July 10, 2015 Technical Workshop

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Program Overview

- The Subscriber Solar Program offers Rocky Mountain Power customers the opportunity to buy fixed kilowatt-hour blocks of electricity from a Company solar resource at a fixed price and then use that purchase to offset their own energy usage at their home or business.
- Customers will subscribe to a specific solar project or group of solar projects that will be owned or contracted by Rocky Mountain Power.
- Customers will not incur the upfront investment costs in solar panels and the ongoing maintenance costs that occur with a typical rooftop installation.
- Customers will buy blocks of solar energy at a fixed (locked-in) energy price for two, five, seven or ten year terms.
- Their non-energy costs (transmission and distribution) will continue to be subject to future rate proceedings.

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Agenda

- Solar Resource and Request for Proposals
- Program Eligibility and Initial Size
- Program Mechanics
- Solar Energy Blocks
  - Solar Block Generation Charge
  - Solar Block Delivery Charge
- Program Administration Costs
- Program Billing
- Program Regulatory Accounting

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Solar Resource Request for Proposals

- The initial resource is proposed to be a 15 megawatt project.
- The resource will be acquired through a Request for Proposal (RFP) process.
- The 2015 Solar RFP was issued on May 27, 2015.
  - Bids are due July 20, 2015
- The resource must be located in Utah.
- Three different types of deal structures:
  - 1) Power Purchase Agreements (PPA) with 15 to 25 year terms
  - 2) Asset Purchase and Sale Agreements (APSA), also known as Build-Own-Transfer (BOT) arrangements
  - 3) Engineer-Procure-Construct (EPC) arrangements.
- Multiple resources may be selected to achieve the desired total size.
- The RFP requires a minimum size of 2 MW.

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Additional RFP Details

- The RFP documents can be found at the following web address: www.pacificorp.com/sup/rfps/RFP2015s.html
- The RFP schedule is as follows:

Event	Estimated Timeline
RFP issued	**May 27, 2015**
Bidder meeting	**June 3, 2015**
Responses due	**July 20, 2015**
Shortlist selection	**August 14, 2015**
Shortlist submitted to Utah DPU	**September 4, 2015**
Best and final pricing update of Shortlist	**September 11, 2015**
Bidder negotiations completed	**October 2, 2015**
Final selection	**October 16, 2015**
Notice to Proceed (Pending approval of Program)	**November 2, 2015**
Project Commercial Operation Date	**December 1, 2016**

Solar Resource: Final Size

- The Company intends to review the RFP responses and customer interest as this docket progresses to determine if the solar resource size should be adjusted to meet the needs of the program.
- If a larger project results in a materially lower solar resource cost, or if there is higher than expected customer interest, the Company may select a larger solar resource.
- The Company intends to work closely with interveners and other stakeholders when selecting the final size of the solar resource for this initial Program offering, but the current targeted size is 15 MW.
- The shortlist from the Company's RFP is scheduled to be completed on August 14, 2015.
- The Company will include an updated recommended size in its August 27, 2015 supplemental filing.

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Subscriber Solar Program Eligibility

- The program is available to residential, small commercial and industrial customers, with the initial offering split as follows:
  - Residential: 30% (4,500 kW assuming a 15 MW resource)
  - Commercial: 30% (4,500 kW assuming a 15 MW resource)
  - Industrial: 40% (6,000 kW assuming a 15 MW resource)
- After an initial marketing period of 180 days from the date of Program approval, and at periodic intervals thereafter, the Company will assess whether available unsubscribed capacity should be shifted between classes to meet customer interest and will make adjustments accordingly.
- The Company is working with "charter" subscribers and may allocate initial capacity (and acquire a larger solar resource) accordingly.

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Program Mechanics

1. Subscriber Solar Energy Block purchases can be locked in for two, five, seven or 10 year terms.
2. Residential and small non-residential customers can subscribe to as many blocks as they want, but their subscription cannot exceed 100 percent of their usage for the prior 12 months (on a kWh basis).
3. Industrial customers can subscribe to as many blocks as they want, but their subscription cannot exceed the lower of 100 percent of their usage for the prior 12 months or 500 kW.
4. Subscriptions will be awarded on a first-come, first-served basis until Program capacity is reached.
5. If a customer cancels a subscription, the subscribed amount will be added to the available Program capacity. Cancelation shall be effective at the end of the billing period in which the request is made.

