

COG EV Subgroup Meeting Priorities Document (3.26.12)

Electric Utility Subgroup **Draft Updated 3/26/2012**

Subgroup Lead: Steve Rosenstock, Edison Electric Institute

EV Workgroup Goal: Create a framework for rapid deployment of electric vehicles in the Metropolitan Washington Region.

Objective: To develop recommendations on policies regarding rate structure and third party billing, strategies to address potential EV impacts on the electric grid and integration with renewable energy.

Members:

- 1- Steve Rosenstock, Edison Electric Institute
- 2- Bryan Moorhouse, Pepco Holdings
- 3- Najib Salehi, Loudoun County
- 4- Mark Davis, WDC Solar, Inc.
- 5- Andy Flavin, Dominion
- 6- Scott Miller, Coulomb Technologies
- 7- Elizabeth Lawton, Ecotality

Deadline for Recommendations: April 25, 2012

Resource Website

<https://ncrportal.mwcog.org/sites/surveys/EVP/>

Timeline

1. Review Issues : Add/Modify (Feb 29 + on-going)
2. Prioritize Issues (before March 29)
3. Develop criteria for Recommendations (before March 29)
4. EV Meeting (March 29)
5. Review draft staff recommendations/add/modify (ongoing)
6. Present Draft Recommendations (before April 25)
7. EV Meeting (April 25)

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Electric Utility Subgroup Issue Area Summary

High Priority
Utility Notification of EVSE Installment
Medium Priority
Regulatory status of electric vehicle charging service providers
Preparing for DC Fast Charging
Utility EV Education Programs
Cost to charge EVs at public charging stations
Lower Priority
Deployment of "Smart" EVSE
Use of a 2 nd meter or multiple meters for EV electric consumption billing
Utility EV Pilot Programs

Issues Identified, Key Considerations, and Preliminary Recommendations

1. Utility Notification of EVSE Installment (Priority – 1)

- Looking toward the future of EV charging, utilities are concerned about planning for neighborhood clustering of Level 2 charging. High local concentrations of Level 2 charging can pose issues with overloading utility feeders and transformers, causing disruption. Level 1 charging is less of a concern.
- Utilities have a distribution planning process in place, and are receiving some information about EV purchases from OEMs and COG, but information about EV charging stations and types of vehicles are important inputs.
- State laws are being proposed that would mandate that DMVs share data with utilities.

Recommendation: Notify utilities in advance about locations of new Level 2 or DC Fast Charge charging stations.

Recommendation: A statewide public charging station registry should be developed.

Recommendation: All new electrical permits should include a field noting whether the permit includes electric vehicle charging and if so, its voltage and amperage. If the field is checked on the permit, the information should be shared with the local utility.

2. Regulatory status of electric vehicle charging service providers. (Priority – 2)

- Across the region, the regulatory status of EV charging service providers is inconsistent and in some cases unclear. A coherent regional policy is needed to promote investment in charging infrastructure and open opportunities for renewable generation of electricity for charging.
- Key areas of state utility law needing to be addressed include:
 - Whether EV charging service providers are subject to public utility regulation
 - Under what circumstances EV charging is defined as the resale of electricity or as the use of electricity to provide a service
 - Under what circumstances EV charging service providers may use renewable energy to provide charging services

Recommendation: Non-utility EV charging service providers should not be regulated as public utilities or electricity suppliers.

Recommendation: EVSE providers are offering a service, not just electricity, so it should not be considered a “sale for resale” or the “retail sale of electricity” subject to state/local electric provider regulations as long as EV charging service providers meet any existing conditions in state law that exempt the provision of EV charging services from treatment as a “sale for resale” or the “retail sale of electricity”.

Recommendation: Local governments should work with utilities to overcome barriers to renewable EV charging and identify opportunities to modify existing policy to further enable electric vehicle charging from renewable sources while respecting state laws governing electric utility regulation and utility franchise rights, and accounting for the terms of contractual agreements between electric utilities and governmental entities.

3. Preparing for DC Fast Charging (Priority – 2)

- DC Fast charging will require more voltage, larger cables, larger conduit, and have great potential to impact utility transformers.
- Utilities need to know about specific deployment plans for DC Fast charging installations in advance.
- Currently there is no US standard for DC Fast charging connections. SAE International is in the process of formulating industry-wide standards.

Recommendation: Notify utilities in advance about locations of DC Fast Charge charging stations.

Recommendation: Local governments and fleets should monitor SAE standards on DC Fast Charging connections and consider waiting for standards to be adopted before making large investments in DC Fast Charging infrastructure.

4. Utility EV Education Programs (Priority – 2)

- Utilities have developed or are developing education programs to provide their electric customers with information related to the development and deployment of EVs.
- Such programs may include web site information, speaker's bureaus, community outreach, and electronic or paper education materials that are available to EV owners, potential EV owners, and the general public.
- Other programs may be developed in conjunction with EV manufacturers, EV charging station manufacturers, and/or trade associations.
- Some programs may be looking for partners to improve and expand their impact.
- Specific education programs may be targeted by customer segment (e.g., to residential and/or commercial and/or industrial and/or governmental customers).

