

Advocates for the West
Affiliated Tribes of Northwest Indians
AirWorks, Inc.
Alaska Housing Finance Corporation
Alliance to Save Energy
Alternative Energy Resources Organization
American Rivers
A World Institute for a Sustainable Humanity
Beneficial State Bank
BlueGreen Alliance
Bonneville Environmental Foundation
Centerstone
Citizens' Utility Board of Oregon
City of Ashland
City of Seattle Office of Sustainability &
Environment
Climate Solutions
Community Action Center
Community Action Partnership Assoc. of Idaho
Community Action Partnership of Oregon
David Suzuki Foundation
Drive Oregon
Earth and Spirit Council
Earth Ministry
Ecova
eFormative Options
Emerald People's Utility District
EnergySavvy
Energy Trust of Oregon
Enhabit
Environment Oregon
Environment Washington
HEAT Oregon
Home Performance Guild of Oregon
Home Performance Washington
Housing and Comm. Services Agency of Lane
Co.
Human Resources Council, District XI
Idaho Clean Energy Association
Idaho Conservation League
Idaho Rivers United
Interfaith Network for Earth Concerns
League of Women Voters Idaho
League of Women Voters Oregon
League of Women Voters Washington
Montana Audubon
Montana Environmental Information Center
Montana Renewable Energy Association
Montana River Action
National Center for Appropriate Technology
Natural Resources Defense Council
New Buildings Institute
Northern Plains Resource Council
Northwest Energy Efficiency Council
NW Natural
NW SEED
OneEnergy Renewables
Opower
Opportunities Industrialization Center of WA
Opportunity Council
Oregon Environmental Council
Oregonians for Renewable Energy Progress
Pacific Energy Innovation Association
Pacific NW Regional Council of Carpenters
Physicians for Social Responsibility Oregon
Chapter
Physicians for Social Responsibility Washington
Chapter
Portland General Electric
Puget Sound Advocates for Retired Action
Puget Sound Cooperative Credit Union
Puget Sound Energy
Renewable Northwest Project
Save Our Wild Salmon
Sea Breeze Power Corp.
Seattle City Light
Seinergy
Sierra Club
Sierra Club, Idaho Chapter
Sierra Club, Montana Chapter
Sierra Club, Washington Chapter
Smart Grid Northwest
Snake River Alliance
Solar Installers of Washington
Solar Oregon
Solar Washington
South Central Community Action Partnership
Southeast Idaho Community Action Agency
Spokane Neighborhood Action Partners
Student Advocates for Valuing the Environment
Sustainable Connections
The Climate Trust
The Energy Project
The Policy Institute
Trout Unlimited
Union Of Concerned Scientists
United Steelworkers of America, District 12
US Green Building Council, Idaho Chapter
Washington Environmental Council
Washington Local Energy Alliance
Washington State Department of Commerce
Washington State University Energy Program
YMCA Earth Service Corps



NW Energy Coalition

for a clean and affordable energy future

From: JJ McCoy
Senior Policy Associate
NW Energy Coalition

August 16, 2016

To: Washington Utilities & Transportation Commission
Steven V. King, Executive Director

Re: Responses to Questions Regarding RCW 80.28.360

Thank you for the opportunity to comment on a potential policy statement regarding RCW 80.28.360, which authorizes Washington utilities to accelerate transportation electrification by installing charging infrastructure.

We appreciate the efforts of the Commission, its staff, Gov. Jay Inslee, and bill sponsor Rep. Chad Magendanz to address this important issue. The NW Energy Coalition fully supports a greater utility role in transportation electrification as endorsed by our membership ([link](#)). The largest share of Washington's carbon emissions come from transportation, which is also the least energy efficient sector of our economy. By electrifying vehicles and equipment of all types, Washington utilities can leverage their low-carbon energy sources to reduce emissions, improve air quality, lower fuel costs for their customers, put downward pressure on utility rates, and provide flexible resources to the electricity grid which may be amenable to demand response programs and help integrate variable renewable generation.

Our responses to your questions are on subsequent pages. We look forward to participating in your September workshop. Thank you for your consideration, and feel free to contact me at (206) 295-0196 or jj@nwenergy.org if you would like to discuss these issues further.

