Witness OCS – 5R COS/RD

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of	**)**	
Rocky Mountain Power for Authority	**)**	**Docket No. 13-035-184**
to Increase its Retail Electric Utility	**)**	**Rebuttal COS/RD**
Service Rates in Utah and for	**)**	**Testimony of**
Approval of Its Proposed Electric	**)**	**Daniel E. Gimble**
Service Schedules and Electric	**)**	**For the Office of**
Service Regulations	**)**	**Consumer Services**

June 26, 2014

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, POSITION AND YOUR BUSINESS ADDRESS.

A. My name is Daniel E. Gimble. I am a manager with the Office of Consumer Services. My business address is 160 E. 300 S. Rm. 201, Salt Lake City, Utah.

Q. DID YOU PREVIOUSLY PREPARE AND FILE DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes. On May 22, 2014, I filed direct testimony in the areas of cost-of-service, rate spread and residential rate design. My rate design testimony included presenting the Office's recommendations on the Company's proposed residential net metering (NM) facilities charge.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. My rebuttal testimony responds to the residential NM facilities charge recommendations submitted by the Division (Powell and Fairynairz), Utah Clean Energy (Wright and Gillam), The Alliance for Solar Choice (Miksis), Sierra Club (Mulvaney), and Utah Citizens Advocating Renewable Energy (Rossetti) in direct testimony. In responding to these recommendations, the Office outlines a reasonable process for addressing the NM cost-benefit analysis as required by SB 208.

II. RESIDENTIAL NET METERING

Response to DPU

Q. PLEASE SUMMARIZE THE DIVISION'S POSITION ON THE COMPANY'S PROPOSED NM FACILITIES CHARGE.

A. The Division states that compensation to NM customers at the full retail rate (through a reduction in consumption or a bill credit) results in a cost shift from NM residential customers to non-NM customers. Since NM customers use the distribution infrastructure, they impose costs on the system and should accordingly pay for using that infrastructure.[1] While the Division calculates a NM

[1]Powell Direct, pages 10-11, lines 206-223.

facilities charge of $4.81 related to the recovery of fixed distribution and retail costs, it recommends that the charge be initially set at the Company's proposed level of $4.25 month.

Regarding the NM requirements set forth in SB 208, the Division recommends that the Commission open a new docket to explore NM costs and benefits, which could be subsequently considered in a future rate proceeding.[2]

Q. WHAT IS THE OFFICE'S RESPONSE TO THE DIVISION'S RESIDENTIAL NM FACILITIES CHARGE PROPOSAL?

A. The NM facilities charge proposals of the Division and Office are very similar. The primary rationale for developing the charge are the same (cost causation), with the differences being that the Office recommends implementing the charge on a $/kW whereas the Division proposes setting the charge initially at the Company's proposed $4.25 level. As further discussed in responding to other parties below, the Office agrees with the Division's process recommendation to open a separate docket to consider NM cost-benefit issues associated with SB 208.

Q. HOW WOULD THE SETTLEMENT IN THIS GRC, WHICH INCLUDES AN INCREASE IN THE LEVEL OF THE RESIDENTIAL CUSTOMER CHARGE FROM $5.00 TO $6.00 PER MONTH, IMPACT THE DIVISION'S NM FACILITIES CHARGE CALCULATION?

A. The calculation should match the Office's updated "flat" charge calculation of $4.65. My Exhibit OCS 5.1R (Gimble) includes the Office's updated NM calculation, which is $1.54 on a $/kW basis. However, I would note that in its direct testimony, the Division recommended limiting the NM charge to $4.25 based on the principle of gradualism.

[2] Faryniarz Direct, pages 21-22, lines 380-383.

Response to UCE and TASC – Process Issues

Q. PLEASE SUMMARIZE THE POSITIONS OF UTAH CLEAN ENERGY (UCE), AND THE ALLIANCE FOR SOLAR CHOICE (TASC) ON THE COMPANY'S PROPOSED NM FACILITIES CHARGE, AS THEY RELATE TO PROCESS ISSUES?

