Q. Are you the same David L. Taylor that filed direct testimony in this case?

A. Yes.

Purpose and Summary of Testimony

Q. What is the purpose of your rebuttal testimony?

A. My rebuttal testimony addresses issues raised in the direct testimony of Division of Public Utilities (DPU) witness Mr. Abdinasir Abdulle, Office of Consumer Services (OCS) witness Ms. Cheryl Murray, Utah Association of Energy Users (UAE) witness Mr. Kevin Higgins, Energy of Utah (EOU) witness Mr. Ros Vrba, Ormat Technologies, Inc. (Ormat) witness Mr. Colin Duncan, Powdr Corp (Powdr) witness Mr. Brent Giles, Walmart witness Mr. Steve Chriss, Utah Clean Energy (UCE) witness Ms. Sarah Wright, and the comments of The Interwest Energy Alliance (Interwest). Because many of the issues raised by the intervening parties are similar, I will address the issues by topic rather than by specific witness. My rebuttal testimony will address the following:

a. DPU and OCS Support
b. Complexity of Schedule 32
c. The Administrative Fee
d. The Delivery Charge
e. Legality of Generation Backup Facilities Charges
f. Proposed Credits for Capacity Contribution
g. Rates for Customers under 1MW under Schedule 32

Company witness Mr. Bruce W. Griswold will also provide rebuttal testimony. He will address the confidentiality issues raised by some of the parties and will present a template of the Electric Service Agreement to be used with Schedule 32.

DPU and OCS Support

Q. Do the DPU and OCS support Schedule 32 as filed?

A. Yes. The DPU, which represents the interest of all Rocky Mountain Power customers, fully supports Schedule 32 as proposed. DPU witness Abdinasir M. Abdulle states, "[t]he Division reviewed the Company's filing and determined that the filing is reasonable and complies with Utah Code Title 54, Chapter 17, Part 8. Therefore, the Division recommends that the Commission approve it as filed."[1]

The OCS, which represents the interest of residential and small business customers, finds no issues with the proposed schedule. OCS witness,Ms. Murray, states that, "[t]he Office has not identified any specific problems with Schedule 32 as proposed other than failure to identify all applicable surcharges"[2]She goes on to say "[t]he Office's position is that the implementation of Schedule 32 must maintain ratepayer indifference for non-participants – there must be no shifting of costs from Schedule 32 customers to other customers."[3]

Complexity of Tariff

Q. Several parties suggest that the proposed Schedule 32 is too complex. Is the proposed tariff complex?

A. Yes,and appropriately so. There are multiple objectives in designing utility rates and tension between the various objectives often exists. Simplicity is one objective of rate design. Rates must also be designed to recover the utility's

[1] Direct Testimony of Abdinasir M. Abdulle, line 155.
[2] Direct Testimony of Cheryl Murray, line 161.
[3] *Id.*, line 169.

costsof providing services to its customers. This make rates, in some circumstances, more complex. Because Schedule 32 is designed to comply with Senate Bill 12, now codified at Utah Code Ann. § 54-17-801*et al.* (RES Statute), and to ensure that all of the costs associated with providing this type of service are paid for by the participating customers rather than be shifted to nonparticipating customers, the tariff is more complex than a general service tariff.

Energy of Utah witness, Mr.Vrba,recommends a "simplified" billing approach and yet proposes additional service flexibility, including allowing changes to contractual obligations andchanges to energy points on daily bases. Far from making the tariff simpler, his proposals would make the tariff even more complex.

Q. Interwest Energy Alliance claims that the RES Statute's goalwould be better served by allowing the customer to contract directly with the renewable energy producer. Is such an arrangement contemplated under Utah law?

A. No. Utah law does not allow a retail customer to buy electricity directly from a non-utility provider (except for certain governmental and non-profit entities under specific circumstances).

Administrative Fee

Q. UAE, Ormat, UCE, and EOU each argue that the Company's proposed monthly administrative fee is too high, particularly for smaller customers that are aggregating load to reach the 2.0 MW minimum size for participation. How do you respond?

A. RMP acknowledges that the administrative fee may serve as a barrier for some customers with multiple smaller delivery points. As indicated in my direct testimony, the administrative fee is intended to cover the cost of data collection and manual billing. The existing customer service billing system, established in 1995 was not programmed to accommodate complex billing of this type. Options for upgrading the customer service billing system are planned for review in 2015. The Company will determine at that time if automation of Schedule 32 is cost effective and, if so, the Company will revise the administrative fee appropriately.

