BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Petition of)	DOCKET UE-140626
)	
PUGET SOUND ENERGY,)	
)	ORDER 01
Petitioner,)	
)	
For an Accounting Order Authorizing)	ORDER DENYING WAIVER AND
Accounting Treatment Related to)	APPROVING ACCOUNTING
Funding and Cost Recovery of the)	PETITION ON CONDITIONS
Electric Vehicle Charger Incentive)	
Program and Waiver of WAC 480-100-)	
223.)	
)	

BACKGROUND

- On August 28, 2013, Puget Sound Energy (PSE or Company) filed with the Washington Utilities and Transportation Commission (Commission) in Docket UE-131585 revisions to its currently effective Tariff WN U-260, Electric Tariff G, designating a new Schedule 195, *Electric Vehicle Charger Incentive* (EVCI). PSE proposed a program to provide a one-time \$600 financial incentive to eligible PSE residential electric customers who install a "Level 2" electric vehicle (EV) charger at their residence, which enables the vehicles to be recharged faster than when using a standard charger. The Company proposed to fund the program through surcharges on Schedule 120, *Electricity Conservation Service Rider*. The original stated effective date of the tariff sheets was October 1, 2013, but the Company subsequently extended the effective date several times, most recently to May 1, 2014.
- PSE estimates that there are now approximately 5,000 electric vehicles in its service territory, creating a large additional residential load with the potential to contribute to peak load, depending on customer charging behavior. Commission Staff (Staff) is concerned that on-peak electric vehicle charging may ultimately drive the need for new generation resources and distribution infrastructure. Identifying residential electric vehicle charging patterns will allow PSE to determine whether charging occurs on-peak, and if mechanisms to shift electric vehicle charging off-peak are appropriate. Staff believes that collection of this data is an essential first step to evaluate whether there is a need for load-shifting programs, and if so, inform the design of those programs.

- On August 28, 2013, after working with Staff to refine the EVCI program, PSE filed with the Commission replacement pages, specifying that Schedule 195 would also fund data collection on customer charging patterns and analysis of EVs on PSE's system. The Company's filing included a Petition seeking an Accounting Order under WAC 480-07-370(b)(i) that authorizes PSE to fund the EVCI through surcharges on Schedule 120, as described above, and to defer the related costs of the EVCI program. The Company's filing also included a request for a waiver under WAC 480-100-223's rules on advertising.
- On April 10, 2014, the Commission dedicated significant time at its regularly scheduled open meeting to discuss a variety of policy issues surrounding PSE's proposed EVCI program. Following that open meeting, the Commission assigned the Company's accounting petition and waiver request to Docket UE-140626.
- On April 16, 2014, PSE filed replacement pages in Docket UE-131585 to lower the amount of the incentive to \$500, cap the total number of participants to 5,000 over the duration of the program, and end the program at the end of 2016.
- Staff reviewed the updated filing and supports the Company's efforts to design a study on EV load, including PSE's commitment to test multiple approaches to data collection and re-evaluate the study design after the first program year. Staff accepts that electric vehicle load will continue to increase in the near future. Staff believes that the \$500 incentive for customers with an EV who purchase a Level 2 charger will mainly contribute to increased adoption of Level 2 chargers rather than increased EV sales in PSE's service territory, making the EVCI program unlikely to directly increase electricity consumption. As explained at the April 24, 2014, open meeting, there is an efficiency improvement in moving from Level 1 to Level 2 chargers. Staff has also expressed its concern that the impact on peak may be significant. Because there is an efficiency improvement, and because it is necessary to study end-use load impacts to support the development of appropriate conservation program design, Staff finds the program would be appropriate for cost-recovery under Schedule 120 subject to specific conditions.
- Staff recommends granting the Company's petition for accounting treatment subject to the following conditions:
 - The rebate will be limited to \$500 per Level 2 vehicle charger;

- The company will study the end-use characteristics of electric vehicle load for a period of up to 32 months, to end no later than December 31, 2016;
- The number of participants in the study will be limited to 5,000, at least half of which will have interval metering data activated and collected at a minimum of one-hour intervals;
- During the study period, the company will regularly coordinate with its Conservation Resources Advisory Group and include the study's progress and findings in its regular reports of conservation accomplishments;
- At the end of the study, the company will consider, in consultation with the Conservation Resources Advisory Group, programs that will manage electric vehicle load in the most cost-effective manner, including but not limited to time-of-use rates, demand response, and direct load control.
- The Company agrees that Staff's recommended conditions are acceptable.