A. UCE and TASC recommend that a NM facilities charge should not be imposed on residential NM customers without consideration of a comprehensive cost-benefit analysis across all customer classes. In particular, TASC proposes that the Commission should initiate a separate, collaborative process to develop a standardized approach to consider cost-benefit issues.[3]

Q. WHAT IS THE OFFICE'S RESPONSE TO THE NM PROCESS ISSUES RAISED BY UCE AND TASC WITNESSES?

A. UCE and TASC have raised valid concerns regarding NM process issues. While the Commission in its April 16, 2014 public notice stated that it would consider NM costs and benefits in the COS phase of the case, it provided no explicit direction to the Company to supplement its direct testimony with a detailed NM cost-benefit analysis that the Division, Office and other parties could evaluate and timely respond to in either direct or supplemental direct testimony. Further, the Company did not take any initiative to supplement the record with a NM cost-benefit analysis. Consequently, the Division, Office and other parties will only have the surrebuttal phase of the case (three weeks with very little time for discovery) to respond to any NM cost-benefit analysis filed by the Company in rebuttal testimony.

Q. DID THE OFFICE PREVIOUSLY ATTEMPT TO OBTAIN RESIDENTIAL NM COST AND BENEFIT INFORMATION THROUGH DISCOVERY TO THE COMPANY?

A. Yes. Table 8 on page 23 of my direct testimony includes residential NM cost data provided by the Company in response to discovery. However, the Company

[3]Miksis Direct, page 8, lines 7-9.

was unable to provide any information regarding the energy and capacity benefit associated with residential NM output.[4] Specifically, the Office sought detailed information on the types of energy and capacity resources avoided by NM production over different time periods. The Company's inability to timely furnish any information or analysis relating to NM "benefits" continues to be a major deficiency in this proceeding.

Q. WHAT IS THE OFFICE'S POSITION ON THE NM PROCESS ISSUES RAISED BY UCE, TASC AND THE DIVISION?

A. The Office agrees with these parties that the best way of moving forward is for the Commission to open a separate NM docket. The NM issues are complex and require a deliberate review process. In the NM docket, the Commission should do the following:

- Set a schedule for testimony and a hearing to determine whether a NM credit or facilities charge is warranted for affected rate schedules.
- Direct the Company to file a NM cost-benefit analysis for all affected customer classes as required by SB 208;
- Schedule a NM technical conference prior to the filing of non-Company direct testimony. At the first technical conference the Company should be prepared to present its NM valuation method and the cost-benefit results for affected customer classes.
- Allow adequate time for the Company and interested parties to explore areas of agreement and disagreement relating to method specification (key modeling components, assumptions, data inputs, etc.), consistency across resource planning and ratemaking proceedings, and application. A collaborative process may help to narrow analytical differences among parties on certain NM issues prior to filing testimony and allow the Commission to conduct a more efficient hearing on disputed issues.

[4]See response to OCS 30.2 attached to my direct testimony.

Rebuttal of UCARE, UCE, TASC, Sierra Club Witnesses – Other Issues

Response to UCARE – Mr. Rosetti

Q. DOES UCARE PROVIDE AN ACCURATE ASSESSMENT OF THE COMPANY'S RECENT IRPs CONCERNING RENEWABLE RESOURCES (ROSSETTI DIRECT, PAGE 4 , LINES 45-49)?

A. No. UCARE's statement that "RMP…has an integrated resource perspective hostile to significant development of non-carbon energy facilities" is neither objective nor accurate. To the contrary, since 2006 the Company has acquired or built substantial wind resources totaling 2,152 MWs and has plans to acquire an additional 450 MWs of wind in the 2024-2025 time period. The Company also has achieved 5.4 million MWhs of Class 2 DSM savings since 1992.[5] Regarding coal and natural gas resources, the Company has no current plans to construct new coal-fired facilities and has deferred the acquisition of new gas plants as well. From an IRP standpoint, the reality is that the Company has been committed to wind resources and DSM since 2006 and the Company currently plans to retire the Carbon Plant, convert the Naughton Plant to natural gas and retrofit other coal plants with pollution control technologies (without extending plant lives). Thus, an accurate assessment of the Company's IRPs indicates that the Company has not been "hostile to the development of non-carbon energy facilities" but has been transitioning to an energy future that is increasingly dominated by market, renewable and energy efficiency resources.