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Program Mechanics cont.

6. Customers may transfer their subscriptions to other points of electric service delivery within the Company's Utah service territory if they move (provided they stay on the same rate schedule).
7. Customers can cancel their subscriber solar contract within 30 days of signing up with no penalty/termination fee.
8. Subscribers will pay a termination fee if they cancel before the term of their subscriber solar agreement. The cancelation fee will equal six months of the Solar Block Generation Charge times the number of blocks subscribed times 200 kWh.
9. PacifiCorp will retain ownership of the RECs and all other environmental attributes including but not limited to carbon emission reduction credits, and the credits will be retired by PacifiCorp on behalf of subscribers.

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Program Mechanics cont.

10. Residential and small non-residential customers can bank excess kWh from month to month, and the bank will be cleared annually with any excess kWh being donated to the Low Income Program.
11. The Program will not require new metering installations at a subscribing customer's point of delivery.
12. Customers participating in the Subscriber Solar Program cannot participate in the Company's net metering program.

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Solar Energy Blocks

- Each Solar Energy Block will represent one kW of capacity of the subscriber solar resource.
- The corresponding kWh associated with each one kW capacity block will be finalized once the solar resource has been selected and the expected production profile of the solar resource is known.
- Based on a Company estimation of a solar production output for a southern or central Utah solar resource, the Solar Energy Block energy amount is expected to be approximately 200 kWh per one kW block of capacity.
- For residential and small non-residential customers, the Solar Energy Block will be the same for each month.
- Residential and small non-residential customers can bank excess kWh from month to month, and the bank will be cleared annually with any excess kWh being donated to the Low Income Program.

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Solar Energy Block Costs

– A Solar Energy Block includes two cost components:

1. A Solar Block Generation Charge to cover the cost of the solar generation resource and the costs associated with the Program.

2. A Solar Block Delivery Charge to cover the delivery related, or non-generation, costs (e.g., transmission, distribution, and customer services).

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Solar Block Generation Charge

- The Solar Block Generation Charge includes the following:
  - Solar resource cost: *the cost per kWh of the Program resource*.

plus

  - Utility generation cost: *the cost per kWh of utility generation required (in addition to the solar resource blocks) to provide service to the customer.*

plus

  - Program administration costs:
    - » *Administration*
    - » *Marketing*
    - » *Billing*

- The "utility generation cost" is based on a set of data points including: 1) the difference between the expected solar resource cost and the embedded cost of generation and 2) the difference between the expected solar resource cost and the market value of the solar energy.

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Solar Block Generation Charge cont.

- Assumptions:
  - Solar resource cost of $55 per MWh
  - Utility generation cost of $9 per MWh
  - Program costs of $24 per MWh (residential), $21 per MWh (small commercial) and $18 per MWh (industrial)

- The current anticipated Solar Block Generation Charge for each customer class is as follows:
  - Schedules 1, 2, 3: 8.8 cents per kWh subscribed
  - Schedule 23: 8.5 cents per kWh subscribed
  - Schedules 6, 6A, 6B (no interval meter): 8.2 cents per kWh subscribed
  - Schedules 6, 6A, 6B (with interval meter): 8.2 cents per kWh subscribed
  - Schedules 8, 9, 9A: 8.2 cents per kWh subscribed

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Solar Block Facilities Charge

- In addition to the Solar Energy Block Generation Charge, residential and commercial customers will pay a Solar Energy Block Facilities Charge to cover distribution, transmission and customer service costs.
- The Solar Energy Block Facilities Charge will be based on certain unit cost categories in the customer class cost of service model:
  - The charge will include all unit cost categories except Generation Total (so it will cover transmission, distribution and customer service charges).
- The Solar Energy Block Facilities Charge will adjust over time consistent with those cost categories in any commission-approved cost of service study resulting from rate cases and other rate-making proceedings.
- The current charge would be 3.9783 cents per kWh for residential, 2.9294 cents per kWh for commercial if calculated on a per unit basis.
- Industrial customers who participate in the program will be on a three part partial requirements rate (Utah Schedule 32) and will not have a separate Solar Energy Block Facilities Charge since those charges are captured in Schedule 32.

