Public Service Commission of Wisconsin

Rebecca Cameron Valcq, Chairperson
Ellen Nowak, Commissioner
Tyler Huebner, Commissioner

4822 Madison Yards Way
P.O. Box 7854
Madison, WI 53707-7854

May 24, 2021

Re: Application of Wisconsin Electric Power Company, as an Electric Public Utility, for Approval of Electric Vehicle Charging Pilots — 6630-TE-106

Comments Due:	Address Comments To:
Thursday, June 3, 2021 – 1:30 p.m.	**Steffany Powell Coker** Secretary to the Commission Public Service Commission P.O. Box 7854 Madison, WI 53707-7854
This docket uses the Electronic Regulatory Filing system (ERF).	

To the Parties:

The Commission memorandum concerning the application of Wisconsin Electric Power Company for approval of electric vehicle charging service programs, is being provided to the parties for comment. Comments must be received by 1:30 p.m. on Thursday, June 3, 2021. Party comments must be filed using the ERF system. The ERF system can be accessed through the Public Service Commission's website at http://psc.wi.gov. Members of the public may file comments using the ERF system or may file by mail addressed to the Public Service Commission, P.O. Box 7854, Madison, WI 53707-7854.

Please direct questions about this docket or requests for additional accommodations for persons with a disability to the Commission's docket coordinator, Tyler Meulemans, at (608) 266-3587 or tyler.meulemans@wisconsin.gov.

Sincerely,

Steffany Powell Coker

Steffany Powell Coker
Secretary to the Commission

SPC:TCM:cmb:DL: 01804826

Attachment

PUBLIC SERVICE COMMISSION OF WISCONSIN
Memorandum

May 24, 2021

FOR COMMISSION AGENDA

TO: The Commission

FROM: Martin R. Day, Administrator
Tara N. Bachman, Deputy Administrator
Jackie Madsen, Bureau Director
Tyler Meulemans, Public Utility Rates Analyst
Ben Kaldunski, Public Utility Rates Analyst
Kyle Saxe, Public Utility Auditor
Nick Schuster, Public Utility Auditor
Division of Energy Regulation and Analysis

Kristy Nieto, Administrator
Bradley Rose, Bureau Director
Laura Fay, Consumer Analyst
Division of Digital Access, Consumer and Environmental Affairs

RE: Application of Wisconsin Electric Power Company, as an Electric Public Utility, for Approval of Electric Vehicle Charging Pilots — 6630-TE-106

Suggested Minute: The Commission (accepted/accepted with conditions/did not accept) the application of Wisconsin Electric Power Company, for approval of its proposed Charger Only EV Program – Residential (COEV-R).

The Commission (accepted/accepted with conditions/did not accept) the application of Wisconsin Electric Power Company for approval of its proposed Whole House EV Program – Residential (WHEV-R).

The Commission (accepted/accepted with conditions/did not accept) the application of Wisconsin Electric Power Company for approval of its proposed EV Program – Commercial (EV-C).

The Commission (granted/granted in part, with limitations and/or conditions/denied) the request of Wisconsin Electric Power Company for a waiver of specific requirements in the Wisconsin Administrative Code and the rules found in Wisconsin Electric Power Company's tariffs needed to implement COEV-R, WHEV-R, and/or EV-C.

> The Commission (accepted/accepted with conditions) Wisconsin Electric Power Company's proposed low-income program OR the Commission rejected Wisconsin Electric Power Company's proposed low-income program and directed the utility to file a follow-up plan (with assistance from Commission staff/including information on how the utility will use community engagement to inform program design and implementation/both) OR the Commission rejected Wisconsin Electric Power Company's proposed low-income program.

Introduction

On October 7, 2020 Wisconsin Electric Power Company (WEPCO) filed an application with the Commission for approval of three electric vehicle (EV) service programs and one low-income program. (PSC REF#: 397968.) WEPCO's application includes two pilot residential EV programs, one pilot commercial EV program, and a pilot proposal for a low-income program. The Commission issued a Notice of Investigation on November 5, 2020. (PSC REF#: 399550.) Citizens Utility Board of Wisconsin (CUB), RENEW Wisconsin (RENEW), Wisconsin Industrial Energy Group (WIEG), and ChargePoint requested to intervene and were granted intervenor status. (PSC REF#: 401401.) None of the parties requested a hearing, and no hearing was required or held.

WEPCO's Proposal Description

WEPCO is proposing two pilot residential EV programs, one pilot commercial EV program, and a pilot low-income program. The residential EV programs proposed in the application would combine providing customers with EV charging equipment with a time-of-day (TOD) rate design, and attempt to address the upfront charging infrastructure cost barrier to EV adoption. The two residential EV programs are similar, but would allow residential customers with EVs to participate in different ways. The first residential program, which WEPCO calls the Charger Only EV Program – Residential (COEV-R), would allow customers to contract with WEPCO to install an EV charger, in which household usage would continue to be billed at the residential or farm flat energy charge rate (Rg-1 or Fg-1), while the EV charger usage would be measured and billed at a new TOD rate specifically designed for electric vehicle charging (EV TOD). All usage for the property, both house usage and EV charger usage, would pass through and register on the primary house meter at the property. However, the EV chargers also contain sub-meters that WEPCO proposes to use to parse out and subtract the EV charger energy use from the total house usage for the application of the respective Rg-1 or Fg-1 versus EV TOD usage rates.

The second residential program proposed by WEPCO, referred to as the Whole House EV Program – Residential (WHEV-R), is for residential customers who want to contract with WEPCO for an EV charger, and who also wish to keep their household energy use metered on WEPCO's existing TOD rate (Rg-2) and/or participate in one of WEPCO's parallel generation programs, such as customers who own solar photovoltaic panels and interconnect with WEPCO's system. The EV load of WHEV-R customers would also be subject to Rg-2.

Under both residential EV programs, customers would have two options to pay for the installed charging unit plus associated ongoing service costs, including maintenance and administrative costs. The two options would be "bundled" or "prepay." The bundled option has no upfront fee; participating customers would pay a monthly fixed charge that would enable WEPCO to recover all costs of the EV charger and associated services over the course of the contract. Upon the end of contract, customers who choose the bundled option would be able to sign a new 10-year contract, under which WEPCO would continue to own and maintain the existing charger or replace with another charger if needed. WEPCO plans to redeploy EV chargers among customers electing service under the bundled option if a customer terminates their contract early, or if the charger is still usable after the end of the 10-year term.

Under the second option—prepay—participating customers would pay the costs of the EV charging unit upfront, and would also be required to pay a monthly fixed charge for the remaining associated service costs. Only customers electing service under the prepay option are guaranteed to receive a new EV charger. Prepay comes with the additional option for the customer to keep the EV charger after the contract is complete, or sign another contract with WEPCO that would include a new EV charger. WEPCO proposes to continue to maintain and repair the EV charger after ownership is transferred to the customer, but would require the customer to replace this EV charger if it breaks by signing a 10-year contract if they wish to continue to participate in the program. WEPCO designed both payment options in order to collect all EV charger and service costs, and hold all other non-participating customers harmless to ensure there is no cross-subsidization.

In its application, WEPCO describes how these residential programs were designed based on the residential programs that were recently approved for Northern States Power Company-Wisconsin (NSPW) in docket 4220-TE-104.[1] NSPW used its experience gleaned from its sister utility, Northern States Power Company-Minnesota (NSPM), and NSPM's own EV charger pilot program that was implemented in Minnesota.

WEPCO also describes proposed accounting treatment, marketing considerations, annual reporting, and experience WEPCO would gain in order to better understand load management that would be needed in future EV high-penetration scenarios.

WEPCO is also proposing in this application an EV Program – Commercial (EV-C) which aims to address high upfront costs that may be faced by commercial class customers creating EV charging infrastructure for their own business purposes. EV-C would be an

[1] *See* Final Decision in docket 4220-TE-104 (PSC REF#: 393776).

alternative option for customers who must pay WEPCO for extension services,[2] and would allow WEPCO the ability to own and maintain “make-ready” EV charging equipment (equipment up to the charger but not including the charger) for commercial customers who wish WEPCO to do so. Commercial customers would also have the option to have WEPCO own the make-ready equipment and the EV chargers on the customers’ premises for a fee.

