utilize cord management technologies when possible 		
	 Equipment operating above 50 volts must be protected against physical damage (NEC 		
	110.27); ensure the vehicle is out of the line of vehicle travel and use wheel stops or		
	other protective measures		
	✓ EVSE must be located such that ADA routes maintain a pathway of 36" at all times		
Phase 4	 Price quote submitted to customer and approved including utility upgrades 		
Contractor Installation	Order equipment		
Preparation	Provide stamped engineering calculations as needed		
	Provide site plan modification with diagrams as necessary		
	Complete all necessary service upgrades and/or new service assessments		
	Complete permit applications as required by local permitting department		
	 Ensure permit is approved and collected 		
	 ✓ Schedule all necessary contract work (i.e., boring, concrete and/or paving restoration) 		
	and utility work (i.e., utility marking, service upgrade, new service and/or meter pull)		
	 Ensure utility marking of existing power lines, gas lines or other infrastructure is 		
	completed and utilize "call before you dig" services		
Phase 5	 ✓ Residential garages may permit the ✓ Run conduit from power source to station 		
Installation	use of nonmetallic-sheathed cable in location		
	lieu of conduit ✓ For EVSE greater than 60 amperes, a		
	separate disconnect is required (NEC		
	625.23) and should be installed concurrently		
	with conduit and visible from the EVSE		
	✓ Post permit at site in visible location		
	✓ Remove material to run conduit and/or wiring (i.e., drywall, insulation, pavers,		
	concrete, pavement, earth, etc.		
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	✓ Contractors are encouraged to examine requirement for installation sites and types of
	wiring in Chapter 3 of the NEC
	✓ Pull wiring; charging stations require a neutral line and a ground line and equipment is
	considered to be a continuous load
	✓ Conductors should be sized to support 125% of the rated equipment load (NEC 625.21)
	✓ Preparing mounting surface and install per equipment manufacturer instructions
	Floor-mount: typically requires a concrete foundation with J-bolts on station base; place
	with space to allow conductors to enter through the base
	✓ Wall/pole/ceiling-mount: install brackets for mounting of the equipment
	✓ Install bollard(s) and/or wheel stop(s) as needed
	✓ Install informative signage to identify the EVSE and potential trip hazards
	✓ Install additional electrical panels or subpanels as needed
	✓ Install service upgrades, new service and/or new meter as needed; utility may also pull
	a meter to allow for charging station wires to be connected to a panel
	✓ Make electrical connection
	✓ Perform finish work to repair existing infrastructure, surfaces and landscaping
Phase 6	✓ An initial electrical inspection by applicable building, fire, environmental and electrical
Inspection	authorities should occur after conduit has been run and prior to connecting equipment
	and running wires; if necessary, contractor should correct any issues and schedule a
	second rough inspection
	✓ If required, the inspector will perform a final inspection to ensure compliance with NEC
	and other codes adopted within the jurisdiction by inspecting wiring, connections,
	mounting and finish work
	✓ Contractor should verify EVSE functionality
Additional Resources	✓ National Codes and Standards
	✓ American National Standards Institute (ANSI)
	✓ National Fire Protection Association (NFPA)
	 ✓ Underwriters Laboratories, Inc. (UL)
	✓ International Association of Electrical Inspectors (IAEI)
	✓ International Code Council (ICC)
	✓ NECA-NEIS Standards
	✓ NECA and NFPA Webinars
	✓ Electrical Vehicle Infrastructure Training Program (EVITP) Installer Training
	Course/Certification

Please Refer to Attachment Document:

Attachment 3 –

Zero-Emission Vehicles in California: Community Readiness Guidebook

http://www.opr.ca.gov/docs/ZEV_Guidebook.pdf

CC Agenda 9-19-17

City of El Paso de Robles, California

NOTICE OF PUBLIC HEARING OF A PROPOSED ORDINANCE OF THE CITY OF EL PASO DE ROBLES, ADDING CHAPTER 17.25- ELECTRIC VEHICLE CHARGING STATIONS, TO TITLE 17 OF THE MUNICIPAL CODE (BUILDINGS AND CONSTRUCTION)

PLEASE TAKE NOTICE that a public hearing will be held by the Paso Robles City Council at 6:30 p.m. on September 19, 2017, or as soon thereafter as the matter may be heard, at the Paso Robles City Hall, Council Chambers, 1000 Spring Street, Paso Robles, California to consider the following action:

AN ORDINANCE OF THE CITY OF EL PASO DE ROBLES, ADDING CHAPTER 17.25- ELECTRIC VEHICLE CHARGING STATIONS, TO TITLE 17 OF THE MUNICIPAL CODE (BUILDINGS AND CONSTRUCTION)

The full text of the proposed ordinance will be available for public inspection in the Office of the Paso Robles City Clerk at 1000 Spring Street, Paso Robles, California, for not less than fifteen days prior to said hearing date.

If you have any questions regarding this application, please call Charlie Moloney, Deputy Building Official or Devon Vandergon, Building Technician at (805) 237-3850.

Dated: September 1, 2017

Devon Vandergon Building Technician