Q. UCARE STATES THAT SOLAR PV PRODUCTION REDUCES PEAK DEMAND AND REDUCES STRESS ON THE GRID (ROSSETTI DIRECT, PAGE 10 LINES 186-187). WHAT IS THE OFFICE'S RESPONSE TO THIS CLAIM?

A. This claim is not supported a recent "Utility Scale Rooftop Solar" study circulated by the Company to various stakeholders. Specifically, in August 2010 the Company performed a residential NM study, which involved a Salt Lake City circuit totaling 4 MW. The study results indicated that residential PV systems on

[5]PacifiCorp 2013 IRP, page 89.

this circuit primarily contributed energy to the distribution system in the 10 AM – 4 PM timeframe. By 7 PM when the distribution circuit was at or reaching peak demand levels, the residential solar PV systems were providing very little output and over 90% of the distribution infrastructure was needed to serve customers. Therefore, a more accurate representation of the value of residential solar PV is that this resource reduces demand during certain hours of the 7 AM – 11 PM on-peak period but is not available to reduce or offset demand during the specific peak hours of the day. This is an important distinction to recognize when valuing the contribution of the residential NM resource because the Company still needed its full system infrastructure to meet the vast majority of load on that 4 MW circuit during the highest load hours of the day.

Q. HAVE YOU ATTACHED THIS STUDY TO YOUR TESTIMONY?

A. Yes. It is attached as Exhibit OCS 5.2R (Gimble).

Q. SHOULD THE COMMISSION BE CONCERNED ABOUT CERTAIN SOCIAL BENEFIT CATEGORIES PROPOSED BY UCARE?

A. Yes. Certain social benefits ascribed to residential NM by Mr. Rossetti on lines 51-56 of his direct testimony, such as the reduction of solid wastes (e.g., ash) and the reduction of heated water into rivers and streams, are inconsistent with the set of externalities used in resource planning to compare and evaluate resource options. Using different sets of costs and benefits in different regulatory processes (e.g., IRP, NM and Resource Acquisition) could create perverse incentives and unintended consequences. The Office believes it is very important for the Commission to ensure that it uses a consistent set of costs and benefits across resource planning and ratemaking dockets, including any docket involving NM. The Office will have more to say on specific cost and benefit categories and related issues, assuming the Commission establishes a separate NM docket to consider those matters.

Q. UCARE SUGGESTS THAT THE $0.70/KW CHARGE ASSESSED BY THE ARIZONA COMMISSION HAS SIGNIFICANTLY REDUCED SALES OF RESIDENTIAL SOLAR SYSTEMS AND HAS THREATENED SOLAR JOBS (ROSETTI DIRECT, PAGE 7, LINES 129-131). DO YOU HAVE ANY RESPONSE TO UCARE'S CLAIM REGARDING REDUCED SALES AND THREATENED JOBS IN ARIZONA?

A. Yes. In direct testimony, UCARE provided no evidence to support its assertion that the $0.70/kW charge has dampened demand for residential solar PV systems or impacted solar-related jobs in Arizona. According to the Solar Energy Industries Association (SEIA), the near-term effect of the Arizona Commission's decision on NM policy has been to stimulate demand for residential PV systems, which led to a depletion of funding for residential rebates by September 2013.[6] The immediate effect appears to be more of "boom" than "bust" in Arizona with investment decisions tied to more variables (residential PV system prices,[7] incentives, etc.) than solely the Arizona Commission's interim net metering policy.[8] The long-term impact on demand for residential solar PV systems in Arizona will likely depend on numerous factors, including changes in APS's residential rates, the level of solar program incentives, changes in PV system prices and any decisions rendered by the Arizona Commission in future rate cases to modify the interim $0.70/kW NM charge.