Recommendation: Encourage participation in or partnership with utility education programs.

Recommendation: Research the possibility of joint programs to expand and improve their outreach and impact.

5. Cost to charge EVs at public charging stations (Priority-2)

- There is currently a range of public charging options in the region. At some locations, recharging services are free; at others, EV owners pay an hourly rate for the service as a cost of parking.
- At this early stage of the EV charging market, a range of payment structures for EV charging should be available, including free service.

Recommendation: There should be no prohibition against EVSE providers that do not charge for their service.

Recommendation: Information about the hourly and/or total cost of the charging service should be provided at the EV charging station.

6. Deployment of "Smart" EVSE (Priority – 3)

- Some EVSE being sold into the market is not capable of 2-way communication with grid and is not smart-grid ready.

Recommendation: Do not interfere with the market, do not prohibit the sale of EVSEs that are not smart grid ready.

Recommendation: Communications protocols for EVSE should be developed, likely by standards development organizations working with federal government entities.

7. Use of a 2nd meter or multiple meters for EV electric consumption billing (Priority – 3)

- Under some tariffs or rate schedules, there may be an option or a requirement to separately meter EV charging stations.
- Currently, in many buildings, multiple meters are used to separately meter different consumption (e.g., in a multi-family building, each apartment will have its own meter along with a meter for common area or central equipment; a commercial building may have one meter for office space and separate meters for retail tenants; etc).
- In facilities with smart meters, the use of a 2nd meter may not be necessary.

Recommendation: Do not prevent or prohibit the use of 2nd meters, since in some instances they may provide the most cost-effective option.

Recommendation: Encourage regulatory flexibility to allow multiple technological solutions to metering and billing issues.

8. Utility EV Pilot Programs (Priority – 3)

- Utilities may develop or have developed “pilot” programs (available to a limited number of customers) to work on issues associated with EV deployment, including EV-specific tariffs/rate schedules, with the approval of their utility commission.
 - EV tariffs offer the opportunity for EV owners to lower their costs to drive PHEVs and all-electric EVs.
- Such pilot programs may last for 1-3 years, but provide the basis for full deployment of such programs after the pilot program ends.
- Programs may be available to residential and/or commercial and/or industrial and/or governmental customers.

Recommendation: Encourage customers that have purchased EVs or are considering the purchase of EVs to participate in utility pilot programs.

Recommendation: Support state regulatory approval of such programs, including the establishment of EV-specific tariffs for residential, commercial, industrial, and governmental customers.

Resources:

Notification

[California Utilities' Assessment of Notification Options](#) (NOTE: Utilities in CA already receive notification through electrical permits, but to obtain more complete information, suggest receiving notification from OEMs, local government, customers, and conducting load scanning)

Regulatory Status of EV Charging

[California PUC Alternative-Fueled Vehicle Proceeding](#)

Utility Pilot Programs

[Dominion's EV Pilot program](#)

[Pepco's EV Rate for Commercial Customers](#)

State Regulations/Cases:

Virginia [HB2105](#), exempting EV charging stations from regulation as utilities

Virginia Code [56-1.2](#) and [56-232.2:1](#)

Maryland [SB179](#), establishing an EV pilot to be implemented by 2013.

Maryland [HB 1280 / SB 997](#), exempting EV charging stations from regulation as utilities

DC PSC [Case #1096](#), examining EV tariffs

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Overview of State Law/Regulation Related to EVSE - [Keep up to date and expand as needed]

	Maryland	District of Columbia	Virginia
Sale of Electricity for EV	Only electric suppliers licensed by the Commission can sell electricity. Legislation has been proposed to exempt Electric Vehicle Charging Station (EVCS) owners, EVCS service companies and EVCS service providers from the definition of “electricity supplier” and “public service company” in the Public Utilities Article. Also, PSC Rate Case 9261.	Only retail suppliers licensed by the Commission can sell electricity. DC government considering introducing legislation. (Note: according to DOE, there are 65 public charging stations in Washington DC as of 2/25/2012).	2011 legislation passed the VA General Assembly deems EV charging service providers not to be engaged in the resale of electricity, provided that they purchase the 100% of the electricity used to provide EV charging services from the incumbent electric utility in the given service territory and that the electricity purchased is used solely for transportation. The law deems the provision of EV charging services to be a permitted utility activity, but it exempts EV charging service providers from being regulated as public utilities. (Reference House Bill 2105 , 2011, and Virginia Code 56-1.2 and 56-232.2)
Release of Records	Legislation has been proposed to allow MVA to release street address to utilities to ensure public safety and reliability of the electric grid.		This issue will be addressed as part of the DOE EV Readiness Grant awarded to the Greater Richmond Region.
Rates/Tariffs	Pepco EV Rates - Schedule EV (commercial only)	No special rate for EV. PSC Case has been opened [Case #1096]	Dominion EV Rate Pilot was approved by the VA SCC in July and became effective in October. Offers two rate options specifically designed for customers with EVs: (1) whole house time of use rate and (2) a separately metered EV-only rate. Each option is open to 750 participants. The pilot will be in effect for three years. (Link)