WEPCO proposes an alternative “revenue-based extension allowance” for its commercial program, which was also approved for NSPW in docket 4220-TE-104. The nature of the revenue-based extension allowance will be discussed later in this memorandum. The costs for WEPCO to install, own, and maintain equipment and wiring on a commercial customer’s premises would be part of the extension costs.

The proposed contract between participating residential customers and WEPCO contains several terms and conditions, and for COEV-R, WEPCO specifically requests that the Commission grant waivers of specific requirements of the Wisconsin Administrative Code. These waiver requests for COEV-R are related to certain billing, consumer complaint, and metering requirements of the Code. WEPCO does not expressly request any waivers of Wisconsin Administrative Code requirements to implement the WHEV-R program, but the tariff sheets for each of the residential options includes language stating that customers choosing the rate schedule waive rights to billing adjustments, including any rights under Wis. Admin. Code § PSC 113.0406(4). Accordingly, a waiver for WHEV-R program may also be necessary. In connection with the proposed commercial program, WEPCO is requesting that the Commission grant a waiver of specific requirements in Wis. Admin. Code §§ PSC 113.1005(1), 113.1007(1),

[2] The current process requires customers to pay for utilities to build extensions to serve the customers’ new load upfront. The customers receive an embedded extension allowance, which is determined by the Commission on a class-by-class basis in every utility rate case. In addition to being required by Wisconsin Administrative Code, the extension allowance is also written into most utility tariffs in the state, including WEPCO’s.

113.1008(3), and rules found in WEPCO's tariffs. These waiver requests for the commercial program are related to the embedded extension allowance methodology that is required by the code and tariff provisions. The waiver requests for COEV-R, WHEV-R, and EV-C will be discussed in detail later in this memorandum, following the analysis of the proposed programs.

Background of Commission Consideration of Utility Residential EV Programs

Three other utilities in Wisconsin have implemented EV charging programs for residential customers. Madison Gas and Electric Company (MGE) has its Charge@Home Program that installs an EV charger with no upfront costs for a bundled fee of about $20 per month.[3] The Commission approved the Charge@Home Program as part of MGE's rate case in docket 3270-UR-120 "on an experimental basis," noting that the information collected on customers' charging behavior could have value for informing future rate design related to EVs.[4] (PSC REF#: 226563 at 53-54.) Wisconsin Power and Light Company (WP&L) offers its customers a rebate of up to $500 on Level 2 chargers if customers fill out a form and meet certain criteria.[5] WP&L did not seek Commission approval for this rebate program, because the funding comes from utility shareholders rather than ratepayers. Most recently, the Commission approved residential and commercial programs for NSPW, upon which WEPCO's proposal is based.

The Commission also denied two EV-related proposals in 2019. First, the Commission denied an application from the City of Sun Prairie, as an electric public utility (Sun Prairie), for a new residential charging rate in docket 5810-TE-106. The application would have created an

[3] See MGE's webpage: Charge@Home Program - Madison Gas and Electric - Madison, Wisconsin.
[4] The Commission also approved a separate rate related to public EV charging stations. EV customers must pay MGE based on the amount of time that their EV uses the MGE public charging station.
[5] See WP&L's webpage: Alliant Energy - Electric Vehicle Home Chargers and Rebates.

additional time-of-use (TOU) rate for residential customers, which reduced prices for overnight charging as a price signal for customers to charge their EVs when wholesale prices are at their lowest. The Commission's denial concluded that the proposal appeared premature in light of questions about whether the new rate could achieve revenue neutrality and whether Sun Prairie could collect adequate charging data to assess the program. However, the Commission also encouraged Sun Prairie to further work on EV proposals with stakeholders. (PSC REF#: 378093.)

Second, the Commission denied Wisconsin Public Service Corporation's and WEPCO's proposed EV charger rebates in rate case dockets 6690-UR-126 and 5-UR-109, respectively. The proposed programs would have provided customers rebates of up to $1,000 to purchase and install home chargers, and required participants to enroll in TOU rates. The Commission cited a lack of supporting evidence for several elements of the program design, including the proposed rebate amount. (PSC REF#: 381325, PSC REF#: 381305.)

Utility Ownership of EV Charging Infrastructure

For the residential COEV-R and WHEV-R programs, WEPCO proposes to own and maintain all make-ready equipment and EV chargers installed for customers who contract for the EV services. For customers who choose the prepay option, they would have the option for WEPCO to transfer the ownership of the EV charger and equipment to the customers at the end of the 10-year term, at which point the customers could continue to use the EV TOD rates without additional EV charger fixed costs from WEPCO going forward. For customers who choose the bundled service option, WEPCO would continually own the EV charger. At the end of the 10-year contract, customers who choose the bundled option would be able to sign a new

10-year contract, in which WEPCO would continue to own and maintain the existing charger or replace it with a new charger if needed.

For the commercial program, WEPCO proposes two utility-ownership options related to EV charging infrastructure. The first option would allow WEPCO to own make-ready equipment, such as wiring and conduit, needed to connect EV chargers to the electric grid, but not the EV chargers themselves. The other customer option would allow WEPCO to own the make-ready equipment as well as the EV chargers and associated equipment. The primary goal of the commercial program is to gain utility experience with installing and owning make-ready equipment, as well as EV charging equipment, on commercial customers' premises, and to gain experience with a proposed revenue-based extension allowance. WEPCO believes the combination of these two elements in the commercial program would address the high upfront costs of installing EV charging infrastructure, which can be an obstacle for persons, government services, and businesses desiring to transition to EV ownership.

The National Association of Regulatory Utility Commissioners' (NARUC) 2019 report "Electric Vehicles: Key Issues, Trends and Considerations for State Regulation"[6] highlights utility ownership of EV infrastructure as an area receiving significant attention and discussion in many states. Additionally, the Commission has included ownership and operation of EV infrastructure as a core topic in the Order of its general EV policy investigation in docket 5-EI-156. ([PSC REF#: 402117](PSC REF#: 402117).) While NARUC's analysis and the comments filed with the Commission to-date in the EV policy investigation have focused on ownership issues related to public charging stations, general considerations raised in both sources can still have relevance for the customer-premise equipment in NSPW's proposals. For a summary of stakeholder

[6] "Electric Vehicles: Key Issues, Trends and Considerations for State Regulators." https://pubs.naruc.org/pub/32857459-0005-B8C5-95C6-1920829CABFE.

comments on the Order in the Commission's EV investigation, see Commission staff's comment summary memorandum in docket 5-EI-156. (PSC REF#: 401838.)

Stakeholders with expressed reservations regarding utility infrastructure ownership have cited concerns that the involvement of monopoly utilities could interfere with the effective operation of a competitive private market. Additionally, some stakeholders are concerned that allowing utilities cost recovery on owned assets could risk encouraging utilities to overbuild assets or allowing non-EV owners to cross-subsidize costs for EV owners. On the other hand, supporters of utility ownership have contended that utility investments could be beneficial for meeting growing demand for EVs, particularly since private actors may not yet have adequate business cases to support and scale the market. Some supporters have also cited the potential benefits from utilities' existing experience with managing the electric grid, and the potential capacity of utilities to address the needs of hard-to-reach segments within their customer base.

The NARUC report does not take a stance on utility ownership of EV infrastructure, but suggests that state public utility commissioners should consider stakeholder and ratepayer considerations regarding utility ownership in relation to EV market transformation, cost, equity, and integration of EVs into the grid. The Commission's EV policy investigation has issued an order that creates a framework designed to provide regulatory clarity on the criteria the Commission will use to evaluate EV program proposals from any electric utility.[7]

Residential Programs: COEV-R and WHEV-R

Residential Programs – EV TOD Rates

An important aspect of evaluating WEPCO's proposed residential EV TOD tariff options is estimating bill impacts of proposed EV TOD rates against existing service options. In response to

[7] *See* Order in Docket 5-EI-156 (PSC REF#: 402117).

