

- BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH -

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In the Matter of the Approval of Rocky Mountain Power's Tariff P.S.C.U. No. 47,  
Re: Schedule 107 - Solar Incentive Program )  
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DOCKET NO. 07-035-T14  
ORDER ON THE  
THREE-YEAR SOLAR ASSESSMENT

ISSUED: February 10, 2011

By The Commission:

INTRODUCTION

On April 4, 2007, PacifiCorp, doing business in Utah as Rocky Mountain Power ("Company"), filed with the Utah Public Service Commission ("Commission") a request for approval of Schedule 107 - Solar Incentive Program ("Program"). The Program is a five-year pilot program providing financial support to those customers who purchase and install solar photovoltaic systems.

On August 3, 2007, the Commission issued an Order Approving Tariff with Certain Conditions ("Order"). As a component of the Program, the Company committed to file an annual report of the program summarizing annual program results and related expenditures by March 1<sup>st</sup> of each year. In addition to the annual program reports, this Order also directed the Company "to provide a report within three years, assessing whether changes are warranted in any element of the Program, including the caps."

On May 27, 2009, the Company filed annual reports for 2007 and 2008. The Division of Public Utilities ("Division"), on July 22, 2009, and the Office of Consumer Services ("Office"), on July 23, 2009, filed comments with the Commission in response to the Company's annual reports. The Office expressed concern there was a lack of compliance in returning the

attestation certificates and these certificates were an important factor in evaluating the Program. The Office requested the Commission require the Company to evaluate the problem and consider alternative methods for increasing compliance.

On August 5, 2009, the Commission issued two letters to the Company. The first letter acknowledged the reports and the second requested the Company respond to the attestation compliance issue raised by the Office.

On February 25, 2010, the Company requested an extension of time to file the 2009 Annual Report until March 15, 2010. On March 15, 2010, the Company filed its 2009 Solar Photovoltaic Incentive Program Annual Report (“2009 Annual Report”). On March 16, 2010, the Commission issued an action request to the Division and on April 20, 2010, issued a request for comments on the 2009 Annual Report due May 3, 2010.

On September 15, 2010, the Commission issued an order acknowledging the 2009 Annual Report and directed the Company to provide responses to seven issues raised by the parties. On September 30, 2010, the Company filed with the Commission its Three-Year Assessment of the Program. In addition to providing program assessment data and recommendations, the Company also addressed issues raised by parties on the Company’s 2009 Annual Report.

On November 4, 2010, a duly noticed technical conference was held in which EMB Energy Inc. (“EMB”) made a presentation on “Utility-Scale Bulk Electric Energy Storage Technology Proposed Demonstration Facility.” The intent of the project is to demonstrate that electro-mechanical battery storage technology, when properly installed, will enable the large-scale

integration of central and distributed renewable generation. This can be done by eliminating system barriers, contributing to the long-term competitiveness of large industrial customers, affording an alternative to transmission expansions and fossil-fueled peaking generation, and contributing to the system-wide improvement of grid reliability, power quality, and customer service. The Company recommended that the Program terminate at the end of calendar year 2010, the Program's fourth year of the original five-year term, and that the Program annual budget of \$314,500 be extended through 2012 to fund an electro-mechanical battery energy storage demonstration project.

On December 14, 2010, the Company responded to issues raised by parties in response to the Three-Year Assessment and the proposed electro-mechanical battery energy storage demonstration project.

PARTIES' COMMENTS AND RECOMMENDATIONS

In addition to the Division and the Office, the following parties provided comments on the Company's Three-Year Assessment of the Program and the proposed electro-mechanical battery storage project: Utah Solar Energy Association; Salt Lake County ("SLCO"); Salt Lake City ("SLC"); Department of Natural Resources, Utah State Energy Program; Solar Volts LLC; Utah Association of Energy Users; Park City Municipal Corporation, City of Moab, Wal-Mart, Garbett Homes, Park City Mountain Resort & Powdr Corporation, Petzl America, Inc., Backcountry.com, Utah United Religions Initiative, Utah Interfaith Power and Light, HEAL Utah, The Utah Physicians for a Healthy Environment, Wild Utah Project, The Vote Solar Initiative, Sharp Electronics Corporation, SunEdison, Harris-Dudley Co., Rocky Mountain Integrated Solutions, Inc., Tom Ward, Jess Reid Real Estate (collectively "Park City"); European

Renewable Energy Research Centres Agency (“EUREC”); EMB; and Utah Clean Energy (collectively know as the “Parties”).

