Gary G. Sackett (USB 2841)
JONES, WALDO, HOLBROOK & MCDONOUGH, P.C.
170 South Main, Suite 1500
P.O. Box 45444
Salt Lake City, Utah 84145
Phone: (801) 534-7336
gsackett@joneswaldo.com

Attorneys for EMB Energy, Inc.

Submitted: November 30, 2010

— BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH —

IN THE MATTER OF THE APPROVAL OF ROCKY MOUNTAIN POWER'S TARIFF P.S.C.U. NO. 47, RE: SCHEDULE 107 – SOLAR INCENTIVE PROGRAM	)))))))	Docket No. 07-035-T14 **COMMENTS OF EMB ENERGY, INC. ON THE THREE-YEAR ASSESSMENT**

In response to the report submitted by Rocky Mountain Power on September 30, 2010, in the captioned docket and pursuant to the Commission's October 6, 2010, Request for Comments, EMB Energy, Incorporated ("EMB Energy"), submits its comments concerning the Rocky Mountain Power report. All documents in this proceeding should be served on counsel and on:

Charles D. Hess
Senior Vice President of Operations
602 South Edgewood Dr., #135
North Salt Lake, UT 84054
chess@tri-sci.com

EMB is a special-purpose company formed in May 2010 solely to accelerate the scale-up and commercialization of an advanced bulk electric-energy storage technology

developed by scientists working at the U.S. Department of Energy's Lawrence Livermore National Laboratory ("Lawrence Livermore"). EMB Energy has secured the requisite funding, staffing and manufacturing contracts to successfully complete this important undertaking. With the Rocky Mountain Power's continued support and participation, EMB Energy expects to demonstrate the technical and economic viability of the technology on a utility-scale basis (i.e., 25 MW) before the end of 2011. Full production and deployment of the technology will commence in mid-2012, with much of the initial manufacturing occurring in Utah.

EMB Energy respectfully submits these comments in support of the findings and conclusions proffered by Rocky Mountain Power in its September 30, 2010, Utah Solar Incentive Program Report and respectfully asks the Commission to make special note of the following excerpt from the Report's Summary and Recommendations (page 10):

> Solar is not a cost effective resource, but may become cost effective in the future as technology advances, energy storage capabilities expand, the production efficiencies add value to this renewable energy source or drive its costs down. The Company believes that it is important to continue to monitor and participate in the development of renewable energy technologies that will enhance the value of this energy and provide the experience necessary to understand the impacts on the electrical system as new technologies make solar a viable energy solution. Advances in energy storage technologies could enhance the value of solar by firming up the resource or extending its use to peak periods while reducing the intermittent nature of the resource.

Rocky Mountain Power correctly recognizes that energy storage is an integral contributor to making "solar a viable energy solution." EMB Energy believes that properly placed bulk energy storage will allow electric utilities in general, and Rocky Mountain Power specifically, to economically and efficiently accommodate substantially more renew-

able generation by providing the network with the tools necessary to overcome the diurnal and intermittent nature of these resources. The importance of economic and efficient bulk energy storage is well understood across the electric industry.

The President's Council of Advisors on Science and Technology has stated :

> It is difficult to overstate the importance of energy storage. The efficiency and cost-competitiveness of renewable electricity generation and alternative-fuel vehicles could be significantly improved by the availability of low-cost, high-capacity storage. For example, because solar and wind power generation is intermittent—the sun and the wind are not constantly available—these systems require energy storage if they are to serve as a reliable supply of electricity throughout the day.[1]

The electric industry's long search for a viable, economic and efficient bulk energy-storage technology is well-documented. EMB Energy believes that its best-in-class manufacturing partners will capitalize on the technological advances made by the distinguished scientists and engineers working at Lawrence Livermore and deliver a viable electric storage system that benefits customers while supporting the nation's renewable initiatives.

EMB Energy was afforded the unique opportunity to introduce the storage technology and its business objectives to the Division of Public Utilities during a Technical Conference convened in this docket on November 4, 2010. The conference was well-attended by Division staff, Rocky Mountain Power and several key stakeholders. EMB Energy's goals for the electric-energy storage project are to demonstrate at a utility-scale application that the technology, when properly deployed:

[1]President's Council of Advisors on Science and Technology, *The Energy Imperative: Technology and the Role of Emerging Companies*, Nov. 2006, Executive Summary xiii.

- Enables the large-scale deployment of central and distributed renewable generation by eliminating system barriers.
- Contributes to the long-term competitiveness of large industrial customers.
- Affords viable alternatives to transmission expansions.
- Contributes to the system-wide improvement of grid reliability, power quality and customer service.

Rocky Mountain Power, in furtherance of its desire to support the demonstration project, requested that monies initially designated to fund the remaining two years of its five-year solar pilot project be reallocated to fund its essential participation in the demonstration project. Several funding options were discussed by Rocky Mountain Power, the Division and the various stakeholders in attendance. EMB Energy is encouraged that all parties in attendance appeared desirous of supporting Rocky Mountain Power's participation in the project.

EMB Energy respectfully requests the Commission to authorize Rocky Mountain Power to spend up to $625,000 in support of the electric-energy storage project proposed by EMB Energy. The formidable team assembled to ensure the ultimate success of the storage demonstration project in Utah, including Lawrence Livermore National Laboratories, Rocky Mountain Power, ATK Thiokol, Williams International, Arnold Magnetics, Oklahoma State University—University Multispectral Laboratories, Carnegie Melon University and EMB Energy, all share a common vision of the future of the electric industry that very prominently includes the wide-scale deployment of renewable resources to serve the nation's growing demand for clean, affordable electric energy. The Commission's encouragement and support of this paradigm-changing initiative will substantially increase

its likelihood of success. Rocky Mountain Power, its customers, the renewable industry and the State of Utah, will all substantially benefit as a result.

Respectfully submitted this 30th day of November 2010.

JONES, WALDO, HOLBROOK & MCDONOUGH, P.C.

Gary G. Sackett

Gary G. Sackett
Attorneys for EMB Energy, Incorporated

CERTIFICATE OF SERVICE

I hereby certify that copy of the foregoing **COMMENTS OF EMB ENERGY, INC. ON THE THREE-YEAR ASSESSMENT** was sent by U. S. Mail and by e-mail this 30th day of November, 2010 to the following:

PacifiCorp
Suite 2000
825 NE Multnomah Blvd.
Portland, OR 97232
datarequest@pacificorp.com

Joan Pearson