Commission staff data request AMK-1.1, WEPCO provided bill estimates for EV loads on the different rate options currently available and proposed. (PSC REF#: 405627.) These calculations illustrate the importance of understanding EV charging behavior to fully capture the economic benefits of taking service under the proposed COEV-R and WHEV-R tariffs.

WEPCO's cost estimates are based on the assumption that 90 percent of EV charging occurs during off-peak hours (12:00 a.m. to 8:00 a.m.), while 6 percent occurs during shoulder/mid-peak hours (8:00 a.m. to 12:00 p.m. and 8:00 p.m. to 12:00 a.m.), and 4 percent occurs during on-peak hours (12:00 p.m. to 8:00 p.m.). These estimates are based off the assumptions used by NSPW in its proposal for similar programs. In the memorandum for the NSPW program, Commission staff expressed concerns about the validity of this assumption as the small sample size provided by NSPW showed load profiles that charged at a higher rate outside of the off-peak hours than what was estimated. Because of this concern, Commission staff again recommends that WEPCO collects load profile data from customers that enroll on this program to see how customers' charging patterns align with the pricing time periods.

System Impacts of Residential EV Load

WEPCO did not provide the Commission with an estimate of enrollment on these two projects, but it did propose to have a system-wide cap for total enrollment. WEPCO proposes a total cap of 7,500 customers across both programs cumulatively. Commission staff finds this proposal to be reasonable given the limited experience in operating these tariffs in Wisconsin. Should WEPCO see 7,500 customers enroll on the program, it will be able to collect a substantial amount of data to evaluate the effectiveness of the programs. Upon analysis of these data, WEPCO will have the option to propose any necessary modifications to the tariff, including raising or lifting the customer cap entirely.

Commission Alternatives – COEV-R Program Approval

Alternative One: Subject to the Commission's determination relating to waivers of specific Wisconsin Administrative Code and tariff provisions, accept WEPCO's proposed COEV-R program without modifications or conditions.

Alternative Two: Subject to the Commission's determination relating to waivers of specific Wisconsin Administrative Code and tariff provisions, accept WEPCO's proposed COEV-R program with one or more of the conditions or modifications discussed below relating to accounting, marketing, performance metrics, and reporting.

Alternative Three: Do not accept WEPCO's proposed COEV-R program and direct WEPCO staff to work with Commission staff as discussed by the Commission.

Commission Alternatives – WHEV-R Program Approval

Alternative One: Subject to the Commission's determination relating to waivers of specific Wisconsin Administrative Code and tariff provisions, accept WEPCO's proposed WHEV-R program without modifications or conditions.

Alternative Two: Subject to the Commission's determination relating to waivers of specific Wisconsin Administrative Code and tariff provisions, accept WEPCO's proposed WHEV-R program with one or more of the conditions or modifications discussed below relating to accounting, marketing, performance metrics, and reporting.

Alternative Three: Do not accept WEPCO's proposed WHEV-R program and direct WEPCO staff to work with Commission staff as discussed by the Commission.

Residential Accounting Treatment

Residential customers who choose the prepay EV charger option would be responsible for paying for the entire installation of EV charger and equipment. The estimated cost would be

$800 for the Level 2 charger installation. Per WEPCO's response to Commission staff data request AMK-1.17 (PSC REF#: 405643), this amount is based on the EV charger cost, EV charger installation cost, and annual software/warranty cost from research done of various resources in WEPCO's service area. The amount seems appropriate for WEPCO and is similar to NSPW in docket 4220-TE-104, but currently no requests for proposal have been conducted to confirm. For the COEV-R program, these prepay customers would also pay a monthly $9 charge. Customers who choose the COEV-R bundled option would not have to pay for the Level 2 charger upfront, but would have a monthly charge of $18 for the Level 2 charger. For WHEV-R, which would not provide separate household and EV charger metering, WEPCO proposes a monthly $5 charge for prepay customers, and a monthly $14 charge for bundled customers. The structure of both programs' monthly charges are similar to NSPW's in docket 4220-TE-104.

For customers who choose the prepay option, WEPCO would allow them to continue to be enrolled in the tariffs for as long or short of a period as they desire. WEPCO would transfer the ownership of the EV charger and equipment to the customers at the point they withdraw from the program. It is not clear whether the ownership would transfer if it is before the 10-year period expected by the bundled customers. No information was provided by WEPCO as to whether customers whose chargers break would have to re-enroll, or their program would continue after purchasing a new charger upfront.

For residential customers who choose the bundled service, WEPCO would continue to own all charging equipment and would continue to perform maintenance on them. Customers with bundled service would be under a 10-year agreement term. If they wish to continue in the program after the 10-year term, they would continue to pay the bundled customer charge, with

WEPCO continuing to own and maintain EV chargers for those customers and replace them if necessary. Customers choosing the bundled option who leave the program during the 10-year contract term would be required to pay a $200 removal fee, similar to NSPW in docket 4220-TE-104. The proposed residential programs COEV-R and WHEV-R would require the customer to pay for the cost of wiring and permitting, since the estimated costs vary by customer premises. WEPCO has relationships with installers who would be able to contract to do the wiring at the same time they install the charger, thereby simplifying customers' experience.

WEPCO is proposing equipment be accounted for in a similar manner to NSPW in docket 4220-TE-104. All COEV-R charging equipment would be recorded in Federal Energy Regulatory Commission (FERC) Account 101, Plant In Service (FERC Plant Account 370, Meters); and all WHEV-R charging equipment would be recorded in FERC Account 101, Plant In Service (FERC Plant Account 371, Installations on Customers' Premises). For the prepaid option, equipment for both programs would be recorded at $0, and for the bundled option, equipment for both programs would be recorded at cost in plant. Depreciation expense would be recorded to FERC Account 403, Depreciation Expense. WEPCO would record cost in the same manner as other mass distribution assets. Assets purchased would be capitalized as an electric distribution asset to FERC Account 101 and would be further classified into FERC Plant Account 370 or 371 in vintage groups for the purpose of depreciation rather than as individual equipment. In its application, WEPCO provides proposed monthly fixed charges, but has not yet provided the calculations, such as levelized annual revenue requirement, to support the charges. Commission staff requested information regarding monthly charges in AMK-1.15 (PSC REF#: 405641) and AMK-1.16 (PSC REF#: 405642) with no detailed responses provided by WEPCO.

Similar to the accounting procedures for NSPW in docket 4220-TE-104, Commission staff notes that recording the bundled equipment in plant raises concerns that costs could be socialized to all ratepayers rather than being included in participant fees. In addition, by recording the plant at cost WEPCO could also earn a return on rate base for a double recovery. Since the customer would pay for the charging equipment either by prepaying or financing the equipment over its expected life, in which case WEPCO would earn a return through the monthly fixed charge, Commission staff suggests that the Commission could reasonably address these concerns by instead requiring WEPCO to record the assets as $0, or below the line, regardless of how the customer would pay for the equipment. As Order Condition 3 in the Final Decision in docket 4220-TE-104 directed NSPW to work with Commission staff to develop accounting procedures to ensure there would be no cross-subsidization from non-participating customers, WEPCO is willing to work with Commission staff to develop accounting procedures to ensure there would be no cross-subsidization.

WEPCO states that cross-subsidization would be avoided since the programs are designed to fully compensate WEPCO. Commission staff recommends that if programs are approved, accounting and tracking for these expenses should be specified so that cost and revenue components, such as cost of charging equipment, are easily identifiable and reportable. Additionally, program costs and revenues would have to be separated from non-participating customers during rate case cost-of-service study (COSS) reviews in order to ensure that non-participants would not be allocated program costs in rate design. WEPCO proposes to work with Commission staff to ensure that program costs and revenues would be appropriately tracked and no cross-subsidization from non-participating customers would occur.

Commission Alternatives – Residential Accounting Treatment

Alternative One: If the residential EV programs are approved, accept WEPCO's proposed accounting treatment without modifications or conditions.

