Q. Please state your name, business address, and present position with PacifiCorp dba Rocky Mountain Power ("RMP" or the "Company").

A. My name is Loren ("Lucky") P. Morse. My business address is 70 North 200 East American Fork, Utah 84003. I am employed by the Company as the Director of Customer and Community Management for the states of Utah and Idaho.

Q. Please briefly describe your professional experience.

A. I received a B.S. in Mechanical Engineering from Brigham Young University in 1984 and a M.B.A. from the University of Utah in 1991. I have been employed by the Company or its predecessors since 1984. At the Company, I have worked in Engineering, Customer Service, District Management, Account Management and Community Management. From 2000 to the present, I have held several supervisory and management positions in account and community management.

PURPOSE AND SUMMARY

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide an overview of the administration costs and the customer billing procedures associated with the proposed Subscriber Solar Program ("Program") introduced by Company witness Mr. Paul H. Clements.

ADMINISTRATION COSTS

Q. Please provide an overview of the program costs associated with the Subscriber Solar Program.

A. Program costs occur in three main categories: 1) administration; 2) marketing; and 3) billing.

Administration

Administration support will be accounted for in a manner similar to the accounting treatment for the current Blue Sky Program. All administrative expenses will be booked to a liability account specific to Utah for this Program that is excluded from revenue requirement in rate case proceedings. This support will include the equivalent of one full time employee for program management and oversight. This employee will manage day-to-day operations and interactions to ensure successful implementation and administration of the Program. Job responsibilities will include monitoring and evaluating Program progress; customer service support with contracts, enrollments, cancellations and transfers; program reporting; development and delivery of training and communications; oversight of third-party vendors contracted to support the delivery of the program; recordkeeping of purchases and sales; matching customer solar requirements to the program's supply, or other support as identified. Initial program costs in this category will include the development of processes and procedures to administer the program.

Marketing

The objective of the communications and marketing plan is to introduce the Subscriber Solar Program as a new renewable energy option for customers who are interested in solar generation and to generate subscriptions. The Program will be marketed under the Blue Sky program umbrella so that it is easily recognizable as a renewable program option. Communications around the Subscriber Solar Program will be funded through the Subscriber Solar Program; however the Program will also utilize the current Blue Sky marketing and outreach efforts which

will present the Subscriber Solar and Blue Sky program options simultaneously. This will create an efficient outreach marketing program. The Company will reach customers directly at events and through targeted communications and online advertising, much like what has been done successfully for the Blue Sky program. Broad awareness will be created through statement communications and news media outreach. Communications will be easy-to-understand, and web tools will enable customers to compare options and encourage enrollment.

Communications around the Program will commence soon after the Company makes its application for approval of the Program. However, increased marketing of the Program will not begin until program approval has been obtained and the program design has been approved by the Commission. The Company will create a waiting list for customers expressing early interest and will contact those customers directly when the Program is approved and available.

Billing

Integrating the new Program with the Company's billing system and developing tools to efficiently manage customer participation are key metrics to the Program success. The Program costs associated with billing include initial design and implementation of enhancements to the customer billing system to accommodate the billing requirements for the Program. Additionally, a management tool will be implemented to support contract management, reporting requirements and the customer application/enrollment process.

Billing setup, annual reconciliation administration, pricing adjustments, testing/verification and final contract billing will require a combination of

automated and manual processes to fulfill the requirements of this Program. The expected number of full time employees needed to support the annual billing for the program is 1.5. Over the lifecycle of the project, the Company anticipates the monthly billing cost to decrease as system enhancements are implemented to further automate the billing process.

Q. What are the projected Program administration costs, and how will they be charged to Subscriber Solar Program customers?

A. The projected Program administration costs average approximately $600k per year. The costs are included as a component of the Solar Block Generation Charge, which is described by Company witness Mr. Clements.

Q. Will customers who do not desire to participate in the Subscriber Solar Program pay any of the Program administration costs?

A. No. The administration costs of the Program will be entirely assigned to and collected from Program subscribers.

CUSTOMER BILLING

Q. How will residential and small non-residential Subscriber Solar Program customers be billed?

A. Residential (Schedules 1, 2, and 3) and small non-residential (Schedule 23) customers will continue to be billed on their existing rate schedules, with certain adjustments to reflect their participation in the Program. The subscriber's bill will include two additional line items. The first line item will be the Solar Energy Block Charge, which includes the Solar Block Generation Charge and the Solar Block Delivery Charge. The second line item will show the amount of kilowatt-hour

("kWh") purchased through the Program. For example, if a customer subscribes to two blocks, and each block is 200 kWh, the line item will show 400 kWh.

The kWh subscribed (the 400 kWh in my example) will be deducted from the customer's total metered energy use for the period, and the remaining kWh will be billed according to the applicable tariff (such as Schedule 1 for most residential customers). All tariff riders, taxes and other adjustment schedules, except for the energy balancing account ("EBA") tariff rider following the first year of enrollment, will apply to the subscribed energy portion of the bill as they would to other energy charges under the underlying tariff. Since the EBA is for recovery of the prior year's power costs, the Company proposes to apply the EBA adjustment to the subscribed energy during the first year of enrollment (or period applicable to the recovery of the EBA) so those costs will not be shifted to other customers. Thereafter, the EBA will not apply to the subscribed energy.