In response to the comments from the parties in this case, the billing team has re-sharpened its pencils and revised the time estimate to prepare a Schedule 32 bill. The revised estimate was developed using the existing complex partial requirement account invoicing as a starting point.Table 1 below showsa description of the 16-step process for manually billing UT Schedule 32 Agreements and the low and high time estimates for each step:

Table 1

Schedule 32 Manual Billing Process and Time Estimate			
		Time Estimate (Minutes)	
Step	Activity	Low	High
1	Access and obtain the MV90 profile data for the current billing period for the listed load research number	15	30
2	Obtain renewable energy facility data and allocate renewable energy to each agreement location	30	60
3	Combine template data to obtain the backup service, maintenance service, and supplementary service kWh and power kW for the month	10	30
4	Enter template reads in the customer service billing system and input to appropriate "data" cells	10	30
5	Verify billing components such as kVar and kVarh are accurately handled for the agreement	10	30
6	Ensure the "basic" template calculates through the current month	5	30
7	Locate and enter On and Off-peak kW in the appropriate cells in the template	10	30
8	Save each updated template as a data file for that month	5	15
9	A second billing analyst reviews and signs off on the copy per SOX compliance controls	30	60
10	Values-only copy of the calculation spreadsheet is emailed to the customer account manager for review and approval per SOX compliance controls	10	15
11	A copy of the customer account manager's written approval is filed	5	5
12	Calculation spreadsheet charges are manually entered in the customer service billing system	15	30
13	Comparison of the billing totals and dollars billed in the customer service billing system (JIMN screen) is made with the completed calculation spreadsheet to ensure accuracy	30	45
14	Calculation spreadsheet saved	5	5
15	Post statement printing, reviewed for accuracy. If any discrepancies are found, a PC bill will be produced	10	45
16	Mail and file one copy of the calculation spreadsheet, along with a printed statement to the customer	10	10
	Total Minutes	210	470
	Total Hours	3.5	7.8

Footnotes
Billing reads are calculated utilizing a template
Register reads in the customer service billing system remain as originally entered (i.e., each meter reflects its own demand values)

As shown in Table 1 above, the time estimates range from a low of 3.5 hours to a high of7.8hours. For purposes of Schedule 32, the Company adjusted the time used to calculate the administrative fee downward to 3.5 hours per month per customer agreement, the low end of the time estimate. At the internal rate of approximately $75 per hour, the new time estimate produces an administrative fee of $260.

Q. What is UAE's alternative proposal to address his argument that by adopting the already large customer charges from Schedule 31, the Partial Requirements Service tariff, no additional administrative fee is needed for Schedule 32?

A. Mr. Higgins recommends two alternatives. He recommends eitherusing the Schedule 31 customer charges with no administrative fee, or alternatively, using the customer charges from the applicable general service tariff plus an administrative fee, although a smaller administrative fee that proposed by the Company.

Q. What do you recommend?

A. I recommend an approach similar to that proposed by Mr. Higgins. I recommend that Schedule 32 incorporate the same customer charge as the applicable full requirements schedule(Schedules 6, 8, and 9)and that the monthly administrative fee be changed to $260 per month per delivery point as described above. The combination of these two changes significantly reduces the fixed monthly charge for each customer agreement from the amount originally proposed.

Q. Ormat claims that a Schedule 31 customer is already paying a customer charge under its current electric service tariff and will continue to pay that charge even after it begins purchasing energy from a renewable energy project. Is this correct?

A. No. I gather from Mr. Duncan's statement that he believes a customer will pay two customer charges, one under the standard tariff and another customer charge under Schedule 32. This is incorrect. The customer will take service under

Schedule 32 only and will only pay the Schedule 32 customer and administrative charges. A customer may require more capacity than can be provided from the Renewable Energy Facility which will necessitate supplemental service. This supplemental service is billed at standard general service facilities, power, and energy rates. No additional customer charge is billed for that service. The customer will not pay two customer charges.

Delivery Charge

Q. UAE claims that the delivery charges proposed by the Company are too high in relation to the tariff rates currently in effect. Do you agree?

A. No. Mr. Higgins proposes an alternative calculation for the Delivery Facilities Charge. His recommended approach is very similar to the approach I took. Both start with the current general service tariff and then separate the delivery component from the generation component of the rate.

My approach based the delivery component (transmission and distribution, if applicable) on the functionalized cost of service results from the last general rate case (GRC)which were used to set current rates. With the delivery costs removed, the remaining portion of the combined Facilities Charges and Power Charges of the current general service schedulesbecomes the generation capacity related component.

Mr. Higgins' approach apportions the current demand related general service rate between the delivery and generation components using the ratio of delivery and generation costs from the same cost of service study.

If current rates were exactly equal to cost of service, both in total and by component, his method and my method would produce the same delivery charge. But as Mr. Higgins states, current rates are not exactly equal to costs, therefore the methods produce similar, but slightly different results. I continue to support my approach although either approach is reasonable.