Alternative Two: If the residential EV programs are approved, direct WEPCO to work with Commission staff to agree on accounting procedures and COSS approach, to better track program costs and revenues, and ensure there is no cross-subsidization from other non-participating customers. WEPCO shall provide accounting treatment and procedures for the programs within 60 days of the order, including a requirement that WEPCO record the customer charging equipment assets as $0, or below the line, regardless of how the customer would pay for the equipment.

Alternative Three: If the residential EV programs are approved, direct WEPCO to implement accounting treatment and procedures for the EV programs per Commission discussion.

Commercial Program – Proposal Description

WEPCO states that its commercial program aims to address the high upfront costs faced by commercial class customers that wish to create EV charging infrastructure for their own business purposes. Currently, customers must pay upfront for utilities to build extensions to serve the customers' new load, but customers receive an embedded extension allowance, which is determined by the Commission on a class-by-class basis in every utility rate case. The embedded allowance is based on class-average distribution infrastructure costs, which are embedded in utility charges that the customer pays continually once service is established. The embedded allowance essentially credits the customer for average costs of distribution extensions that are paid by all customers on an ongoing basis. The embedded extension allowance methodology is required by Wisconsin Administrative Code and WEPCO's tariffs.

For its commercial program WEPCO proposes to offer a program that provides commercial customers with a choice to replace the embedded extension allowance methodology with an optional revenue-based extension allowance, which is based on future revenues that WEPCO would receive from commercial customers based on distribution (customer) demand charges. As described in WEPCO's application, the revenue-based "allowance formula calculates an allowance such that the levelized annual revenue requirement of the investment necessary to serve the increased load equals the annual incremental distribution demand revenues from the increased load." (PSC REF#: 397968.) The commercial program would also allow WEPCO to incorporate the costs of utility-owned and -maintained make-ready equipment into the total cost of the extension. The make-ready equipment would include service panels, conduit, wiring, and other equipment needed to support EV chargers on the customers' premises. Finally, the commercial program would provide an additional option for WEPCO to own and maintain EV chargers and associated equipment for a monthly service charge.

WEPCO is seeking to offer any commercial customer that requires an upgrade, or new interconnection for service, the greater allowance of either WEPCO's standard embedded allowance credit or the proposed revenue-based extension allowance. WEPCO's proposal for calculating the revenue-based extension follows a similar methodology that is used by natural gas utilities,[8] where the average annual carrying costs would be recovered by the additional distribution demand revenue from the new load growth.

[8] Natural gas utilities are governed by a different section of the Wisconsin Administrative Code. *See* Chapter PSC 134 of the Wisconsin Administrative Code.

WEPCO claims that this revenue-based extension would hold non-participating customers harmless because: (1) the additional distribution demand revenue would cover the costs of the larger extension allowance, (2) distribution demand charges would not encapsulate all of the costs associated with distribution, and (3) this new growth would provide marginal benefits to all customers as the total system demand grows. Commission staff notes that while in the long run, non-participating customers may be held harmless, in the initial years the additional credit for the revenue-based allowance (assuming it is larger than the embedded cost allowance) would be funded by all other ratepayers in WEPCO's territory. Only after WEPCO collects future distribution demand revenues from the new load that equals the revenue-based allowance, would both WEPCO and all its ratepayers be made whole.

WEPCO recognizes that the forecasted load and actual load will not always align, so it is including a refund provision for the first two years after a customer receives a revenue-based extension allowance. If actual demand falls below 25 percent of what was expected and installed for, the customer will be responsible for refunding WEPCO any excessive allowance that they should not have received given their actual demand.

Commission Alternatives – Commercial Program

Alternative One: Subject to the Commission's determination relating to waivers of specific Wisconsin Administrative Code and tariff provisions, accept WEPCO's proposed commercial program without modifications or conditions.

Alternative Two: Subject to the Commission's determination relating to waivers of specific Wisconsin Administrative Code and tariff provisions, accept WEPCO's proposed commercial program with one or more of the conditions or modifications discussed below relating to accounting, marketing, performance metrics, and reporting.

Alternative Three: Do not accept WEPCO's proposed commercial program, and instruct WEPCO staff to work with Commission staff per Commission discussion.

Commercial Accounting

In connection with the proposed commercial program, similar to NSPW in docket 4220-TE-104, WEPCO states that distribution extension costs, including make-ready infrastructure costs, would be treated identically to the current extension rules. Extension costs would be added to rate base in the appropriate FERC account and offset by customer contribution in aid of construction (CIAC). If the customer has a shortfall in the expected incremental load in the first two years, they are required to refund a portion of the allowance, including any rebate received. This would be in the form of paying any additional customer CIAC offsetting the rate base and, if appropriate, a reduction to the regulatory asset.

The purchase and installation of the charging and metering equipment for the commercial EV program would be capitalized as an electric distribution plant. This would be accounted for in FERC Account 101 (Plant In Service) within WEPCO's Plant Account 371 (Installations on Customers' Premises). WEPCO is proposing the same accounting practices for the commercial program as it proposed for the prepaid and bundled options under the residential programs, including that prepaid equipment for the commercial program will be recorded at $0. This creates the same Commission staff concerns discussed above with the residential programs' accounting discussion. Since the customer would pay for the charging equipment, the Commission could choose to require WEPCO to instead record the assets as $0, or below the line, which would ensure the charging equipment would not be included in rate base.

Additionally, as noted in the application, WEPCO is seeking deferral to offset rebates for commercial customers. The deferral would be directly assigned to commercial EV customers in a future rate proceeding per WEPCO's response to Commission staff data request AMK-1.13 (PSC REF#: 405639).

Prior Commission orders have adopted and applied the Commission staff accounting policy team's Statement of Position 94-01,[9] and set forth the criteria for evaluating the reasonableness of the use of the deferral accounting method. The criteria may be considered individually or together with other criteria. They are as follows:

1. The amount is outside the control of the utility;
2. The expenditure is unusual (e.g., non-typical, non-customary) and infrequently recurring (e.g., does not occur every two to five years);
3. The immediate recognition of the expenditure causes the utility serious financial harm or significantly distorts the current year's income; or
4. The immediate recognition of the expenditure causes significant ratepayer impact.

The rebates that WEPCO is requesting to defer are unusual and infrequently recurring. In addition, without deferral authorization, WEPCO would be required to immediately recognize the rebate costs associated with the commercial EV charging program, which are currently unknown. The Commission may wish not to approve the rebates because this could cause cross-subsidization for participating EV customers who did not receive the rebate.

[9] See, e.g., Order, Application of Northern States Power Company-Wisconsin, for Deferred Accounting Treatment for Pension Settlement Accounting Expense, docket 4220-AF-100 (Wis. PSC Dec. 13, 2017) (PSC REF#: 334830); Order, Northwestern Wisconsin Electric Company Request for Deferral, docket 4280-AF-100 (Wis. PSC Feb. 8, 2018) (PSC REF#: 337504); Interim Order, in re Wisconsin Power and Light Company, docket 6680-UR-109, 1994 WL 747576 (Wis. PSC Dec. 8, 1994), Final Decision, Joint Application of Wisconsin Public Service Corporation, Wisconsin Power and Light Company, and Madison Gas and Electric Company for Approval to Purchase the Forward Wind Energy Center from Forward Energy, LLC, docket 5-BS-226 (Wis. PSC Mar. 20, 2018) (PSC REF#: 339856).

Commission Alternatives – Commercial Accounting Treatment

Alternative One: If the commercial EV program is approved, accept WEPCO's proposed accounting treatment without modifications or conditions.

Alternative Two: If the commercial EV program is approved, direct WEPCO to work with Commission staff to agree on accounting procedures and COSS approach, to better track program costs and revenues, and ensure there is no cross-subsidization from other non-participating customers. WEPCO shall provide accounting treatment and procedures for the program within 60 days of the order, including a requirement that WEPCO record the customer charging equipment assets as $0, or below the line, regardless of how the customer would pay for the equipment.

Alternative Three: If the commercial EV program is approved, direct WEPCO to implement accounting treatment, deferral treatment, and accounting procedures for the program per Commission discussion.