 Staff also reviewed the waiver request under WAC 480-100-223, the Commission's rule prohibiting recovery in rates of expenses for promotional advertising. Promotional advertising is defined as "advertising to encourage any person or business to select or use the service or additional services of an electric utility, to select or install any appliance or equipment designed to use the electric utility's service, or to influence consumers' opinions of the electric utility." WAC 480-100-223(2)(f) specifically excludes utility announcements or explanations of proposed tariffs and rate schedules from the definition of promotional advertising.
- Staff agrees with the Company's characterization of the EVCI as a conservation program. Although some EV users participating in the incentive program may use additional electricity by charging their vehicles on PSE's system, the ultimate aim of the program is to conserve energy by obtaining data about customer charging habits and avoid the need to procure additional simple-cycle gas-fired peaking units. According to studies by the Idaho National Laboratory (INL) and others, the installation of a higher-voltage Level 2 charger is expected to generate 2 to 3 percent efficiency savings compared to Level 1 charging. Similar to other demand-side resources, Staff views such savings as significant if the deployment of EV's accelerates over the next several years. To obtain data on customer charging habits, the Company must publicize the proposed tariff and explain the EVCI program, as allowed by the rule. Therefore, Staff recommends that the waiver request be denied as unnecessary.

DISCUSSION

- PSE must demonstrate that its EV charger incentive program is in the public interest and if so, that the Company's proposed method and rates for recovering the costs of that program are fair, just, reasonable, and sufficient. In Docket UE-131585, we determined to take no action on the filing and allow the Company's proposed tariff Schedule 195 to go into effect on April 25, 2014. Here, a majority of the Commission determines that although the Company's program is not perfect, it is fair, just, and reasonable starting point for collecting load data associated with the increasing trend of EV usage in PSE's service territory.
- We view the Company's proposal as a pilot program to evaluate projections of future load growth due to PSE's customers buying and driving EVs. The Company may be able to avoid increased future peak demand if it can learn more about how and when customers charge their EVs and educate them on the overall system benefits of non-peak charging. We wish to minimize the need for additional peaking resources in the future, if possible, and believe that this pilot program will contribute both to our knowledge of peak reduction techniques and assist in educating consumers of the need to plan carefully when recharging their EV batteries. Like our colleague Commissioner Goltz, we recognize that the financial incentive provided to qualifying customers who purchase a Level 2 charger will result in a small cost imposed on all customers across PSE's electric system. However, we see the study data and the incremental conservation savings, as well as the potential avoidance of acquiring new generation resources, as benefits justifying such costs.
- We approve the Company's EVCI as a pilot program to study EV charging across PSE's service territory for Level 1 and Level 2 charging and expect the Company to continue working with Staff to refine the incentives created by Schedule 195. PSE's petition for an accounting order should be granted, subject to the following conditions:
 - This is clearly a pilot for the purpose of studying charging usage in the Company's service territory among both Level 1 and Level 2 charging;
 - The rebate is capped at up to \$500 per Level 2 vehicle charger;
 - The Company studies the end-use characteristics of EV load for a period of up to 32 months, ending no later than December 31, 2016;

- The Company limits the number of participants in the study to 5,000, at least half of which will have interval metering data activated and collected at a minimum of one-hour intervals;
- During the study period, the Company regularly coordinates with its Conservation Resources Advisory Group and includes the study's progress and findings in its regular reports of conservation accomplishments; and
- At or before the end of the study, the Company will consider, in consultation
 with the Conservation Resources Advisory Group, programs that will manage
 EV load in the most cost-effective manner, including but not limited to timeof-use rates, demand response, and direct load control.

We encourage the Company to reach out to and request participation in the study from as many EV owners as possible during the course of this pilot program, including those customers with existing Level 1 chargers.

We agree with Staff that PSE's petition for a waiver of WAC 480-100-123 is unnecessary. In the context of this pilot program, publicizing Schedule 195 and the EVCI does not amount to promotional advertising. Accordingly, the waiver should be denied.

FINDINGS AND CONCLUSIONS

- 14 (1) The Washington Utilities and Transportation Commission is an agency of the State of Washington vested by statute with the authority to regulate rates, regulations, and practices of public service companies, including electric companies.
- PSE is an electric company and a public service company subject to Commission jurisdiction.
- 16 (3) The proposed accounting petition requested by PSE is reasonable and in the public interest and should be approved subject to the conditions set out in this Order.
- 17 (4) No rule waiver is necessary in this matter.

18 (5) This matter came before the Commission at its regularly scheduled meeting on April 24, 2014.

19 (6) The petition for an accounting order should be approved, subject to the conditions set out in this Order, and the petition for a waiver of WAC 480-100-223 should be denied.