Q. MR. ROSETTI INDICATES THAT EXCESS NM CREDITS SHOULD BE CONSIDERED AS A BENEFIT FROM THE NM PROGRAM. WHAT IS THE OFFICE'S RESPONSE?

[6]SEIA's Solar Market Insight 2013 Q3 Report, pg. 11. These SEIA reports are also generally informative with respect to how fast solar PV installations are growing across the country. According to SEIA 2013 Q3, the increase in growth in the residential sector for 2013 is expected to be 52% over 2012 levels.
[7]According to SEIA's Solar Market Insight 2014 Q1 Report, residential system prices declined 7.0% from 2013 Q1 to 2014 Q1 and installed prices came down in a number of states, including Arizona.
[8]The NM charge in Arizona is an interim rate that will be revisited by the Arizona Commission in APS's 2015 GRC.

A. Mr. Rosetti misunderstands the purpose of the NM program. It is a simplified rate mechanism designed to facilitate generation that offsets customer usage. The Utah Statute 54-15-102(12) specifically defines net metering as follows:

> "Net metering program" means a program administered by an electrical corporation whereby a customer with a customer generation system may: (a) generate electricity primarily for the customer's own use;

By definition, any excess NM credits should be minimal. If a customer desires to be a net producer and sell its output to the utility, then other mechanisms exist to do so, such as becoming a qualifying facility.

Response to UCE – Ms. Wright

Q. DOES THE OFFICE HAVE ANY COMMENTS ON THE RESIDENTIAL NM COST-BENEFIT ANALYSIS INTRODUCED IN THE DIRECT TESTIMONY OF MS. WRIGHT?

A. Yes. The Office has not reviewed DGValuatorV2 model used by UCE's consultant, Clean Power Research (CPR), to perform the residential distributed solar "benefit' valuation nor has the Office scrutinized the data set that appears to be largely derived from information contained in PacifiCorp's 2013 IRP and data requests.[9] With that said the Office notes two initial conceptual concerns with CPR's $0.116/kWh levelized benefit calculation.

First, CPR's analysis assumes that distributed solar only offsets a combined cycle (CCCT) gas plant. In reality, the 2013 IRP (and 2013 IRP Update) includes a combination of resources (FOTs, DSM, Wind and Natural Gas) over the 20-year planning horizon. In particular, the 2013 IRP Action Plan relies heavily on FOTs and DSM over the first 10 years of the resource planning

[9]See Ms. Wright's direct testimony on pages 22-23, lines 438-461, for a description of the model used by its consultant, Clean Power Research, and the key data inputs. The DGValuatorV2 model was not provided as part of Ms. Wright's testimony.

horizon. Thus, CPR may get a different "benefit" result, if distributed solar is instead assumed to avoid 2013 IRP Resources versus a proxy resource such as a gas CCCT.

Second, CPR's analysis includes avoided carbon regulation costs in its NM benefit assessment.[10] While the Utah Commission requires environmental externalities to be considered by PacifiCorp in its IRP process, it has never ruled on 1) whether an environmental cost such as an avoided carbon tax should be included in models valuing the benefits of resources like wind and distributed solar for ratemaking purposes and 2) what level of carbon tax should be used in these valuation models.[11]

These are just two examples of NM valuation issues that would need to be addressed in the separate NM proceeding recommended by the Division, Office, UCE and other parties. My subsequent rebuttal of other witnesses will show that there are other important issues that require careful consideration as well.

Response to UCE – Mr. Gilliam

Q. ON PAGE 16, LINES 268-273 OF MR. GILLIAM'S DIRECT TESTIMONY, HE STATES THAT A NEIGHBORING CUSTOMER SHOULD BE INDIFFERENT AS TO WHETHER THE SOURCE OF POWER IS FROM A RESIDENTIAL NM CUSTOMER OR A UTILITY GENERATOR BECAUSE THAT NON-NM CUSTOMER PAYS THE FULL RETAIL RATE TO RMP AND THE COMPANY RECEIVES FULL COST RECOVERY. IS SOMETHING MISSING FROM THIS SCENARIO?