Marketing and Reporting

In its application, WEPCO states that it will fund the marketing and administration of the EV pilots with the money that is collected from the fixed charges of the different EV programs. WEPCO's marketing of these programs will be based off of targeted outreach to potential participants. WEPCO will also develop print materials and an informational website to communicate with potential customers.

In its application, WEPCO states that it would collect data on its customer service through surveys to measure customer satisfaction and collect information on their experiences with installation, maintenance, and ongoing charging. The data available to assess customers' charging costs would vary by offering. For COEV-R customers, interval data would be collected through their charger to measure charging behaviors and the effects of that timing on billed costs under their TOD rate. WHEV-R customers would not receive separate tracking and billing of their EV charging, and costs for those customers would be measured only on a whole-home basis.

WEPCO has proposed to adopt the same reporting requirements that were implemented for NSPW for its EV programs. The reporting requirements that were put in place for those programs include:

- Program budget and spending;
- Survey results regarding customer satisfaction and installation experiences;
- Interval data;
- Analysis of the cost savings experienced by participating customers, including savings related to charger purchase and installation and monthly customer bills;
- Analysis of the load management impacts associated with the growth in EV use on WEPCO's electric system; and
- Total enrollment of customers and their selected options (bundled or prepay).

Alternatively, the Commission could reject WEPCO's proposed reporting and require WEPCO to work with Commission staff to develop an updated plan. A follow-up process could allow WEPCO and Commission staff to discuss in more detail how to provide comprehensive information on program outcomes without imposing excessive burdens on staff time or the program budget.

Commission Alternatives – Marketing and Reporting

Alternative One: For any approved EV program or pilot, accept WEPCO's proposed reporting requirements without modifications or conditions.

Alternative Two: For any approved EV program or pilot, modify WEPCO's proposed reporting requirements to include one or more of the performance data reporting and/or load management reporting conditions identified above.

Alternative Three: For any approved EV program or pilot, do not accept WEPCO's proposed reporting requirements. Direct WEPCO to work with Commission staff to develop an updated reporting plan, and file the updated reporting plan with the Commission by August 1, 2021.

COEV-R Program Waiver Requests

WEPCO has requested a waiver of specific administrative code and tariff provisions in order to implement its COEV-R proposal. Wisconsin Admin. Code § PSC 113.01(2) provides:

> Nothing in this chapter of the Wisconsin Administrative Code shall preclude special and individual consideration being given to exceptional or unusual situations and upon due investigation of the facts and circumstances therein involved, the adoption of requirements as to individual utilities or services which shall be lesser, greater, other, or different than those provided in said rules.

The provisions identified by WEPCO relate to billing, customer complaints, and metering requirements, specifically as each relates to the sub-meter found on the WEPCO charging unit, which would be used to parse out EV charging load from the overall house load for purposes of billing the charging load at the EV TOD rate. WEPCO requests the EV charging unit not be considered a "meter" for purposes of these requirements. WEPCO does not request a waiver of these requirements as they relate to the primary electric meter, through which all service, house and charger usage cumulatively, would run. WEPCO asserts, however, that the application of these requirements to both the primary meter and the charging unit's sub-meter would prove administratively burdensome to the extent that the new optional program design would not be practical. Accordingly, it requests that meter-related provisions in the code and its tariffs that are inconsistent with its proposal not apply to the COEV-R charging unit's sub-meter, including:

Billing:

- Wisconsin Admin. Code § PSC 113.0406(1)(a)3., 4., and 5. pertaining to information displayed on customer bills.
- Wisconsin Admin. Code § PSC 113.0406(1)(c) and pertaining to marking bills based on usage measured by the EV charger as estimated.
- Wisconsin Admin. Code § PSC 113.0406(3) pertaining to identifying credits and original charges for meter inaccuracies, errors in billing, or misapplication of rates.

Dispute Procedures:

- Wisconsin Admin. Code § PSC 113.0407 pertaining to dispute procedures.

Metering, Accuracy, and Testing:

- Wisconsin Admin. Code § PSC 113.0811(1)(c) pertaining to meter accuracy requirements.
- Wisconsin Admin. Code §§ PSC 113.0901, 113.0903, 113.0905, and 113.0924 pertaining to meter testing standards and recalculating bills for inaccurate meters.

The Commission has approved similar types of waiver requests previously, with varying conditions based upon the circumstances. As part of a 2016 rate adjustment, the Commission approved WP&L's Fixed Bill pilot program, which was similar in that it was a voluntary program that presented the customer with an additional option. The Commission noted that it appreciated WP&L's effort to introduce new and optional rates and programs including the Fixed Bill program, which would provide WP&L and the Commission useful information in designing offerings that better meet customer needs. (PSC REF#: 295820 at 46.) Regarding granting a waiver of requirements, the Commission found "it is reasonable to waive the specific billing provisions in Wis. Admin. Code § PSC 113.0406 that are inconsistent with the Fixed Bill program. The Fixed Bill program is a novel approach proposed by WP&L to meet changing customer preferences." (*Id.* at 50.) The Commission also approved these waivers in docket 4220-TE-104, which WEPCO has used to design this proposal. The Commission found the waiver reasonable as the offering would not replace the basic required billing provided for in the administrative code, but rather would add a new alternative at the customer's choosing.

Commission Staff's Review of Waiver Requests Relating to Billing Code Provisions

Among other things, a utility bill is required to include: present and last preceding meter readings; the date of the present meter reading; and the date of the next scheduled meter reading. These requirements are generally intended to ensure that each electric bill includes the necessary information for a customer to check the calculation of the bill. WEPCO requests a waiver of these requirements in Wis. Admin. Code § PSC 113.0406(1)(a)3.,4., and 5., so these items would not show on the bill separately for the charging unit's sub-meter. These items would continue to show on the bill for the property's primary or house electric meter. WEPCO requests that for Wis. Admin. Code § PSC 113.0406(1)(c), this program's approach to using COEV-R charging unit measurement for parsing out EV load not be considered to be billing "without an actual meter reading," which would require a bill designation that the bill is "estimated."

A waiver of the billing requirements found in Wis. Admin. Code §§ PSC 113.0406(1)(a)3., 4., and 5., and PSC 113.0406(1)(c) with regard to the charging unit's sub-meter may reduce COEV-R customers' ability to verify bills for accuracy, as that ability relates to the allocation of EV TOD versus Rg-1 or Fg-1 usage. If the Commission were to waive those, it may wish to require a condition that ensures the customer understands and accepts the possible range of billing outcomes should the charging unit sub-meter over- or under-register. The Commission may also wish to require that WEPCO make its tariff language more explicit in informing customers that in the event of an error in the sub-meter's ability to track EV charging usage, such usage will be billed at the Rg-1 or Fg-1 rate. This could alleviate potential concerns that the tariff as drafted might not reflect the charges to be billed to the customers.[10] Alternatively, the Commission may find that the materials WEPCO proposes to provide to the customer, including print and web marketing materials, conversations with call center staff, and the tariff as drafted, are sufficient for customers to verify their bills, and to understand potential risks and the range of potential billing impacts should the customer choose to opt in to the program.

In addition, WEPCO requests a waiver of Wis. Admin. Code § PSC 113.0406(3) with regard to the charging unit sub-meter. Wisconsin Admin. Code §§ PSC 113.0406(3)(a) and (b) require electric utilities to separately show and identify credits and original charges due to "meter inaccuracies, errors in billing, or misapplication of rates." WEPCO's proposal is that it would not adjust bills with credits or charges pertaining to the amount of usage showing on the charging unit that it would allocate to the EV TOD rate versus the Rg-1 or Fg-1 rate; therefore, it requests a waiver of the requirement to separately identify these types of charges and credits on bills for this limited purpose. The proposal to not adjust bills under this limited purpose is discussed further below in Commission staff's analysis of the waivers relating to metering, accuracy, and testing. If the Commission grants a waiver of the bill adjustment requirement in that section, as it pertains to the charging unit, it would be appropriate to accordingly waive the Wis. Admin. Code § PSC 113.0406(3) requirement to itemize billing adjustments on bills, as it pertains to the charging unit.

