Electric Vehicle DC Fast Charging Rate Public Hearing-Continued

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P.U.D.
CHELAN COUNTY

Background

- Staff provided electric vehicle direct current fast charging options to the Board on November 15.
- The Board of Commissioners initiated a public hearing on December 6.
- The Board continued the Public Hearing based on comments from the public.

Review of Staff Recommendation

Option#1-Status Quo Rate
Schedule 2

Customer Charge – $27

Energy (¢/kWh) – 2.5¢

Demand ($/kW) – $2.55

Hypothetical Monthly Bill – $2,700

Hypothetical Hourly Rate ~7.5¢/kWh

Option#2-Market Rate
Market Energy, COSA (Cost of Service Analysis) Demand (3 Month CP[1])

Customer Charge – $40

Energy (¢/kWh) – 5.64¢

Demand ($/kW) – $5.20

Hypothetical Monthly Bill – $5,600

Hypothetical Hourly Rate ~15.8¢/kWh

Option#3-Cost of Service
COSA Energy, COSA Demand (3 Month CP[1])

Customer Charge – $40

Energy (¢/kWh) – 3.10¢

Demand ($/kW) – Schedule 2 until June 1, 2023, then $5.20

Hypothetical Monthly Bill – $4,700

Hypothetical Hourly Rate ~13.2¢/kWh

Effective June 1, 2022

How It Compares

- Utilities implementing FC rates generally phase in demand charge.

Utility	Year 1 Demand Charge (kW)	Final Demand Charge (kW)	Final Hypothetical Hourly Rate[3] per kWh
Chelan PUD	$2.55	$5.20	13.2¢
Snohomish PUD[1]	$.60	$5.99	20.05¢
Tacoma Power[2]	$0.00	$8.51	21.5¢

[1]Schedule 20EV
[2]2018-aug-8-study-session-materials.pdf (mytpu.org)
[3]Based on data associated with Leavenworth Tesla charging station

Summary of Public Outreach

- Provided links for materials and a place to comment on Chelan PUD's EV web page: Electric Vehicles (chelanpud.org)
- Sent formal letters inviting comments to customers directly impacted by proposed rate
- Contacted local government entities and Plug-In North Central Washington to inform them of the proposed rate action
- Posted public notice for rate hearing in the Wenatchee World
- Provided time as part of public hearing for public comments

Overview of Customer Comments

Issue	Response
VC-How do we know that the majority of DC FC Users are Transient (out of the area).	Chelan PUD does not have data that would enable staff to bifurcate usage based on being an in or out of county customer. However, a regional 2017 study[1] forecasted 90% of charging would occur at home. Plug-in North Central WA's Chair also provided a statistic that at least 85% of EV owners charge at home. This also tracks anecdotally with what staff has heard from colleagues and acquaintances that own EV's. Economically this makes sense in that generally it's much cheaper to charge at home on the residential retail rate than to pay the DCFC rate. For example, in Chelan County charging at home equates to $.30/gallon equivalent vs. ~$3.00-$4.00/gallon equivalent when using a DCFC.
VC-Is a Chelan County resident that charges away from home considered a transient customer.	No, they are a customer that happens to fall within the expected 85%-90% usage pattern of customers that charge at home.
VC-There are limited DC FC stations for local non-Tesla owners who have smaller battery capacity cars. The rate will disincentive additional non-Tesla DC FC development harming the local economy and decreasing charging opportunities for locals.	It is hard to know for sure if the new rate will impact the development of additional DCFC stations. Through regional dialogue with DCFC developers and owners, it is known that they prefer to have increases phased in over time. This is one of the reasons staff recommended phasing in the demand charge over the next couple of years. Staff also felt it was reasonable to wait until after the WA Low Carbon Fuel Standard took effect so that the credits generated by the DCFC owners could help off-set the increased rate. It doesn't appear that DCFC rates in Chelan County are based on the rate they are charged by Chelan PUD. The rate EV drivers pay at the "pump" is $.30-$.40/kWh, or $3-$4/gallon equivalent. Based on current utilization, the current rate charging station owners are charged is about $.075/kWh, or about $.75/gallon equivalent. There doesn't appear to be a link between what the charging station owner chargers and what they pay. However, if the rate were passed through from the charging station owner directly to charging customer, the increase to the fill up is estimated to be $2.5-$5 dollars.

1. Energy + Environmental Economics: Economic Impact of Plug-In Electric Vehicle Adoption in Washington and Oregon. 2017.

VC= Verbal Comment
WC=Written Comment

WC-Why are DCFC being treated differently than other loads on the Schedule 2 rate.	Staff used the available data to develop a rate based on the unique characteristics of DCFC loads. These loads can be low to zero until vehicles come to charge. Depending on the number cars, this can quickly reach 1 MW in some circumstances and then drop off as cars leave. This is a different profile than most Schedule 2 customers, which is the current rate DCFC's are on.
WC/VC-Why use full COSA derived rates when other rates are subsidized with wholesale revenue.	The subsidized rates are intended to benefit Chelan County PUD electric customer owners. The large majority of DCFC usage is likely to be by out of County visitors. Not subsidizing DCFC rates is consistent with how Chelan PUD has priced other uses where the benefit would largely benefit non-customer owners like off-system sales. Charging COSA was a compromise between the status quo rate that does not cover costs and a market rate that would consider the full opportunity cost of provided power to DCFC instead of selling to the market.
WC-The rate violates stated commitment to electrification and environmental stewardship.	Chelan PUD does not have a stated electrification goal, However we serve approximately 98% of customers power needs from energy produced at our hydro facilities. Additionally, we have a strong commitment to helping our customers save and use energy more efficiently. This increases the amount of clean renewable hydropower available to local customers and the region, helping to support the integration of other renewables such as wind and solar power. Chelan PUD has a long and robust history of environmental stewardship in many other areas as well, which we do not believe is diminished by the proposed DCFC rate. By developing a DCFC rate now, we provide future DCFC owners with transparent and stable pricing so they can develop the appropriate cost-recovery pricing for their business models. Ultimately, it's hard to know if the new rate will disincentivize new DCFC development, however, state and federal programs that look to incentive charging infrastructure should decrease the chance of this happening. These are programs that Chelan PUD plans to assess as well.
WC-Comments hitting on items not associated with the rates. • Lack of L1 and L2 charging at multi-family facilities, PUD should consider installing these near multifamily dwelling locations. • Chelan PUD should install an L3 station at its new HQ location • PUD should cover HQ roof with PV's and support other large facilities like Walmart and Target to do the same. • We should be purchasing EV fleet vehicles	The first two bullet points are items that advocates could develop and apply for public power benefit dollars to address. Additionally, the District will be researching the business cases for Chelan to do this work when LCFS credits and other grant amounts have been finalized. There needs to be more certainty around the LCFS program, and the onerousness of federal dollars also needs to be assessed before a full business case developed. Regarding the solar bullet point. Chelan will be rolling out a new solar+ battery program in 2022 that aligns installations with the value they can bring to the grid and evolving markets. Regarding the last bullet, in 2022, fleet will incorporate the results of current study to "right-size" the passenger and light truck fleet and determine opportunities from EV utilization. At the same time, they will be deciding on an interim plan for passenger vehicle deployment.

Time for Public Comment

Next Steps

- Action on proposed rate, resolution prepared for Board consideration
- Send formal notice of rate change to impacted customers
- If approved, rate change becomes effective June 1, 2022