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Program Administration Costs

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

1. Administration: One FTE to manage program, other expenses to develop processes and procedures to administer the program.

2. Marketing: Marketing expenses (will utilize existing Blue Sky channels but expenses will be tracked separately).

3. Billing: Integrating program with Company's billing system. Will require automated and manual processes.

The projected Program administration costs average approximately $600k per year. The costs are included as a component of the Solar Block Generation Charge.

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1) Administration Costs

- Start up costs to prepare administration and processes to manage customer enrollments and participation
  - Set up administrative functions to ensure proper oversight and management of Program
  - Contract preparation and management
  - Ensure processes in place to set up new accounts and properly bill subscribers
  - Organize various customer contact points to be responsive to customer questions

- Ongoing administration costs
  - 1 FTE to manage program
  - Program expenses
  - Respond to customer inquiries
  - Manage new enrollments
  - Ensure participants are properly set up in billing system
  - Manage contracts
  - Respond to program inquiries

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2) Marketing Costs

- Phase 1 Pre-Approval
  - Develop outreach materials including program description, key messages, frequently asked questions
  - Update website to include landing page, program description, waiting list, calculator, program updates, develop online application/enrollment process
  - Update existing Blue Sky materials to include subscriber solar as an option under Blue Sky brand
- Phase II - Program Approval to Solar Resource in service
  - Update customer outreach materials with final program information
  - Customer outreach to obtain customer awareness of program, respond to questions, and explain how to enroll through media and print outlets to reach customers
  - update website and provide ability to enroll in program
  - Welcome packet and program information
- Phase III – Ongoing Marketing after solar resource is in service
  - Update program materials periodically as needed to maintain customer awareness and interest in subscribing to solar resources
  - Ongoing customer outreach

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3) Billing Costs

- Billing system development
  - Billing system development and programming to provide modifications necessary to bill Program
  - Automate processes where possible
  - Modify the subscriber's bill to indicate blocks subscribed and solar energy costs
  - Develop process to manage contract terms such as term of contract, cancellation, banking of excess solar energy, new subscribers

- Implementation

  It is anticipated that it will require a combination of manual and automated processes to bill subscribers until a billing system can be placed in service to automatically bill the complexities of the program. This is expected to require 1.5 FTE to bill subscribers

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Total Program Costs

Activity	Initial	Annual	Total
Administration	$10,000	$207,640	$5,201,000
Marketing	$93,000	$267,000	$6,771,000
Billing	$185,000	$164,640	$4,301,000
TOTALS	$288,000	$639,280	$16,273,000

- Includes inflation adjustments
- Program costs are: $24 per MWh (residential), $21 per MWh (small commercial) and $18 per MWh (industrial)
- A portion of program costs cover the impact of the ramping up of subscribers
- Large Commercial customers with interval meters will be billed on schedule 32 and billing costs will be recovered within the customer charge applied to the tariff.

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Program Billing: No Interval Meter

- Residential (Schedules 1, 2, and 3), small non-residential (Schedule 23) and some Schedule 6 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-hours ("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.

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Program Billing: Interval Meter

- Schedule 8 and Schedule 9 customers (and some Schedule 6 customers) have interval meters, meaning the meter produces 15 minute data.
- These customers 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.

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Residential “Talking Points”

RESIDENTIAL

- An average home uses 750 kilowatt hours per month which would mean an additional $3.50 per month or 4.1% more with one block. No upfront costs.
- Transfer subscriptions wherever they live within RMP Utah.
- Paying slightly more for entire electricity bill, but the generation rate will be “fixed” and could hedge against future price increases.
- Customers can obtain blocks up to annual energy usage, and unused energy in one month will roll forward.