[10] Wisconsin Stat. § 196.22 provides: "No public utility may charge, demand, collect or receive more or less compensation for any service performed by it within the state, or for any service in connection therewith, than is specified in the schedules for the service filed under s. 196.19, including schedules of joint rates, as may at the time be in force, or demand, collect or receive any rate, toll or charge not specified in the schedule."

Commission Alternatives – COEV-R Waivers Relating to Billing

Alternative One: Grant WEPCO's request for a waiver of the Wisconsin Administrative Code and tariff provisions identified below without conditions or modifications.

- Wisconsin Admin. Code §§ PSC 113.0406(1)(a)3., 4., and 5. pertaining to information displayed on customer bills.
- Wisconsin Admin. Code § PSC 113.0406(1)(c) pertaining to marking bills based on usage measured by the EV charger as estimated.
- Wisconsin Admin. Code § PSC 113.0406(3) pertaining to identifying credits and original charges for meter inaccuracies, errors in billing, or misapplication of rates.

Alternative Two: Grant, in part or with limitations, WEPCO's request for a waiver of one or more of the code provisions identified in Alternative One, subject to any conditions or modifications that require WEPCO to provide customer information on the range of possible bill impacts and to make the tariff language more explicit in informing customers that in the event of an error in the sub-meter's ability to track EV charging usage, such usage will be billed at the Rg-1 or Fg-1 rate.

Alternative Three: Deny WEPCO's request for a waiver of one or more of the code provisions identified in Alternative One.

Commission Staff's Review of Waiver Requests Relating to Dispute Procedure Code Provisions

WEPCO requests a waiver of the dispute process outlined in Wis. Admin. Code § 113.0407 as it relates to the charging unit sub-meter. This administrative code section requires electric utilities to investigate customer disputes and participate in the Commission's complaint process.

Pursuant to statutory and Wisconsin Administrative Code requirements, a customer may contact the Commission to complain about an aspect of service, and when that situation arises, Commission staff will assess the customer's stated concerns in light of the Commission's areas of jurisdiction and the relevant, applicable requirements of the statutes, administrative code, tariffs, and Commission orders, in its determination regarding whether to open a complaint investigation. Should the Commission authorize the COEV-R program and grant a waiver of specific code and tariff requirements related to metering and billing, the Commission staff would determine whether to open an investigation of a dispute in light of the applicable requirements and waivers; therefore, the Commission may find the process already contemplates the requirements that the Legislature and the Commission have or have not deemed meritorious of the level of review imposed by the procedures. Additionally, if this requirement is waived, the Commission may lack a complete picture of the success of the program if participating customers who experience a problem with the program are discouraged from contacting the Commission to resolve a dispute.

On the other hand, the Commission may wish to waive this requirement, with regard to the sub-meter, and require that WEPCO report back on the number and type of complaints it receives regarding the charging unit sub-meter, and how those were resolved. One specific condition the Commission may wish to impose could be a condition requiring quarterly reporting on complaints received, issues raised, and resolutions related to the COEV-R charging unit sub-meter. Alternatively, as the number of customers likely to contact the Commission with COEV-R charging unit sub-meter complaints may be small, and as this is an additional offering a customer would opt into, the Commission may wish to waive the requirement without condition.

Commission Alternatives – COEV-R Waivers Relating to Dispute Resolution

Alternative One: Grant WEPCO's request for a waiver of Wis. Admin. Code § PSC 113.0407 without conditions or modifications.

Alternative Two: Grant WEPCO's request for a waiver of Wis. Admin. Code § PSC 113.0407 with the condition that WEPCO provide quarterly reporting on complaints received, issues raised, and resolutions related to the COEV-R charging unit sub-meter.

Alternative Three: Deny WEPCO's request for a waiver of Wis. Admin. Code § PSC 113.0407.

Commission Staff's Analysis of Waivers Relating to Metering, Accuracy, and Testing

WEPCO requests that the Commission waive the meter accuracy and testing requirements of the Wisconsin Administrative Code that are inconsistent with the COEV-R proposal.

WEPCO is concerned that the provisions it identified,[11] which require watt-hour meters to be accurate within 1 percent, and generally provide level standards and methods for testing meters for accuracy, would prove administratively burdensome to apply to the charging unit. WEPCO requests that these requirements not apply to the charging unit.

Wisconsin Stat. § 196.16(2) requires that "[t]he [C]ommission shall establish reasonable rules, regulations, specification and standards to secure the accuracy of all meters and appliances for measurement of public utility service." Wisconsin Stat. § 196.17 further provides the "[C]ommission shall provide for the examination and testing of every appliance used for measuring any product or service of a public utility." Because the statutory language refers to "appliances for measurement of public utility service," not just meters, the Commission may conclude that granting a waiver of any accuracy standards or testing requirements for the COEV-R charging units could be problematic under these statutes. As EV charging equipment

[11] WEPCO identified Wis. Admin. Code §§ PSC 113.0811(1)(c), 113.0901, 113.0903, and 113.0905 related to accuracy and testing standards for meters. The Commission may find that waivers of Wis. Admin. Code §§ PSC 113.0911 related to periodic testing of self-contained single-phase meters, and PSC 113.0922, related to complaints tests, would be required as well, as WEPCO's proposal is that the charging unit not be treated as a "meter" for the purpose of meter testing requirements.

is new technology that post-dates the creation of these administrative codes, however, rather than a full waiver of the requirements or a broad finding that EV chargers are not meters, the Commission may find it reasonable that the 1 percent accuracy requirements prescribed for standard meters in Wis. Admin. Code § PSC 113.0811 should not be applied to the EV chargers to be used as part of the COEV-R program. The Commission could establish an alternative accuracy standard, such as WEPCO's suggested 2 percent threshold, specifically for this program, as well as an alternative testing standard.

One option for Commission consideration would be to provide for the testing and accuracy of the chargers by directing WEPCO to propose a standard or process in this regard, working with Commission staff as necessary to develop a testing standard. This standard could then be presented to the Commission for approval or the Commission could delegate approval of that standard to the Administrator for the Division of Digital Access, Consumer and Environmental Affairs. This limited-purpose standard may establish that accuracy certification by the vendor or manufacturer is sufficient absent customer complaint, or another like standard.

WEPCO similarly requests that its EV chargers not be considered meters for the application of Wis. Admin. Code § PSC 113.0924, which requires electric utilities to recalculate bills if a meter tests at an average error of more than 2 percent.

The EV TOD rate is dynamic, and the Rg-1 and Fg-1 rates are flat, so whether a failure would result in a higher charge depends on the time of the day of the failure. The customer would pay more if a charging unit sub-meter fails at night (low TOD rate) and less if it fails during the day (high TOD rate). Because of this dynamic nature, and the optional, voluntary nature of this offering, along with the fact the primary meter would continue to be subject to these adjustments, the Commission may wish to not require adjustment of bills for this limited purpose. The Commission may wish to require, however, that the COEV-R tariff clearly explain how allocation of usage to the Rg-1 or Fg-1 and EV TOD may vary based on charging unit sub-meter potential over- and under-registration, and is or is not subject to bill adjustment.[12]

While WEPCO intends to apply the above waivers only to the residential COEV-R program charging unit sub-meter, the Commission could find that the benefits that may be realized by a limited number of participants do not outweigh the risk the requested waivers of code protections pose to those customers. On the other hand, the Commission may find that customers choosing to enter into this option voluntarily will do so with sufficient information and because they find the benefits of the offering, including the opportunity to capture a TOD charging rate while keeping the house usage on the flat Rg-1 or Fg-1 rate, will outweigh the risks of the waived protections related to the charging unit's sub-meter.

