- BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH –

Rocky Mountain Power's Proposed Tariff Revisions to Schedule 120, Plug-in Electric Vehicle Incentive Pilot Program	**DOCKET NO. 19-035-T16**

INITIAL COMMENTS OF SIEMENS REGARDING ROCKY MOUNTAIN POWER (RMP) ADVICE NO. 19-16 PROPOSED CHANGES TO SCHEDULE 120, PLUG-IN ELECTRIC VEHICLE INCENTIVE PILOT PROGRAM

Date: December 17, 2019

Initial Comments of Siemens

Siemens hereby submits comments pursuant to the Public Service Commission's ("Commission") Notice of Filing and Comment Period issued on November 20, 2019.

Siemens is the first corporation of its size to commit to being net-zero carbon by 2030, anticipating a full transition to clean transportation. We are motivated by the goal of driving socio-economic benefits that stem from reducing GHG emissions and adoption of clean energy. Siemens generates over $71 million in in-state sales. With the intent of generating business efficiencies for our customers at workplaces, transit, government, utilities, fleet and other

segments, Siemens manufactures/assembles its EV chargers and EVSE[1] electrical components on both coasts of the U.S. Siemens' Plug to Grid™ eMobility product portfolio encompasses hardware, software and services that are currently deployed in 35 countries globally – our solutions are geared to maximize the abilities of EVs to act as Distributed Energy Resources, as well as to enable the effective harnessing of renewable sources.

Siemens endorses both RMP and Utah Department of Environmental Quality ("DEQ") support for EV adoption via incentives for the installation of Electric Vehicle Supply Equipment ("EVSE") throughout the state. Availability of and access to charging remain key barriers to customers wishing to make a transition to an electric-fueled mode of personal transport. We also encourage RMP to scale their role in electrifying transport across all vehicle categories.

However, Siemens wishes to raise ***three technical topics for consideration*** in the context of the Plug-in Electric Vehicle Program ("EV Program") Controls , that apply to both AC Level 2 Chargers (L2) as well as DC Fast Chargers (DCFC). These are as follows:

- *Consider use of open technical standards to ensure charger interoperability*
- *Consider open payment standards for public charging*
- *Require chargers to be "smart" in order to support the grid and provide charger usage data*

Charger Interoperability: "Interoperable" means the ability of a charger from one vendor to communicate with the network of another vendor. Ratepayer funded chargers would benefit from compliance with open technical standards, thereby protecting the customer's (site owner) right to switch network providers for any reason, preventing vendor lock-in as well as the risk of stranded assets. When the charger to backend network link is proprietary, the customer is

[1] - Electric Vehicle Service Equipment, a synonym for charger.

locked into a single service vendor for the life of the charger – because no other services provider's IT system can communicate with the charger **(vendor lock-in) –** thereby depriving the charger owner of the right to switch service providers (*such as with changing cell phone providers*), for cost or other reasons. Proprietary technology prevents the marketplace from being able to continuously compete for a given operator or site host's charger networking service business, instead confining competition to just the upfront purchase decision. To drive down cost and best serve the marketplace, competition and innovation for hardware, software and services must be based on product features, price, service, etc., and not just at the initial purchase decision, but also ongoing.

The Commission should be cognizant that prevalent rebate/incentive-based market heightens the risks of stranded assets, as well as tying customers to costly multi-year service agreements. There is also evidence that the rebate-dependent marketplace has led to overpriced purchases of infrastructure based on proprietary technologies. While the Commission has no jurisdiction over third parties, we believe the Commission has the right to impose conditions on the receipt of ratepayer funds by third parties in the form of rebates for chargers. The California PUC recently concluded, "*To promote competition and innovation within these pilots, and to reduce the risk of stranded assets, qualifying EVSEs should actively utilize open access standards for communication of data between the EVSE and the back-end network."*[2]

Widely adopted and relevant standards to achieve the above results include Open Charge Point Protocol ("OCPP") and OpenADR. We suggest that the Commission and RMP encourage that EVSEs that receive incentive rebates, comply with open technical standards.

[2] Decision on the Transportation Electrification Pilots for Schools and Parks pursuant to Assembly Bills 1082 and 108.Decision 19-11-017 November 7, 2019

Universal open payment standards for public charging:

Currently, the most common payment methods for EV charging at public locations include pre-enrolled debit/credit cards, radio-frequency identification (RFID) cards, and mobile payment apps. Given these restrictions, many EV drivers can and do find themselves without a way to pay for their public charging session. *Open, universal payment access for public chargers* is essential for a seamless transition from fossil to electric fueling.

Siemens supports adoption of open payment standards at public chargers as critical to a seamless consumer transition from fossil to electric fueling that will drive EV adoption. *Consumers do not need to download an app, carry an RFID card, and enroll with a service provider to buy gasoline; why should they have to do so for electric fueling?* This insight has been reached in a few states, including Connecticut and Massachusetts, that have passed legislation attempting to solve this problem. However, the solution has been frustrated so far in state policy efforts due to a lack of specificity in the requirements. Accordingly, we respectfully request that the Commission consider that public charging infrastructure that is installed or operated using ratepayer funding have payment options for the EV driver, including a minimum of credit card chip readers (on the charger or via a kiosk serving multiple chargers in one location).

Smart Chargers:

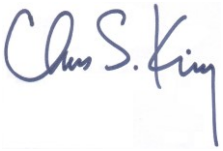
For EVSEs to operate as a source of grid services, provide system value and communicate charger usage data, they need to be "smart" i.e. *networked and sub-metered* which include capabilities for remote communications and internal metering of interval consumption to support billing of time-varying pricing. The metering (sub-metering to be precise) must be at the EVSE level to accurately determine the costs and benefits of the EV acting as a Distributed Energy Resource (i.e. reducing on-peak consumption and increasing consumption when

renewables are abundant and wholesale prices low). Siemens respectfully requests that the Commission consider ratepayer funded chargers be "smart" in order to be grid assets and benefit the grid and society as a whole.

Siemens requests approval of the proposed Residential Charger incentive program subject to our considerations listed above.

We thank the Commission for this opportunity to comment.

Respectfully submitted,



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CERTIFICATE OF SERVICE

Docket No. 19-035-T16

I hereby certify that on December 17, 2019, a true and correct copy of the foregoing was served by electronic mail to the following:

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