ORDER

THE COMMISSION ORDERS:

- 20 (1) Puget Sound Energy's requested accounting treatment for the costs associated with the Electric Vehicle Charger Incentive is approved. Puget Sound Energy is authorized to recover the costs of the Electric Vehicle Charger Incentive program through Schedule 120 and defer costs associated with this program consistent with all other programs falling under Schedule 120, subject to the conditions set out in this Order.
- 21 (2) This Order shall not affect the Commission's authority over rates, services, accounts evaluations, estimates, or determination of costs in any matters that may come before it, nor be construed as acquiescence in any estimate or determination of costs claimed or asserted.
 - (3) The Commission retains jurisdiction over the subject matter and Puget Sound Energy to enforce the provisions of this Order.

DATED at Olympia, Washington, and effective April 30, 2014.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DAVID W. DANNER, Chairman

Separate statement of Commissioner Goltz:

I concur with this order on PSE's Petition for an Accounting (Docket No. UE-140626), but I write separately to restate my reasons, given orally at the April 24, 2014, Open Meeting, for opposing allowing the underlying tariff implementing PSE's Electric Vehicle Charger Incentive (EVCI) from going into effect (Docket No. UE-131585). If the Commission had accepted my proposal to suspend the EVCI tariff, this petition for an accounting order would not have been necessary.

Various parties supported the EVCI for differing reasons. Electric vehicle advocates supported it because it would increase incentives for PSE's customers to purchase electric vehicles (EVs), thereby resulting in a benefit to PSE's customers.¹

Commission Staff supported it as a means of gathering data on charging patterns of owners of EVs. The Company and the Energy Office within the Department of Commerce urged acceptance of the tariff on both grounds. As articulated below, I find neither the argument to be persuasive. The EVCI, as currently crafted, will not result in a net benefit to PSE's ratepayers. While it may result in data that is valuable to PSE and to the Commission to develop appropriate rate designs as more EVs come on line, the overall price of this research project – up to \$3.8 million – is too large a price to pay for data that in all probability could be obtained for a fraction of that cost.

The EVCI Will Not Result in a Net Benefit to PSE's Ratepayers

PSE and Commission Staff estimate that the total cost of the two-plus year program will be \$3.8 million. There will be a maximum of 5000 incentives of \$500 each paid to new or existing EV owners. That totals a maximum of \$2.5 million. The remaining amount, perhaps up to \$1.3 million,² would be available to PSE to do research on EV charging patterns.³

¹ See Letter from John McCoy, Seattle Electric Vehicle Ass'n (April 22, 1014).

² A good portion of this amount, perhaps several hundred thousand dollars, would be for the gathering of data. However, even given that fact, the total cost of the research seems exorbitant.

³ Of course, not all of this money may be spent, and the prudency of expenditures for the research would come before the Commission at a later date.

The Commission has approved ratepayer-funded incentives in other contexts, most notably energy conservation. However, the ratepayer charges that fund utility conservation programs are justified through a variety of economic tests designed to measure whether there are benefits to the system as a whole (system benefits) that outweigh the costs imposed on the ratepayers.

- Here, the Company and the Energy Office argue that the increased load attributable to greater deployment of EVs will result in greater sales of electricity by PSE and therefore greater revenues. Those revenues, or at least a portion of them, would be redistributed to PSEs customers through PSE's revenue decoupling mechanism. According to PSE, each electric vehicle will contribute approximately \$770 to the utility's margin.
- Even accepting that \$770 figure, the only incremental revenue to the Company would be that associated with EVs that would not have been purchased but for the incentive. So the benefit would be limited to incremental EVs, while the cost would be attributable to all EVs. (Indeed, the incentive is even available to those who purchased EVs back to 2012 and do not have a level 2 charger in their home.) As Commission Staff indicated at the April 24 Open Meeting, we do not know how many vehicles that would be. One can surmise with some confidence, however, that it will be but a fraction of the total EV sales. Adoption of EVs is growing, and would continue to grow, even without the \$500 EVCI. Indeed, there is in place a state sales and use tax exemption for the purchase of EVs that dwarfs the \$500 at issue here, 4 so any incremental EV acquisition likely would be a function of the larger tax exemption. 5

A number of parties also argue that, in addition, there will be environmental benefits associated with the EVCI. These could result from the displacement of gasoline-powered vehicles by EVs, with resulting benefits. However, those are societal benefits and, while worthy of consideration, the Commission should not go down the road of imposing on one utility's ratepayers burdens that benefit all of society.

⁴ RCW 82.08.809 (sales tax); RCW 82.12.809 (use tax).