The Commission may find the program design required to offer customers the option of a separate TOD rate for charging without the expense of a second meter installation to be an exceptional or unusual situation meriting the waivers. Residential EV charging was not contemplated when the administrative code requirements were developed, nor had a similar program design been proposed at the time. Not only is high upfront cost a barrier to EV adoption, but so may be a requirement to switch the entire property to a TOD rate. WEPCO has proposed an offering that addresses those barriers. Additionally, NSPW anticipates that issues with customer equipment, such as Wi-Fi connectivity, could affect its ability to accurately measure the timing of usage, as the EV charging unit's sub-meter requires a Wi-Fi connection to transmit usage data on a daily basis, whereas the house meter does not. Due to the optional

[12] Absent such language, the Commission might have concerns that the rate the customer will be charged is not accurately reflected in the tariff. See Wis. Stat. § 196.22, precluding the utility from billing more or less than is specified in the rate schedule.

nature of the offering and the potential intermittency of the Wi-Fi connection, the Commission may find it reasonable to waive the requirements related to information on bills and bill adjustments for the charging unit.

It is also important to note that WEPCO is recommending this offering to address barriers identified by commenters related to the Commission's investigation of EV policy and regulation, specifically charging infrastructure and high upfront costs. This program looks to address concerns related to access to EV infrastructure, high upfront costs, and signals on when to charge. The Commission has provided utility waivers for billing requirements in the past for voluntary program offerings, in which the customer would have other options available if they chose not to participate in the program. The Commission could choose to establish alternative standards for EV chargers as referenced above regarding meter accuracy and testing. The Commission may find that providing the customer an additional offering would allow the customer to select the program that best fits their needs and wants, and would provide useful information to WEPCO and the Commission regarding utility EV charging programs and rates.

Commission Alternatives – COEV-R Waivers Relating to Metering, Accuracy, and Testing

Alternative One: Grant WEPCO's request for a waiver of the Wisconsin Administrative Code sections identified below without conditions or modifications.

- Wisconsin Admin. Code § PSC 113.0811(1)(c) pertaining to meter accuracy requirements.
- Wisconsin Admin. Code §§ PSC 113.0901, 113.0903, 113.0905, and 113.0924 pertaining to meter testing standards and recalculating bills for inaccurate meters.

Alternative Two: Grant a limited waiver of one or more of the code provisions identified in Alternative One, conditioned on a requirement that WEPCO work with Commission staff on an accuracy and testing standard, the approval of which is to be [decided by

Commission/Delegated to Administrator], and a requirement that WEPCO provide and include updated tariff language explaining that over- or under-registration of charging use will result in more or less usage being billed on EV TOD and that bill adjustments will not be made for charging unit sub-meter inaccuracy.

Alternative Three: Deny WEPCO's request for a waiver of one or more of the code provisions identified in Alternative One.

Residential Programs – Tariff Language Waiving Rights to Billing Adjustments

Under the WHEV-R program, all household and EV charging usage would be billed on a single TOD rate, Rg-2, using WEPCO's existing meter, so WEPCO is not requesting the waivers discussed above for COEV-R for that program. Both the COEV-R and WHEV-R schedules include the following language, however:

> Any customer choosing to be served on this rate schedule waives all rights to any billing adjustments arising from a claim that the bill for the customer's service would be cheaper on any alternative rate schedule for any period of time, including any rights under Wis. Adm. Code section PSC 113.0406(4).

The relevant portions of Wis. Admin. Code § PSC 113.0406(4) require utilities to compute customer bills at the proper filed rate, and notify customers of lower-cost rate options unless the customer has opted into an applicable rate. Rate schedules for various investor-owned utilities, including some of WEPCO's existing rate schedules, have identical language on TOD and various pricing riders. The Commission may similarly find the language to be appropriate here because customers will have opted into the residential COEV-R or WHEV-R program, and WEPCO is still obligated to bill customers at the proper filed rate by Wis. Stat. § 196.22. The Commission previously found this waiver language in an optional utility tariff to be reasonable, as it ensures the common sense outcome that when a customer voluntarily chooses to go onto an optional rate the customer cannot later request a refund if they could have been on a lower rate schedule. (PSC REF#: 295820 at 51.)

Commission Alternatives – Residential Program Tariff Language Waiving Billing Adjustment Rights

Alternative One: Approve WEPCO's tariff language referencing customers' waiver of billing adjustment rights, including rights under Wis. Admin. Code § PSC 113.0406(4), in its COEV-R and WHEV-R optional program tariffs.

Alternative Two: Do not approve WEPCO's tariff language referencing customers' waiver of billing adjustment rights, including rights under Wis. Admin. Code § PSC 113.0406(4), in its COEV-R and WHEV-R optional program tariffs, and require WEPCO to remove that language from its program tariffs.

Commercial Program – Waiver Requests

To implement its commercial program, WEPCO has requested a waiver of specific administrative codes and tariff provisions as it relates to the use of an embedded cost allowance. If the Commission is inclined to approve the pilot as proposed, and substitute the revenue-based extension allowance methodology for the embedded-cost allowance methodology required by the Wisconsin Administrative Code, then the Commission must also necessarily grant a waiver. The Commission may grant waiver requests where unusual or exceptional circumstances are presented. Wis. Admin. Code § 113.01(2).

The provisions WEPCO requests a waiver for are:

- Wisconsin Admin. Code § PSC 113.1005(1)
- Wisconin Admin. Code § PSC 113.1007(1)
- Wisconsin Admin. Code § PSC 113.1008(3)

- Section 201 of WEPCO’s Electric Rules
- Section 202 of WEPCO’s Electric Rules

Wisconsin Admin. Code § PSC 113.1005(1) states that customers shall pay the estimated cost of distribution facilities, which is greater than the average embedded cost allowance for existing distribution facilities. As participants in the pilot would receive a revenue-based extension allowance, rather than an average embedded cost allowance, a waiver of this code section would be necessary for WEPCO to implement its program.

Under Wis. Admin. Code § PSC 113.1007(1), customers would receive a refund of the contributed extension when WEPCO makes an extension to a second customer that does not require a contributed extension. This refund would equal the greater of either the embedded cost allowance in effect at the time the extension was installed or the current embedded cost allowance. WEPCO requests a waiver of this code section, as it refers to the use of an embedded cost allowance.

Lastly, Wis. Admin. Code § PSC 113.1008(3) addresses upgrades to distribution facilities. Wisconsin Admin. Code § PSC 113.1008(3)(d) states in relevant part that “customers who are served under a demand rate schedule shall receive an embedded cost allowance.” This allowance is calculated by using the customer’s average billed demand after the upgrade less the customer’s average billed demand before the upgrade. The embedded cost allowance is also used to calculate refunds due to both customers transferring to a different energy-only classification or a demand classification under Wis. Admin. Code §§ PSC 113.1008(3)(c) and (d). These sections would not apply under WEPCO’s proposed pilot.

The portions of WEPCO’s tariff that refer to the embedded cost allowance, and thus that WEPCO would need to be waived, include in Section 201 of the Electric Rules, which defines the allowance and how it is calculated, and lists the allowances assigned to each rate class for extensions intended to serve permanent customers. The embedded cost allowance is referred to in Section 201, to be utilized in calculating the amount customers to be billed on a demand and energy basis shall pay in advance of construction, and which addresses how to calculate the amount billed in advance of construction for commercial and industrial developments. Lastly, WEPCO seeks a waiver of Section 202, as it references the embedded cost allowance in calculating the construction credits allotted to customers who require an upgrade in distribution facilities due to a change in customers' load requirements.

As the commercial program differs from the typical practice of utilizing an embedded cost allowance that is detailed in portions of Wis. Admin. Code ch. PSC 113 and WEPCO's tariff, WEPCO will need to develop a method to communicate with customers throughout this new process.

Additionally, WEPCO will communicate with customers throughout the two-year true-up period. WEPCO plans to notify customers of their actual incremental load in relation to their estimated load after 12 months, which would allow the customers an additional 12 months to make any necessary adjustments before the true-up period ends. WEPCO chose this two-year true-up period to allow customers time to ramp up operations to meet their anticipated load level, limit the risk to non-participating customers, and keep administrative costs of the program low as it believes a period of more than two years would be administratively burdensome. The Commission may wish to require reporting on the number of customers who do not meet their anticipated load level within two years and who receive a true-up bill so as to more clearly weigh the success rate among customers with the risk to non-participating customers and administrative costs.