Q. EOU and Ormat claim that energy losses are already included in current general service rates suggesting that losses are double counted in Schedule 32. Is this correct?

A. No. Losses are not double counted. Retail rates are designed to be applied to customer usage as measured at the customer meter. Loss adjustments are used to account for the difference in the metered kW and kWh at the generator and that same kW and kWh as measured at the customer meter. For Schedule 32 the loss adjustment is only applied to the metered output of the Renewable Generation Facility as metered at that facility before it is netted against the customer's usage as measured at the customer meter, putting both on a common basis. No loss adjustment is applied to the customer's usage.

Legality of Generation Backup Facilities Charge

Q. UAE and EOU claim that there is no requirement or mention of a generation backup facilities charge in the RES Statute and that the 300 MW cap on overall participation which limits the generation reserves might be needed to support the customer load in this program. Do you agree?

A. I acknowledge that the RES Statute does not specifically prescribe a backup charge; neither does it preclude such a charge. The fact that the statute includes a

300 MW cap on participating renewable generation does not eliminate the cost of providing backup service to these facilities. However, since the Company has developed Schedule 32 to follow the provisions of the RES Statute as closely as practicable, the Company agrees to remove this charge and to move recovery of the associated costs into the daily power charge. This change increases the daily power charge by about seven cents per kW/day from the rate proposed in my direct testimony.

Credits for Capacity Contribution

Q. Several parties argue that under the proposed structure of Schedule 32 participating customers will receive very little,if any, credit against their bills for the capacity provided by a Renewable Energy Facility. Is this correct?

A. Whether this is true depends on the energy source of the Renewable Energy Facility. If the Renewable Energy Facility is a solar or wind facility, it is unlikely that the power delivered from the Renewable Energy Facility will provide a significant reduction to the customer's billing demand because of the daily generation profile and the intermittent nature of those generation sources. A waste-heat electrical power generating facility, as is being pursued by Powdr Corp., however, may fully offset the customer's billing demand.

A solar or wind facility may indeed provide generation during some of the on-peak billing period identified in the tariff, and may even provide some capacity during the hour of the Company's Coincident peak. Under the Company's tariffs, however, customers' billing demands are calculated using the 15-minute period of the customer's greatest use during the billing period, or during the on peak billing period, depending on the rate schedule. The impact of solar or wind generation on the customer's billing demand is the same under Schedule 32 as it would be if the generator were located on the customer's premises behind the meter. Therefore, the minimal impact of the solar or wind generation on the customer's billing demand is a function of how tariff rates are billed and not a function of how Schedule 32 is structured.

Q. What do the parties recommend?

A. UCE and EOU propose that the customers be billed on the applicable general service tariff with anoffset/credit to existing charges based on a Commission determined capacity contributionvalue based on generation characteristics of each renewable resource. UCE witness Ms. Wright suggests that the capacity value should follow the capacity valuation methods adopted by the Commission in Docket No. 12-035-100.

Q. Do you agree?

A. No. The purpose of Docket No. 12-035-100 was to determine avoided cost prices the Company would to pay to purchase the generation from Qualifying Facilities. It was not a docket to set retail rates. If a customer that owns a Renewable Energy Facilities wants to receive the capacity value as determined in the avoided cost docket, it has the option of selling the output of that facility to PacifiCorp at avoided costs rates rather than use it to offset its retail purchases.

Q. How does the RES Statute address the billing impact of the capacity provided by a Renewable Energy Facility?

A. The RES Statute is very clear that customers using this service are to be billed for all delivered service at the Company's applicable tariff rates with adjustments for kW and kWh delivered from the Renewable Energy Facility. It states:

> **54-17-805. Costs associated with delivering electricity from a renewable energy facility to a contract customer.**
>
> (3) A qualified utility that enters a renewable energy contract shall charge a contract customer for all metered electric service delivered to the contract customer, including generation, transmission, and distribution service, at the qualified utility's applicable tariff rates, excluding:
>
> (a) any kilowatt hours of electricity delivered from the renewable energy facility, based on the time of delivery, adjusted for transmission losses;
>
> (b) any kilowatts of electricity delivered from the renewable energy facility that coincide with the contract customer's monthly metered kilowatt demand measurement, adjusted for transmission losses;
>
> (c) any transmission and distribution service that the contract customer pays for under Subsection (1) or (2).

Utah Code Ann. § 54-17-805(3)(c) clearly states that customers are to be charged for their net billing demand (kilowatts) during the contract customer's monthly metered kilowatt demand measurement, or the customer's monthly non-coincident peak. Rocky Mountain Power developed Schedule 32 in accordance with this direction in the RES Statute.