A. What is missing from this scenario is at the very heart of this proceeding: the potential cost shift from NM to non-NM residential customers because NM customers are compensated the full retail rate for production delivered to the grid. While the utility may receive full cost recovery, the vast majority of the residential class may be subsidizing residential NM customers.

[10]Wright Direct, page 23, lines 459-461.
[11]Ibid. Ms. Wright indicates that CPR relied on the middle case carbon cost scenario from the 2013 IRP.

Q. WHAT DOES PARAGRAPH 54-15-105.1 OF SB 208 STATE RELATING TO NON-NM CUSTOMERS?

A. The paragraph indicates that the Commission should examine, "whether the costs that the electrical corporation or **other customers** will incur from a NM program will exceed the benefits." (emphasis added) The statutory language is clear that the impact on non-NM residential customers – not just the utility – should be considered by the Commission in any NM cost-benefit analysis.

Q. ARE COSTS SHIFTED FROM NM CUSTOMERS TO OTHER RESIDENTIAL CUSTOMERS?

A. Yes. Based its response to OCS DR 30.1(see Gimble Direct, page 25, lines 644-653), the Company estimated the cost shift at approximately $701,000 (solar PV capacity factor = 20%). The residential NM program has been growing at a 30% rate, which implies that the cost shift will continue to increase over time and non-NM customers will end up paying higher energy rates.

Q. DOES THE OFFICE HAVE A CONCERN WITH THE BROAD CATEGORIES OF COSTS AND BENEFITS ASSOCIATED WITH DISTRIBUTED GENERATION THAT MR. GILLIAM DEPICTS IN FIGURE 1 ON PAGE 19 OF HIS DIRECT TESTIMONY?

A. Yes. The Office concerns here are the same as those expressed relating to Mr. Rossetti's direct testimony above. Specifically, these are very broad categories of costs and benefits that may 1) exceed the Commission's statutory authority and 2) be inconsistent with the evaluation of resource options in resource planning (IRP) and ratemaking (GRC, RFP, Avoided Cost etc.) dockets. For example, the "social" category includes "Economic Development (jobs and tax revenues)," which is clearly not identified in the Commission's IRP guidelines and

exceeds the regulatory authority under which the Commission operates.[12] In addition, criteria air pollutants such as PM10, and water and land resources, all listed under "Environmental," represent externalities that are not presently examined in an IRP framework. Thus, the Commission should not set rates using the broad categories of costs and benefits presented by UCE. UCE may need to pursue legislative changes prior to recommending that the full set of categories be considered by the Commission in a ratemaking docket. .

Response to TASC – Mr. Miksis

Q. ON PAGE 9-10 OF HIS DIRECT TESTIMONY, MR. MIKSIS ADVISES THE COMMISSION TO NOT "REINVENT THE WHEEL" AND RELY ON EXISTING NM COST-BENEFIT STUDIES THAT HAVE BEEN UNDERTAKEN IN MULTIPLE JURISDICTIONS. DOES THE OFFICE HAVE ANY COMMENTS ON TASC'S RECOMMENDATION?

A. The Office cautions the Commission that any "external" studies must be applied judiciously based on the Commission's existing statutory authority and unique circumstances of this case, RMP's utility system and available information. These external studies could include environmental and social costs/benefits that either exceed the Commission's current statutory authority or lack consistency of measurement and application across resource planning and ratemaking proceedings. If external costs and benefits are applied randomly in selected ratemaking cases, this could lead to unintended outcomes and poor regulatory policy. In addition, some studies could be associated with utility systems where residential solar PV systems make a greater contribution to reducing system peak than is the case based on the August 2010 study performed by RMP.

Q. DOES THE OFFICE AGREE WITH TASC'S VIEW THAT BEHIND THE METER CONSUMPTION OF A RESIDENTIAL NM CUSTOMER IS EQUIVALENT TO

[12]See Utah Statute 54-3-1.This statute allows the Commission to assess economic impacts in terms of the general welfare of the state. However, it does not explicitly require the Commission to determine whether a proposal by the utility or party promotes economic development in terms of employment, tax revenues, expansion of business, etc.