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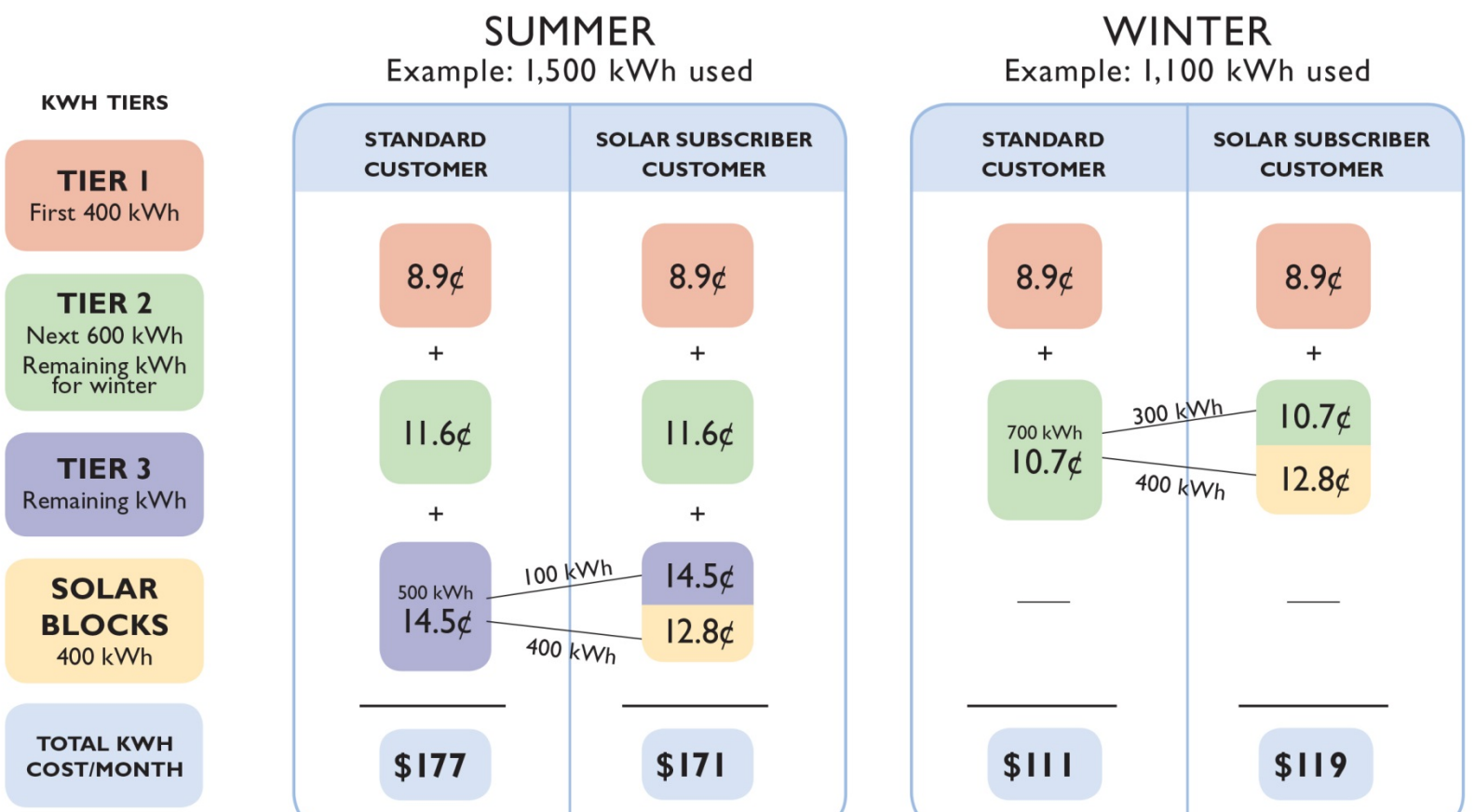
Residential Billing Mechanics



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Regulatory Accounting