July 11, 2018

VIA ELECTRONIC FILING

Public Service Commission of Utah
Heber M. Wells Building, 4th Floor
160 East 300 South
Salt Lake City, Utah 84111

Re: **Docket No. 18-035-16—In the Matter of Rocky Mountain Power's First Annual Sustainable Transportation and Energy Plan Act ("STEP") Program Status Report.**

These comments are being submitted jointly on behalf of the Southwest Energy Efficiency Project and Utah Clean Energy and address the electric vehicle charging infrastructure incentives and electric vehicle time of use pilot program.

I. INTRODUCTION AND SUMMARY

The Sustainable Transportation and Energy Plan (STEP) program has been successful in developing new electric vehicle charging infrastructure and we are encouraged by the early results of the program. In particular, the Custom Grant Program has gotten substantial uptake, and based on the descriptions provided in the annual report, the projects appear to have significant merit.

In addition, the report shows substantial uptake of Level 2 workplace charging stations through the incentive program. We would suggest that future reports list not only the total number of workplace charging ports by county, but also the number of employers and sites, as it is not possible from this year's report to tell whether there was broad uptake across many employers or more focused uptake by a smaller number of large employers. It would also be helpful for future reports to include both the average and range of total costs for each charging station, so that the incentive levels can be compared to the full cost.

While the early results are encouraging, we do have three areas of concern. These include incentives for multifamily housing, incentives for DC fast charging, and the TOU pilot program.

II. MULTI-FAMILY HOUSING INCENTIVES

One area of concern is the very low uptake in the multi-family housing sector. According to the status report, of the 67 charger ports that were installed in 2017, only four were added in multi-family housing, with the remaining 63 in public and workplace applications. As described below, access to charging in multi-family housing is essential for widespread EV adoption, but it is also one of the most challenging sectors to generate uptake. That is why SWEEP and Utah Clean Energy originally advocated for higher incentives levels and recommended funding for 80% of the charger and installation costs up to a cap of $8,000 in docket 16-035-36. The stipulated agreement capped the incentives at $4,000 per single-port charger and $7,500 per

multi-port charger. RMP chose to enact incentives below the cap, at $2,500 per single-port charger and $3,500 per multi-port charger.

As part of the stipulation, the parties agreed to evaluate the program after the first year of operation and consider making adjustments to the incentive and outreach strategies. Given the challenges associated with multi-family charging installations and the low uptake described in this report, we believe that RMP should increase the incentive levels for multi-family charging stations to the maximum levels that were authorized in docket 16-035-36. If this does not succeed in generating greater uptake, we recommend that RMP consider returning to the Commission to request approval for higher incentive levels. Alternatively, RMP could propose a turnkey approach, in which RMP would directly install and own the charging infrastructure. Drivers are very unlikely to purchase plug-in electric vehicles if they cannot plug in at home, where cars are typically parked for 12 hours each day. However, less than half of U.S. vehicles have reliable access to a dedicated off-street parking space at an owned residence where charging infrastructure could be installed. To-date, almost 90 percent of EV drivers live in single-family detached homes. As the National Academy of Sciences notes: "Lack of access to charging infrastructure at home will constitute a significant barrier to EV deployment for households without a dedicated parking spot or for whom the parking location is far from access to electricity." It is essential for the EV market to move beyond single-family detached homes to scale up to meet long-term climate and air quality goals.

Prospective EV owners that live in multi-family housing units face unique challenges to vehicle charging access: parking lots are often common or shared spaces, complicating authorization to install charging stations and billing arrangements; the costs of installing infrastructure at a distance from the building is more expensive; and, in the case of renters, investments in charging infrastructure may not be recoverable within their expected tenancy. This issue is especially relevant in growing urban areas like Salt Lake City, where almost 70% of renters live in multi-family dwellings. As recently as 2014, Salt Lake City was building more multi-family housing units than single-family homes. This growing market sector presents an opportunity for utilities to leverage their knowledge of the electric grid and economies of scale to deploy charging stations in this critical but underserved market.

While we believe that increasing incentive levels is an important step, there is reason to believe that the rebate or "make-ready" model may struggle to generate significant uptake in the multi-family housing sector. The results of three utility programs in California provide an interesting contrast. Multi-family housing only accounts for three percent of the charging ports deployed in Southern California Edison's (SCE) Charge Ready pilot, despite SCE's increased outreach to potential site hosts in that segment. In that make-ready program, site hosts are responsible for contracting with third-party providers of charging stations for purchase and installation. In contrast, about 40 percent of San Diego Gas & Electric's (SDG&E) participating site-hosts in the Power Your Drive pilot, which also targets multi-family housing and workplaces, but includes utility ownership of charging stations, are in multi-family housing.

Pacific Gas & Electric's (PG&E) EV Charging Network program allows 35% of all charging stations to be installed, owned and maintained by the utility in order to maximize site host convenience. All of these turn-key charging stations will be located at multi-family housing or workplaces located in disadvantaged communities. As of the end of 2017, 40 percent of the program applications were submitted by multi-family housing sites, suggesting the utility ownership model works better in this market segment.

III. DC FAST CHARGING INCENTIVES

While there are a number of fast chargers being installed through the Custom Grant Program, only two fast chargers are being funded through the DC fast charger incentive program. The stipulation agreement set the DC fast charger incentive cap at $45,000 per single port chargers and $63,000 per charger for multi-port chargers. RMP chose to reduce these incentive levels to $30,000 and $42,000 respectively. Given the low uptake, we recommend that RMP increase the incentives up to the maximum levels allowed under docket 16-035-36 in order to promote greater uptake.

IV. TOU STUDY AND RESIDENTIAL LEVEL 2 CHARGING

Only 14 customers signed up to participate in the TOU study. The report does state that the program was not actively marketed during this time period, so future participation may be higher. As part of the stipulation, the parties agreed to evaluate the program after the first year of operation and consider making adjustments to the incentive and outreach strategies. We would recommend that the company explore the possibility of creating a meaningful incentive for residential level 2 charging stations of at least $500. Incentive recipients would also be required to participate in the TOU pilot program. We believe this will aid in increasing the participation in the EV TOU pilot program.

Thank you for the opportunity to comment.

Please direct questions about these comments to:
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Sincerely,

/s/ Hunter Holman
Hunter Holman

Staff Attorney
Utah Clean Energy

cc: Chris Parker from the Division of Public Utilities;
Michele Beck from the Office of Consumer Services; and
Joelle Stewart from Rocky Mountain Power.