LOAD REDUCTION FROM ENERGY EFFICIENCY (MIKSIS DIRECT, PAGES 15-16)?

A. No. The Office believes there are at least three fundamental differences between residential customers participating in a utility NM program versus a utility energy efficiency program. First, a NM customer that consumes and exports energy uses the grid twice from a cost causation standpoint; first to meet load requirements that vary over the day and second to export excess power onto the grid. By contrast, a residential energy efficiency customer only consumes energy (albeit at a lower level) supplied over the grid. Second, during Mr. Miksis' "Retail Customer State," a residential NM customer provides no output (i.e., benefit) to the grid whereas a residential NM customer that has purchased and installed an energy-saving device (e.g., refrigerator with a high energy efficiency rating) continues to provide a benefit via lower usage during the peak period. Third, output from a residential customer is intermittent based on time of day and amount of cloud cover. Consequently, the NM resource is not dispatchable to meet varying load conditions on the system. By contrast, a residential customer participating in the Utah Cool Keeper provides a DSM resource that can be readily dispatched to meet peak demand during summer months. Thus, there are a number of important distinctions to recognize between residential customers participating in utility NM and energy efficiency/demand management programs.

Q. WHILE TASC DOES NOT DISCUSS WHETHER THERE IS AN EQUIVALENCY OR DIFFERENCE ON THE <u>PRODUCTION SIDE</u> BETWEEN A RESIDENTIAL NM CUSTOMER AND A SMALL SOLAR QUALIFYING FACILITY (QF) PROJECT, DOES THE OFFICE HAVE AN OPINION?

A. There is a significant difference in terms of compensation received by a residential NM customer versus a small solar QF project selling output under Schedule 37. The residential NM customer receives compensation valued at the full retail residential rate for the power exported onto the grid. According to the

recent GRC settlement, the average residential rate is 10.93 cents/kWh.[13] By comparison, the small solar QF project only receives compensation at the current, non-levelized avoided cost rate of approximately 4.6 cents/kWh.[14] This underscores why it is important for the Commission to ensure that there is an overarching consistency in methods and data when evaluating costs/benefits associated with the NM program and other ratemaking cases such as avoided cost dockets.

Q. MR. MIKSIS PROVIDES A "BACK-OF-THE ENVELOPE CALCULATION" (HIS WORDS) INDICATING THAT RMP'S RESIDENTIAL CUSTOMERS PAY 124% OF THEIR SHARE OF RMP's COSTS INCURRED TO SERVE ALL CUSTOMERS (MIKSIS DIRECT, PAGE 21). IS THIS AN ACCURATE REPRESENTATION OF THE COS STUDIES PREPARED BY THE COMPANY?

A. No. In the current GRC, the COS study filed by the Company (based on a 12-CP, 75/25 demand-energy classification method) indicates that the residential class has a return slightly below cost-of-service and that it is the commercial classes that are paying rates that exceed cost-of-service. Improvements to the COS Study recommended by the Office in the area of resource classification changes increase the residential class return such that the class would be paying rates that cover estimated cost-of-service. The settled spread in the current GRC generally follows the COS relationships of rate schedules, as reflected in the current COS study.

A COS Study is a complex undertaking involving many decisions on the functionalization, classification and allocation of numerous revenue and cost accounts. It includes detailed data relating to class load forecasts, load research, and other information that is used to determine the performance of the various rate schedules and special contract customers. Parties do not take the COS Study lightly as evidenced by the Office, Division and industrial interveners'

[13]The Schedule 1 energy block rates for the summer months will be both higher (Tier 3) and lower (Tier 1) than the average residential rate of 10.93 cents/kWh.

[14]This number is the published Sch. 37 non-levelized, on-peak summer price for 2014. The published Sch. 37 levelized, on-peak summer price is approximately 6.1 cents/kWh.

typical practice of retaining COS experts to review the reasonableness of the COS model, data inputs and assumptions used to estimate the class returns. The implication Mr. Miksis tries to present with his simple calculations, that the residential class is significantly over-allocated cost responsibility, does not comport with a more careful, in-depth analysis of the Company's COS Study.