Regards,

JJ McCoy

CC: Tony Usibelli, Peter Moulton, Brian Young, Dept. of Commerce
Charles Knutson, Chris Davis, Keith Phillips, Governor's Office

General Statements

Commission Rules Should Support Broad Transportation Electrification Efforts – It’s worth repeating that House Bill 1853 (2015) made several very strong findings and statements that should fully authorize electric utilities to pursue broad-based transportation electrification. We believe that the Washington Utilities & Transportation Commission’s eventual policy guidance or rules in this area should reflect the spirit of those findings. In particular, the Legislature found that “expediting the transition to alternative fuel vehicles, including electric vehicles” provides the “greatest return on investment in reducing greenhouse gas emissions.” Further, utilities “must be fully empowered and incentivized to be engaged in electrification of our transportation system,” and the “legislature intends to provide a clear policy directive and financial incentive to utilities for electric vehicle infrastructure build out.” We hope that the utilities will adopt (and the Commission will support) comprehensive strategies for the sector, including not just passenger vehicles but also transit buses, work fleets, short haul vans and shuttles, light and heavy rail, non-road equipment (such as forklifts), port electrification, etc.

Role of Non-Incentivized Programs – Several provisions of RCW 80.28.360 authorize a 2% incentive rate of return on charging infrastructure capital spending, subject to rate impact and dwell time restrictions. The law is silent, however, on whether a regulated utility can pursue additional infrastructure work for the *standard rate of return*, perhaps with fewer restrictions. In conversations with Puget Sound Energy (a NW Energy Coalition member), staff have raised the possibility that the utility could pursue additional transportation electrification programs (such as DC fast charging, where the dwell time is likely to be less than 2 hours) also on a fully regulated basis without asking for the incentive rate of return, earning instead the standard return. The NW Energy Coalition agrees that utilities should be permitted to pursue a variety of transportation electrification efforts that have real and tangible ratepayer benefits, only claiming the extra incentive on the subset of programs that meet the specific terms of RCW 80.28.360.

Gross vs. Net Rate Impact Cap – RCW 80.28.360 is silent on whether the 0.25% rate impact cap should be applied with respect to gross capital cost impacts or applied net of offsetting new rate revenue from transportation. As with decoupling, this new revenue can put downward pressure on rates by spreading utility fixed costs over more kilowatt-hours. We would recommend applying the rate impact cap on a net basis, as this will reflect that actual net bill impact to customers.

Answers to UTC Staff Questions

Question – *What real and tangible benefits to ratepayers should electrical companies be required to quantify and demonstrate in order for the Commission to: a) make a prudence determination, and b) authorize an incentive rate of return?*

The ratepayer benefits are many and should be relatively easy to demonstrate. They include:

- Customers’ lower fuel costs relative to gasoline or diesel.
- Downward pressure on utility rates from the net new revenue using existing utility assets.
- Value to the utility of transportation loads as a distributed energy resource, with potential demand response programs and alignment with variable renewable resources. This will need to be quantified over time through pilot programs.

- Reduced greenhouse gas emissions, valued at either a social cost of carbon, an available carbon market price, or actually monetized by the utility if sold as an emissions reduction credit in a voluntary or mandatory compliance market.
- Improved human health from reduced air toxics emissions, including ozone, nitrogen oxides, and fine particulates.

Question – Should the incentive rate of return authorized in RCW 80.28.360(2) apply to EVSE investments that serve the public at large, or only to investments in infrastructure that serve the company’s electric customers?

This question is difficult to answer in general, because transportation electrification is likely to present many situations that are only partially addressed in RCW 80.28.360(2) and (3), which authorize the incentive rate of return for investments behind the customer meter where vehicles are expected to be parked for more than two-hour intervals. As noted in our testimony on the Avista docket, the location of charging infrastructure behind a customer meter or on a separate meter often depends on site-specific conditions, so both arrangements are present in the field today. We look forward to continuing this conversation with the Commission and the Legislature, as additional specification is likely to be needed here.

We can envision both public-facing and customer-only use settings that would clearly qualify for the incentive rate of return and others that may not. Some examples are shown in the table below for consideration:

	Behind Customer Meter?	>2 Hour Dwell Time?	Incentive Rate of Return?	Regular Rate of Return?
Passenger vehicles				
Level 1 or Level 2 charging				
Single- or multifamily residential	Yes	Yes	Yes	
Business fleet	Yes	Yes	Yes	
Workplace (employee)	Yes	Yes	Yes	
Public (e.g. retail or workplace / visitor parking)	Yes	Sometimes yes	Yes	
City street parking	Possibly	Sometimes	Yes?	
Utility stand-alone venture* at public site (e.g. retail or workplace / visitor parking)	No	Sometimes yes	No?	Yes?
DC fast charging				
At customer site (e.g. public parking, retail)	Probably yes	Usually no	No?	Yes?
Utility stand-alone venture*	No	Usually no	No	Yes?
Transit or school bus				
<i>En route</i> quick charge or trolley	Yes	No	No?	Yes?
Depot charging	Yes	Yes	Yes	
Short-haul shuttles and vans (fleet)	Yes	Probably	Yes	
Light or heavy rail	Yes	No	No	Yes?
Non-road equipment (e.g. forklifts)	Yes	Probably	Yes	
Port electrification	Yes	Yes	Yes	