⁵ Of course, to the extent that more fast chargers are deployed than otherwise would be, there likely would be some incremental increase in usage of electricity by EV owners with fast chargers as their vehicles would be available to them during more hours of the day. However, there is no information on the impact of additional fast charger deployment.

Indeed, historically, the Commission has resisted that the imposition of such financial burdens by not allowing a transfer of funds from ratepayers as a whole to a subset of ratepayers, even where there exists a "public purpose" rationale. The Commission so stated in a case involving PSE's predecessor, Washington Natural Gas (WNG). WNG had proposed a tariff rider to fund the construction of a series of compressed natural gas (CNG) fueling stations. While there was a public purpose behind the proposal to increase the use of CNG vehicles, the Commission rejected the proposal, stating:

The company proposes a transfer of funds from ratepayers to benefit a small group of users, although to support a public purpose. It may be more appropriate to spread the burden of supporting that public purpose among all the body politic, who all receive the social benefit, than to impose it on those who happen to be company ratepayers, who are a small group of that larger body politic. That is a task for the legislature, not for the Commission.⁶

- Even if we were able to quantify the societal benefits attributable to incremental EVs displacing gasoline-powered vehicles, it would be a major stretch to conclude that this tariff proposal would be cost-effective on that basis. The Seattle Electric Vehicle Association estimated that the "ratepayer and global benefit" would be worth \$900 to \$4600 per vehicle. But, again, the subsidies would go to all owners of vehicles, while this incremental environmental benefit would only be associated with the incremental EV sales.⁷
- This is not merely a policy issue; it is a legal one as well. While the Commission has broad authority to "regulate in the public interest," that authority is qualified by the phrase "as provided by the public service laws." Where the Commission has used ratepayer dollars for broader public purposes, it has done so with specific authorization "by the public service laws." Implementing renewable portfolio

⁶ Washington Utilities & Transportation Comm'n v. Washington Natural Gas Co., Docket UG-920840, 3d Supp. Order (Mar. 12, 1993).

⁷ Further, if we were going to include "global benefit" in the cost-benefit analysis, one would also have to include all costs. Among the cost to the State would be the foregone sales tax revenues. *See* note 3, *supra*.

⁸ RCW 80.01.040(3); see Cole v. Utilities & Transportation Comm'n, 79 Wn.2d 302, 306, 485 P.2d 71 (1971).

standards and providing for assistance to low income customers are two examples. But I do not find in the public service laws authority to use ratepayer funds to subsidize owners of EVs where there is no corresponding system benefit.

The Proposed Study of EV Charging Behavior Does Not Justify the EVCI Tariff

Commission Staff agrees that the EVCI cannot be justified based on financial or environmental benefits to ratepayers. Rather, Staff seeks to justify the incentive based on its interest in a study that has become part of the overall proposal. The \$500 subsidy for a fast charger would be contingent on PSE having access to the customer's load information for the purpose of data collection.

I have two issues with this argument. First, evaluating future loads seems like a function that the utility should have been performing all along. These research costs should be part of the general expenses of the utility, recoverable as any other expense. Every new topic for utility research need not be accompanied by a tariff surcharge. Second, the overall \$3.8 million cost of this study, including the \$500 payments to each of 5000 customers as an incentive to have access to their data, seems extremely high for a research project, even when one considers that the company has to spend a fair amount to collect the data from meters. I suspect that a request for proposals to research organizations and to research universities would have yielded proposals at far lower costs.¹⁰

Conclusion

For these reasons, I urged my colleagues to follow the sound recommendation of Public Counsel and suspend this tariff so that we could collaboratively seek to make the EVCI a better program. I share the view that more electric vehicles on the road

⁹ RCW 19.285; RCW 80.28.068.

¹⁰ There are some ways to improve on the research effort to be funded by this tariff. First, PSE should collect end-use load data for customers who use Level 1 chargers at their homes. Second, PSE should use its meters to collect 15 minute interval data from as many participants as possible. Third, PSE should provide a written report on the results of this program, including an analysis of the load profile of Level 1 and Level 2 EV charging to its Conservation Resource Advisory Group (CRAG). Given the discussions at the Open Meeting, it appears that the Company and Commission Staff will strive for these and perhaps other improvements in the research design and implementation.

will serve the public interest. Indeed, that is state legislative policy given the substantial sales and use tax exemption in place. Yet our job as economic regulators is to ensure that each program brought before us promotes the public interest at the least cost. Suspension of this tariff would have allowed us the opportunity to reduce the cost of this program and improve the load study's design.

However, because this matter was not suspended, and it has taken effect, I now support the related accounting order.

JEFFREY D. GOLTZ, Commissioner