Q. MR. MIKSIS STATES THAT GOOD RATEMAKING SHOULD BALANCE FAIRNESS WITH EFFICIENCY AND THAT A VERY HIGH BURDEN EXISTS TO JUSTIFY DISPARATE TREATMENT OF CUSTOMERS WITHIN RATE CLASSES. (MIKSIS DIRECT, PG. 27) DOES THE OFFICE GENERALLY AGREE WITH THIS STATEMENT?

A. Yes, the Office generally agrees this position.[15] Cost causation and fairness are usually viewed by analysts as the two cornerstones for establishing fair and cost-based utility rates. However, what TASC fails to recognize is that the application of efficiency and fairness principles in setting just and reasonable rates for customers is a two-way street. If NM residential customers do not pay for distribution-related costs, then these costs will be shifted to non-NM residential customers. To allow residential NM customers to avoid paying distribution-related costs would constitute differential treatment for that small sub-set of NM customers at the expense of the majority of residential customers that may not be able to afford the up-front expense of installing a solar PV system, live in homes that are not properly situated for a solar PV system or are not interested in participating in a utility NM program.

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<u>Response to Sierra Club – Dr. Mulvaney</u>

Q. IN ITS ASSERTIONS THAT NM INSTALLATIONS PROVIDE VALUE TO THE SYSTEM, THE SIERRA CLUB CITES AS EXAMPLES CALIFORNIA AND MINNESOTA (MULVANEY DIRECT, P. 7) WHAT IS THE OFFICE'S RESPONSE?

[15]The Office would note that additional key principles such as gradualism, rate stability and energy conservation are sometimes applied in developing just and reasonable rates for customers.

A. California and Minnesota have a very different policy history on NM compared to Utah. For example, the "value of solar" calculation used in Minnesota is the result of specific legislation outlining the types of costs and benefits to be included in such a calculation. As the Office previously indicated with respect to UCE, if the Sierra Club wants to propose that its expanded set of costs and benefit categories be included in a ratemaking context, it may need to seek legislation.

Q. THE SIERRA CLUB CALCULATES AN NM AVOIDED COST BY INCLUDING FOUR CATEGORIES OF COSTS. WHAT IS THE OFFICE'S RESPONSE?

A. The Sierra Club's proposed NM avoided cost method is seriously flawed and should be disregarded by the Commission. It suffers from many of the problems I have previously described in my rebuttal testimony and introduces new ones as well. The problems with the Sierra Club's avoided cost calculation can be summarized as follows:

- It appears that some of the avoided cost calculations are based on generic research studies. The Office would advise the Commission to be very circumspect in applying results from studies based upon data related to different utility systems. The specific load patterns and operational characteristics of RMP's system are critical to a proper evaluation of any set of NM costs and benefits.
- It appears that some benefit categories are based on the theoretical possibility of benefits, rather than the calculation of actual benefits. For example, Dr. Mulvaney describes ancillary service benefits as potential benefits that NM installations could provide. (Mulvaney Direct, p. 15) He does not attempt to demonstrate that, in fact, NM installations in Utah do provide such benefits.
- The calculation includes cost and benefit categories that are inconsistent with those used in other regulatory processes. This presents the potential problems of perverse incentives and unintended consequences that I have previously described. Further, the Sierra Club may need to pursue legislation

in order for the Commission to consider certain categories of costs and benefits that it has presented.

Q. IN ADDITION TO THE PROBLEMS THE OFFICE IDENTIFIED ABOVE WITH RESPECT TO THE SIERRA CLUB'S PROPOSED AVOIDED COST METHOD, IS ITS CALCULATED NM AVOIDED COST OF 6.09 CENTS/KWH ANYWHERE NEAR AVOIDED COSTS RECENTLY CALCULATED BY THE COMPANY?