While the statute does not contemplate that demand related charges should be anymore granular that monthly, Schedule 32 converts the demand related generation component of the rate into a daily charge. Moving to daily charges provides the customer with the opportunity to avoid demand related generation costs on days this service is not received and only pay for this service on the days it is taken, rather than being billed the full monthly rate even if service is taken for only one 15-minute period during the month. The daily charge is designed such that a Customer that uses this service every day during a month would pay essentially the same in facilities charges and power charges as a Customer on the otherwise applicable general service tariff.

Q. How does UAE propose to address the generation capacity portion of Schedule 32?

A. Mr. Higgins chooses to characterize this service as "shaping power" rather than "backup power". There are elements of both. When a Renewable Energy Facility is off line completely, the Company is providing backup service. When the Renewable Energy Facility is operating under its normal daily production cycle, the Company is providing generation capacity to fill in the gaps between the powerthat the Renewable Energy Facility is providing and the power the customer is consuming each hour of the day. This is what Mr. Higgins characterizes as "shaping power." To capture the fact that this charge covers both backup and shaping service and to address the concern that the RES Statute does not specifically prescribe backup charges, I propose to change the description of these charges to "Daily Power Charges."

While Mr. Higgins considers the daily power charges as a useful construct, he proposes to make the charge even more granular by converting it to an hourly demand charge. At that level of granularity, the proposed "hourly on-peak shaping charge" ceases to be a demand related charge and simply becomes an additional kWh or energy charge billed during the on-peak period. I do not agree with that approach and do not believe it is supported by the language of the RES Statute.

Rates for Customers under 1MW under Schedule 32

Q. Walmart recommends that the Delivery Facilities Charge (DFC), Generation Backup Facilities Charge (GBFC), and backup power tariff charges be separately calculated for and applied to Customer Agreement locations otherwise served on Schedule 6. Do you agree?

A. Yes. When the Company developed Schedule 32, itfocused on the 2MW minimum size requirement and calculated the rates using cost of service and current rates for Schedules 8 & 9, for service over one MW. Because the RES Statuteallows smaller delivery points of the same customer that aggregate to two MW to also participate, I should have also developed prices for delivery points smaller than one MW. That was an oversight on my part. Specific rates for customer agreements under one MW, based on Schedule 6 costs and prices, have now been included in Exhibit RMP___(DLT-1R).

Q. What are the resulting Schedule 32 rates and when will they become effective?

A. Approved step 1 rates will become effective upon approval of the Commission in this docket. Approved step 2 rates will become effective on September 1, 2015, which is the rate effective date of the step 2 rate increase proposed in a stipulation in the 2014 GRC.The proposed Schedule 32 rates, as revised in my rebuttal testimony, are shown in Table 2 below. The calculation of these rates are shown in Exhibit RMP___(DLT-1R).

Table 2

	Proposed Schedule 32	
	Step 1[6]	Step 2[7]
Customer Charges[1]		
Distribution Voltage < 1 MW	$54.00	$54.00
Distribution Voltage > 1 MW	$69.00	$70.00
Transmission Voltage	$247.00	$259.00
Administrative Fee[1]		
All Voltages	$260.00	$260.00
Delivery Facilities Charges[2]		
Secondary Voltage < I MW	$7.68	$7.75
Primary Voltage < 1MW	$6.74	$6.81
Secondary Voltage > 1MW	$7.97	$8.05
Primary Voltage > 1MW	$6.83	$6.91
Transmission Voltage	$4.29	$4.34
Daily Power Charges[4]		
On-Peak Secondary Voltage < 1MW		
May - Sept	$0.63	$0.64
Oct - Apr	$0.41	$0.42
On-Peak Primary Voltage < 1MW		
May - Sept	$0.61	$0.63
Oct - Apr	$0.40	$0.41
On-Peak Secondary Voltage > 1MW		
May - Sept	$0.71	$0.72
Oct - Apr	$0.46	$0.46
On-Peak Primary Voltage > 1MW		
May - Sept	$0.70	$0.70
Oct - Apr	$0.45	$0.45
On-Peak Transmission Voltage		
May - Sept	$0.64	$0.66
Oct - Apr	$0.40	$0.41
Backup Energy Charges	Sch 6, 8, 9	Sch 6, 8, 9
Supplementary Power and Energy Charges[5]	Sch 6, 8, 9	Sch 6, 8, 9

Notes:

[1] per Customer Agreement per Month.

[2] per kW of Renewable Contract Power.

[4] per On-Peak kW per Day; No charge for Off-Peak Demand.

[5] Facilities Charges ,Power Charges and Energy Charges for Supplementary Power shall be billed under the applicablegeneral service schedule.

[6] Step 1 rates will become effective upon approval of Schedule 32

[7] Step 2 rates will become effective September 1, 2015.

Q. Does this conclude your rebuttal testimony?

A. Yes.