* Note that if the utility were to operate a stand-alone public charging venture (Level 2 or DC Fast) with a regulated price, then arguably the distinction between the “public at large” and “electric customers” is meaningless, since any vehicle that rolls up to the station would be a direct utility customer.

Question – While EVSE increases electrical load, existing tests used by the Commission to determine the cost-effectiveness of energy efficiency investments may be applied or adapted for EVSE. Is the Total Resource Cost (TRC) an appropriate measure of whether EVSE investments provide benefits to ratepayers?

Question – What, if any, modifications to traditional cost-effectiveness tests are necessary or appropriate to use for investments in EVSE?

While the TRC does appear to be readily adaptable for use for transportation electrification, we are not prepared to comment in detail on the applicability of regulatory cost tests at this time, as this is a subject worthy of additional study. Various jurisdictions are looking at modified versions of the TRC, the Societal Cost Test (SCT), and the Ratepayer Impact Measure (RIM) test when evaluating programs. As applied to transportation electrification, these tests often compare gasoline vehicles vs. electric vehicles on such measures as vehicle acquisition price, available tax credits, fuel cost (including energy and capacity costs on the electric side), carbon emissions, air toxics emissions, and charging infrastructure cost.

Question – *What policies should the Commission consider to improve access to, and promote fair competition within the market? Please comment separately on how the Commission should address the following:*

- a) Improve access to EV charging as a regulated public service*
- b) Ensure that the utility procurement process for charging equipment is fair and competitive*
- c) Allow a competitive market for charging services to develop*

a) We recommend that the Commission improve access to EV charging with rules directing the utilities to reach low-income customers with charging service, as has been adopted in California. A variety of creative programs targeting low-income consumers have been proposed in recent months, including public electric car share services for low-income communities and partnerships with medical transport services or public housing authorities to electrify their fleet and shared ride vehicles. County transit agency vanpools and other transit modes should also be a priority for utilities to reach low-income communities, as they can be expected to have cost and air quality benefits in highly impacted communities. Port and industrial equipment electrification will also be expected to have disproportionate air quality benefits in low-income communities and should be prioritized.

b) and c) We are not overly concerned about competitive market impediments at this time. As demonstrated in the Avista proposal, the utility's RFP received a vigorous response, with 18 responses from hardware and network service vendors for vehicle charging infrastructure. A variety of hardware vendors are active in the field, including major companies like Siemens, Bosch, and Clipper Creek, and General Electric. Transportation electrification will require the utilities to work with their customers to find hardware and software solutions that fit their needs at lowest cost and derive optimum utility benefit. In some models, the "smarts" for charge management programs may reside in the charging station equipment; in others, the utility may be able to interface directly with the vehicle to manage charge times or power levels. It is not yet clear which model will deliver optimum value for lowest cost, so the utilities should be free to pilot test these different modes and present cost-benefit data for future phases of their electrification roll-out.

Question – *Considering RCW 80.12.020 when would it be appropriate for an electrical company to "gift" EVSE to a customer, as provided in RCW 80.28.360(4)? What notice should be given?*

We will need to do additional research before commenting on this specifically, but we are generally comfortable with gifting fully depreciated assets on the same basis and via the same procedures as is currently done for energy efficiency programs.

Question – Considering RCW 80.28.320, what other factors should the Commission consider in order to approve investor-owned utility proposals to own and operate EVSE as a regulated service?

In Oregon, the Public Utility Commission’s draft rule ([link](#)) contemplates two-year cycles for utility transportation electrification plans, which would be acknowledged by the Commission much like an integrated resource plan (IRP). Ultimately, the outputs (load forecasts, etc.) of the transportation plan would feed into the IRP as well. Under Oregon’s proposed structure, utilities would update their overall transportation electrification plan every two years but be free to propose individual programs (for example, targeting different vehicle or equipment segments) on an *ad hoc* basis as available within the plan goals. The Washington UTC should consider a similar structure, as it would provide a regular basis on which to evaluate and acknowledge utility transportation electrification efforts. Utilities operating in both states may also appreciate the parallel structure in their filings.