A. No. The Company recently calculated avoided costs for two solar QF Power Purchase Agreements (PPAs) using its GRID model and the avoided cost methodology approved by the Utah Commission. For these two recent solar PPAs filed under Schedule 38, the Company's calculated an avoided cost ranging from 3.2 cents/kWh to 3.3 cents/kWh for the years 2016 and 2017. The Sierra Club's avoided cost calculation of 6.09 cents/kWh is almost double the Company's avoided cost estimates for these two solar QF projects.

Q. WHAT ADDITIONAL PROBLEMS ARE ASSOCIATED WITH THE AVOIDED COST METHOD PROPOSED BY THE SIERRA CLUB?

A. The Sierra Club's avoided cost analysis assumes that the Company purchases all of the output of the 15.6 MW of generation from residential NM customers and resells it to other customers at a value of $56.27 per month. However, the actual situation is that residential NM customers use the majority of NM production to meet their own energy needs (either at the time of consumption or through NM credits that offset future charges on their utility bills). Since NM customers use the majority of output from their PV systems to either meet their own energy needs or offset future bills, paying them $56.27 per month to provide little net power to the grid appears to be an additional flaw in the avoided cost method used by the Sierra Club.

Q. THE SIERRA CLUB DESCRIBES AT LENGTH THE IMPACT OF THE PROPOSED NET METERING FACILITIES CHARGE ON THE SOLAR INCENTIVE AND SOLAR PAYBACK PERIODS. WHAT IS YOUR RESPONSE?

A. The Sierra Club arguments are irrelevant to this proceeding. The solar incentive program was established based upon the standalone cost/benefit analysis from the perspective of Utah customers. It was not established to guarantee any particular price or payback period for current or future customers who choose to install PV resources. In fact, the Office took a very specific position in the solar incentive docket to ensure that communications to potential residential solar incentive recipients clearly indicated that rates and charges may vary in the future.

Q. THE SIERRA CLUB ASKS WHETHER THE "PENALTY" FOR SOLAR INSTALLATIONS IS CONSISTENT WITH OTHER COMMISSION POLICIES. (MULVANEY DIRECT, P. 46) WHAT IS THE OFFICE'S RESPONSE?

A. First, the Commission frequently indicates that it establishes just and reasonable rates consistent with law and policy set by the legislature. Second, as the Office explained above, setting just and reasonable rates is a process separate and apart from the establishme
nt of the solar incentive program. Third, the Office views the Sierra Club's characterization of the proposed net metering facilities charge as a "penalty" as inappropriate. The Sierra Club is free to provide evidence in an effort to persuade the Commission to reject, modify or support the Company's proposed NM facilities charge, but it should not misconstrue the charge as penalty. Finally, the Office's position is that a net metering facilities charge represents a rate change that *is consistent* with Utah policy and Commission orders. The Commission has long supported setting rates consistent with cost causation and fairness principles and the legislature just affirmed its support for a charge so long as it is demonstrated that costs to either the Company or other customers is greater than the benefits from NM customers. While the Office supports a more robust and focused process to examine these issues, we also maintain that the evidence in this docket supports a NM facilities charge to recover an additional portion of the costs of the distribution system from NM customers.

Q. PLEASE SUMMARIZE THE OFFICE'S RESIDENTIAL NM RECOMMENDATION?

A. In direct testimony, the Office calculated and proposed a residential NM facilities charge of $1.60/kW. The settlement in the current GRC reduces the Office's calculated NM charge to $1.54/kW. However, the Office agrees with the Division, UCE and other parties that the Commission should open a separate docket to consider NM costs and benefits for all customer classes so that it can make an informed decision as to whether a residential NM facilities charge at any level is reasonable and in the public interest. The Office believes it is important for the Commission to proceed in a separate docket so that it can fully understand the differences in valuation models, data inputs and assumptions proposed by interested parties. Ultimately, the Commission will want to use a valuation method that best fits the legal, policy and factual circumstances unique to Utah and relies on data inputs and assumptions that are generally consistent across resource planning and ratemaking cases.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.