On November 30, 2010, the Division issued a letter to the Commission recommending it acknowledge the Three-Year Assessment of the Program filed by Rocky Mountain Power as meeting the Commission’s requirement for the Program. The Division reviewed the filing and evaluated it according to the requirements set forth by the Commission and found the Three-Year Assessment of the Program complies with the Commission Order.

While Parties voice support for the continuation of the Program, comments on the Three-Year Assessment and of the proposed electro-mechanical battery energy storage demonstration project include:

1. The Commission should order the continuation of the Program to the original five-year term to gather additional useful information for the program moving forward. Interval data collection should continue, but from a larger sample of participants including more southwesterly oriented solar projects that will better meet the demands of the system peak.
2. The Commission should order the expansion of the Solar Incentive Program with higher caps, requiring the Company to make necessary modifications for a cost-effective, long-term solar program. Consideration should be given to the multiple benefits of distributed solar energy, both economic and environmental.
3. The Company originally requested the Commission discontinue the program and allocate the remaining Solar Incentive Program funds to support the installation of

the demonstration battery storage system. While the Company concludes the Program has accomplished its original objectives, in response to the nearly unanimous voice of the responding Parties that the Program continue through its full five year term, the Company is agreeable to continuing the Program.

4. Parties recommend reducing the incentive rebate amount, to reflect the reduction in the cost of installed solar systems, and offer tiered incentives for different system orientations. They also recommend consideration of opportunities to tie the Program with demand response/efficiency programs to minimize the effects on-system peak.
5. The Commission should direct the Company to provide adequate responses to four specific issues identified by the parties in comments to their review of the Company's 2009 Annual Report filing, dated March 15, 2010. These issues are:
  - a. The Commission should open an investigative docket, or other formal proceeding, to initiate a comprehensive review of the effectiveness of the Program and evaluate it for possible changes and expansion.
  - b. The Commission should use caution in using the findings in the Company's 2009 Annual Report to determine the effectiveness of the Program without considering economies of scale, more reasonable administrative costs, programs used in other utilities, and more transparent data analysis.

- c. The Program budget and design are too small to fairly conduct an economic analysis and to encourage adequate solar penetration into the Utah market.
  - d. The Parties support a more open and thorough review process and request a more detailed explanation of the methodology, assumptions, calculations, formulas and models used in the report and request an open forum to explore these issues. Of particular concern are Tables 3 (Levelized Cost of Energy) and 4 (Results for Standard Economic Tests).
6. Parties are supportive of the Company's interest in the research and development of an energy storage technology project. The Commission should assure funding and recovery for this project. Funding should occur through the Demand Side Management Program or other Company proposed rate recovery methods. Long term, the establishment of a research and development fund for Rocky Mountain Power to explore new technologies in power production and storage should be considered.

DISCUSSION, FINDINGS, AND CONCLUSIONS

1. Based on the Division's recommendation, we conclude the Company's Three-Year Assessment Report generally meets the requirements identified in our August 3, 2007, Order.

2. **Program Future:** Based on the comments received from the Division, the Office and the Company, the Program will continue through to the end of the original five-year term and collect additional information on the potential of distributed solar technologies.
3. **Rebate Incentive Amount:** Due to a reduction in installed solar costs, the Company, the Division, the Office, and UCE recommend a reduction to the incentive amount. We find the proposed reduction of the incentive amount to \$1.55 per watt appropriate given current market conditions. The Company proposes, and the Division and Office agree, remaining funds from the reduction in incentive amount shall be used to cover the increased costs associated with more comprehensive data collection obtained through using more capable meters. We are supportive of this.
4. **Detail to Questions 1-4:** The Division requests the Company provide adequate responses to issues 1-4 identified by the parties in response to the Company's 2009 Annual Report filing. With the continuation of the program to the five-year term, we direct the Company to provide these responses.
5. **Battery Storage:** Parties are in favor of the battery storage demonstration project but most agree it should not come as a result of discontinuing the Solar Incentive Program. We agree and commend the Company for its participation in this demonstration project.

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ORDER

NOW, THEREFORE, IT IS HEREBY ORDERED, the Commission acknowledges the Three-Year Solar Incentive Program Report subject to the comments and conditions in this Order.

DATED at Salt Lake City, Utah, this 10<sup>th</sup> day of February, 2011.

/s/ Ted Boyer, Chairman

/s/ Ric Campbell, Commissioner

/s/ Ron Allen, Commissioner

Attest:

/s/ Julie Orchard  
Commission Secretary  
G#71061