Q. Can you provide a basic example of how the Program will impact a residential customer's bill?

A. Yes. Assume a customer uses 1,300 kWh in a summer month (e.g., a month between May and September), and the customer subscribes to one subscriber solar energy block that produces 200 kWh. First, the customer will be charged the Solar Energy Block Charge described earlier in my testimony. Then, the 200 kWh of subscriber solar energy will be deducted from the customer's metered total usage. In this example, 200 kWh would be deducted from 1,300 kWh, leaving 1,100 kWh. The remaining 1,100 kWh will be billed based on the standard Schedule 1 billing parameters. Since Schedule 1 has a tiered rate schedule, this customer would be

billed 400 kWh in the first energy block (the lowest cost block), 600 kWh in the second energy block (the next lowest cost block) and the final 100 kWh would be billed in the third energy block (the highest cost block). In this example, had this customer not subscribed to one subscriber solar energy block, this customer would have been billed 300 kWh in the third energy block instead of 100 kWh in the third energy block. The subscriber solar energy is always deducted from the customer's usage prior to calculating the charges for the remaining energy.

Q. Will the calculation be similar for Schedule 23 customers?

A. Yes. Schedule 23 customers will be billed in a similar manner.

Q. How will large non-residential Subscriber Solar Program customers be billed?

A. I will address the billing for large non-residential customers in two groups: 1) Schedule 6 customers and 2) Schedules 8 and 9 customers.

Most Schedule 6 customers do not have interval meters that are capable of collecting 15 minute billing information and instead have a meter that only measures a peak demand and cumulative energy usage. Some may have a time of use meter that can capture cumulative usage during on peak and off peak periods and a time stamp of when the peak usage occurred, but these time of use meters do not capture and report 15 minute usage data. For that information, a customer requires an interval meter. For Schedule 6 customers who do not have interval meters, meaning customers who do not have meters that can produce 15 minute meter data, their subscriber solar energy block purchases will be deducted from their energy usage prior to calculating the energy charges under the applicable Schedule 6. If a Schedule 6 customer has an interval meter, or elects to install an

interval meter, the customer will be billed consistent with the billing for Schedule 32.

Schedule 8 and Schedule 9 customers have interval meters, meaning the meter produces 15 minute data. These customers (and Schedule 6 customers who have interval meters) will be billed on Schedule 32. Schedule 32 went into effect April 1, 2015, and is intended to fulfill the requirements of Utah Senate Bill 12, which allows customers to purchase a portion or all of the energy needs from a renewable resource that is not located behind their own meter. Under Schedule 32, the renewable resource can be owned by a third party or by the Company. For large non-residential customers who desire to participate in the Subscriber Solar program, Schedule 32 is an ideal fit for billing purposes as it was specifically designed for customers who meet some or all of their needs with a renewable resource that is not behind their meter.

Q. Can you provide a basic description of how the Program will impact a large non-residential customer's bill?

A. Yes. Under Schedule 32, the output of the customer's share of the solar resource (in this case it would be the capacity of the subscriber solar resource to which the customer has subscribed) is deducted from the customer's bill on a 15 minute basis. In other words, if the customer subscribes to one subscriber solar energy block, and each block is 1 kW of the solar resource, the output associated with 1 kW of the solar resource over a given 15-minute period will be deducted from the customer's metered usage over that same 15-minute period. This calculation will occur for every 15-minute period in the billing cycle. This essentially is equivalent to the

customer having 1 kW of solar behind their own meter.

Once the customer's share of the output of the subscriber solar resource is deducted for each 15-minute period, the customer is then billed the applicable charges in Schedule 32.

Q. Can a large non-residential customer offset demand charges?

A. Yes. Since the subscriber solar resource output is deducted from the customer's usage on a 15 minute basis, and demand charges are based on the highest usage during any given 15-minute period in the billing cycle, a large non-residential customer may offset a portion of their otherwise applicable demand charges.

Q. Can a subscriber solar customer bank unused subscriber solar energy in one month for use during future months?

A. Residential and small non-residential customers can roll forward excess subscribed energy to be deducted from the customer's usage in the following month(s) until any excess subscribed energy has either been consumed by the customer or the customer reaches its annual subscription anniversary. On the annual subscription anniversary, any unused excess subscribed energy from the prior 12 months will be donated to the Company's Low Income Program, consistent with the treatment of excess energy under the net metering program.

For large non-residential customers, the subscriber solar energy is deducted from the customer's usage on a 15 minute basis. If the subscriber solar energy exceeds the customer's usage in any given 15-minute period, the usage is set to zero for that 15-minute period and no banking or rolling forward occurs for the excess.

Q. Please summarize your testimony.

A. Program costs for the subscriber solar program consist of administration, marketing and billing costs. These costs are necessary to provide the management and structure required to ensure the program is managed successfully and will be entirely assigned to and collected from Program subscribers. A description of how bills will be calculated for residential, small non-residential and large non-residential customers has been provided to describe how subscribed energy will be incorporated into a customer's total power costs.

Q. Does this conclude your direct testimony?

A. Yes.