While the current extension rules require payment in advance of construction, customers would potentially not receive a bill until two years into the program. With utility facilities already in place, customers may lack some incentive to pay this bill.

WEPCO did not specify whether it would treat customers with unpaid bills the in the same manner as NSPW, which does not plan to utilize disconnection to collect unpaid bills that result from a true-up, but would instead apply its non-commodity collections treatment process. Under NSPW's plan, customers would receive a notice when owed amounts are 30, 60, and 90 days past due. Then a deferred payment agreement would be offered to customers who require one, and amounts still owed after approximately 180 days would be written off. This would result in the customer being required to purchase all EV supply infrastructure and optional charging equipment without warranty, at the undepreciated balance of the equipment based on the cost to purchase and install it and the expected remaining life of the equipment from the date of termination. The Commission may wish to require WEPCO to specify how it will treat unpaid bills under this plan. Should WEPCO use the same methodology as NSPW, the Commission may also consider requiring WEPCO to report on the number of customers who do not pay the true-up bill prior to WEPCO writing it off, and the amounts WEPCO writes off after approximately 180 days, so as to evaluate these additional costs to the program.

As previously noted, the Commission has approved similar types of waiver requests with conditions in the past to allow a utility the ability to introduce new and optional rates and programs, like those seen in the approval of WP&L's Fixed Bill pilot program. The Commission has approved utility waivers in the past for voluntary program offerings in which the customer would have other options available if they chose not to participate in the program. The Commission may find that providing customers an alternative offering to the embedded cost extension allowance similarly presents exceptional and unusual circumstances meriting a waiver because it provides a unique opportunity to explore a novel pilot and different method for charging in a rapidly developing area relating to EVs, where the Commission has asked utilities to present creative ideas. As the proposed commercial pilot program is a new offering that aims to balance cost savings for participating customers, costs to non-participating customers, and administrative costs, the Commission may wish to condition approval of these waivers by requiring reporting on the following:

- The number of customers whose actual load is more than, or less than, 25 percent of its estimated load by the end of the two-year true-up period;
- The amount of bills issued to customers at the end of the two-year true-up period;
- The number of customers who have received a true-up bill but have not paid it prior to write-off at approximately 180 days; and
- The amount of true-up bills written off after approximately 180 days.

Commission Alternatives – Commercial Program Waiver Requests

Alternative One: Grant WEPCO's request for a waiver of the Wisconsin Administrative Code and tariff provisions identified below without conditions or modifications.

- Wisconsin Admin. Code § PSC 113.1005(1)
- Wisconsin Admin. Code § PSC 113.1007(1)
- Wisconsin Admin. Code § PSC 113.1008(3)
- Section 201 of WEPCO's Electric Rules
- Section 202 of WEPCO's Electric Rules

Alternative Two: Grant, in part or with limitations, WEPCO's requested waivers of one or more of the code and tariff provisions identified in Alternative One, with one or more of the proposed conditions identified below:

- Require reporting on the number of customers who do not meet their anticipated load level within two-years and who receive a true-up bill;
- Require reporting on the number of customers who do not pay the true-up bill prior to WEPCO writing it off, and the amounts WEPCO writes off after approximately 180 days; and
- Reporting on the amount of bills issued to customers at the end of the two-year true-up period.

Alternative Three: Deny WEPCO's requested waivers identified in Alternative One.

Low-Income Program

WEPCO is proposing the inclusion of a low-income program. WEPCO has not provided many details to this program except that it will possibly include utility investments in charging infrastructure for municipal fleets and public transit, utility investments in EV charging hubs, utility-funded rebates to promote EV investments, and use of earning sharing dollars to assist in funding the utility-funded rebates in underserved areas. Per WEPCO's response to Commission staff data request AMK-1.11, "[t]he investments would provide benefits to the Company's customer base at large and the public generally, and as such the Company proposes to include in rate base the cost of any low-income program(s) that are undertaken." (PSC REF#: 405637.) Per WEPCO's response to Commission staff data request AMK-1.12, "[w]hile the Company expects to measure and report on various aspects of these projects it has not identified specific metrics." (PSC REF#: 405638.) Commission staff asked, when compared to billing credits, how the rebates would benefit low-income customers, and for detailed information on the proposed framework to extend the availability of the benefits. WEPCO was not able to provide this information, as the pilot has not been defined or the analysis developed.

Per WEPCO's response to data request KS-1.2, WEPCO stated that absent details on the full scope and cost of the potential low-income pilots, WEPCO anticipates that in the event that there is not any earnings sharing revenue available in a non-rate-case year, it would request a deferral for utility-funded rebates used in the low-income program. (PSC REF#: 408123.) It should be noted that the use of earning sharing mechanism dollars or a deferral of utility-funded rebates for the low-income program would be socialized across all customer classes.

A recent report by the American Council for an Energy-Efficient Economy (ACEEE) concluded that EV-related investments to-date for low-income customers and communities has been limited nationwide, with most activity concentrated in California, New York, and recently approved initiatives in Colorado. The report recommends that future initiatives for low-income customers should include "meaningful community engagement" early in the program development process in order to establish relationships and accurately identify community needs and priorities.[13]

The Commission may wish to direct WEPCO to file a more substantive plan for the low-income program with the Commission, and may wish to direct WEPCO to work with Commission staff in plan development. While WEPCO's initial program application was filed before the Commission established its framework for EV program proposals in docket 5-EI-156 (PSC REF#: 402117), the follow-up filing could utilize the framework to further define the substance of the program, including the definition of program performance metrics and a description of how the program design reflects cost-causation principles. The Commission could

[13] Huether, P. 2021. Siting Electric Vehicle Supply Equipment (EVSE) with Equity in Mind. Washington, DC: ACEEE. https://www.aceee.org/white-paper/2021/04/siting-electric-vehicle-supply-equipment-evse-equity-mind. Quote from p. iii.

also consider requiring the filing to address the use of community engagement efforts to inform program design and implementation.

Commission Alternatives – Low-Income Program

Alternative One: The Commission accepts WEPCO's proposed low-income program without modifications or conditions.

Alternative Two: The Commission accepts WEPCO's proposed low-income program but with modifications as discussed in the open meeting.

Alternative Three: The Commission rejects WEPCO's proposed low-income program and directs them to file a more substantive plan [with/without] assistance from Commission staff and [with/without] information regarding community engagement efforts.

Alternative Four: The Commission rejects WEPCO's proposed low-income program.

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Key Background Documents
WEPCO Application for EV Service Pilot Program (PSC REF#: 397968)
Notice of Investigation Signed and Served 11/05/2020 (PSC REF#: 399550)
Order on Requests to Intervene (PSC REF#: 401401)
Final Decision in docket 3270-UR-120 (PSC REF#: 226563)
Final Decision in docket 5810-TE-106 (PSC REF#: 378093)
Final Decision in docket 6690-UR-126 (PSC REF#: 381325)
Final Decision in docket 5-UR-109 (PSC REF#: 381305)
Order in docket 5-EI-156 (PSC REF#: 402117)
Memorandum in docket 5-EI-156 (PSC REF#: 401838)
Response-Data Request-PSC-Kell-1.1 (PSC REF#: 405627)
Response-Data Request-PSC-Kell-1.17 (PSC REF#: 405643)
Response-Data Request-PSC-Kell-1.15 (PSC REF#: 405641)
Response-Data Request-PSC-Kell-1.16 (PSC REF#: 405642)
Response-Data Request-PSC-AMK-1.13 (PSC REF#: 405639)
Final Decision in docket 6680-UR-120 (PSC REF#: 295820)
Response-Data Request-PSC-Kell-1.11 (PSC REF#: 405637)
Response-Data Request-PSC-Kell-1.12 (PSC REF#: 405638)
Response-Data Request-PSC-KS-1.2 (PSC REF#: 408123)
Final Decision in docket 4220-TE-104 (PSC REF#: 393776)
Order in docket 4220-AF-100 (PSC REF#: 334830)
Order in docket 4280-AF-100 (PSC REF#: 337504)
Order in docket 5-BS-226 (PSC REF#: 339856)