J. Craig Smith (04143) (jcsmith@smithlawonline.com) Adam S. Long (14701) (along@smithlawonline.com) SMITH HARTVIGSEN, PLLC 175 South Main Street, Suite 300 Salt Lake City, Utah 84111 Telephone: (801) 413-1600 Facsimile: (801) 413-1620 Counsel for the Renewable Energy Coalition

# **BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

In the Matter of the Application of Rocky Mountain Power for Modification of Contract Term of PURPA Power Purchase Agreements with Qualifying Facilities Docket No. 15-035-53

**REBUTTAL TESTIMONY OF NATHAN RICH** 

The Renewable Energy Coalition, (the "Coalition") hereby submits the attached Rebuttal

Testimony of Nathan Rich on behalf of the Coalition.

Respectfully submitted this 13<sup>th</sup> day of October, 2015.

## SMITH HARTVIGSEN, PLLC

/s/ Adam S. Long

J. Craig Smith Adam S. Long Attorneys for Renewable Energy Coalition

## **CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the foregoing was served on this 13<sup>th</sup> day of October, 2015 upon the following as indicated below:

Via hand delivery and email to:

UTAH PUBLIC SERVICE COMMISSION c/o Gary Widerburg, Commission Secretary 160 East 300 South, Fourth Floor Salt Lake City, Utah 84111 psc@utah.gov

Via e-mail to:

Data Request Response Center (datarequest@pacificorp.com) PacifiCorp

Robert C. Lively (bob.lively@pacificorp.com) Yvonne R. Hogle (yvonne.hogle@pacificorp.com) Daniel E. Solander (daniel.solander@pacificorp.com) Rocky Mountain Power

Sophie Hayes (sophie@utahcleanenergy.org) Kate Bowman (kate@utahcleanenergy.org) Utah Clean Energy

Tony Hall (mail@ehc-usa.com) Ellis-Hall Consultants, LLC

Gloria Smith (gloria.smith@sierraclub.org) Travis Ritchie (travis.ritchie@sierraclub.org) Sierra Club

Gary A. Dodge (gdodge@hjdlaw.com) Hatch, James & Dodge

Dan Patry (dpatry@sunedison.com) SunEdison

Brad Merrill (bmerrill@swlaw.com) Elizabeth M. Brereton (lbrereton@swlaw.com) Snell & Wilmer

Sean McBride (smcbride@spower.com) Sustainable Power Group Kevin Higgins (khiggins@energystrat.com) Energy Strategies

Patricia Schmid (pschmid@utah.gov) Justin Jetter (jjetter@utah.gov) Rex Olsen (rolsen@utah.gov) Utah Assistant Attorneys General

/s/ Adam S. Long

REBUTTAL

# TESTIMONY

OF

# NATHAN RICH

# FOR

# **RENEWABLE ENERGY COALITION**

October 14, 2015 Docket No. 15-035-53

## 1 I. INTRODUCTION

2 Q. Please state your name and business address.

A. My name is Nathan Rich. I am the Executive Director of the Wasatch Integrated
Waste Management District ("Wasatch"), which is a member of the Renewable
Energy Coalition (the "Coalition"). My business address is P.O. Box 900, 1997
East 3500 North, Layton, Utah 84014.

### 7 Q. Please describe your background and experience.

A. I am a registered Professional Engineer in the State of Utah. I hold a Master of
Science degree in Civil and Environmental Engineering, a Master of Science
degree in Mining Engineering, and a Bachelor of Science degree in Mining
Engineering. I am currently the Executive Director of Wasatch, which operates a
municipal solid waste incinerator that produces renewable base load power which
is sold to PacifiCorp as a qualifying facility ("QF").

## 14 Q. On behalf of who are you appearing in this proceeding?

- 15 A. I am testifying on behalf of the Coalition.
- 16 **Q.** What is the purpose of your testimony?
- 17 A. I am providing this testimony as rebuttal to direct testimony provided by other
  18 parties in this docket, including Bela Vastag on behalf of the Office of Consumer
  19 Services and Paul Clements on behalf of Rocky Mountain Power.
- 20 **Q.** What topics will your testimony address?
- A. My testimony will address the negative impact a reduction of contract length
   would have on the economic viability and ability to finance a new QF project or
   maintain an existing QF.

24

#### 25

II.

### WASATCH INTEGRATED WASTE MANAGEMENT

### 26 Q. Please describe Wasatch.

27 Wasatch is a Special Service District established in 1984 to provide solid waste A. 28 management services for the municipalities in Davis County (other than the City 29 of Bountiful), the unincorporated areas of Davis County, Morgan City and the 30 unincorporated areas of Morgan County, Utah. Wasatch constitutes a separate 31 body politic and corporate and a quasi-municipal public corporation distinct from 32 each county or municipality in which the District is located. Wasatch is 33 goverened by an Administrative Control Board composed of nineteen members; 34 including the three Davis County Commissioners and one member from each of 35 the sixteen other political subdivisions of the State of Utah that are included 36 within the District.

#### 37 Q. Please describe your QF project.

38 A. The Davis Energy Recovery Facility is a 420 ton per day municipal solid waste 39 combustor. The facility produces approximately 105,000 pounds per hour of high 40 pressure steam which is directed through a 1.6 megawatt back pressure turbine 41 generator. Low pressure steam exiting the generator is sold and shipped to Hill 42 Air Force Base where it is used primarily for heating buildings on the east side of 43 the installation. Electrical power generated on site is primarily used for facility 44 operations and the excess power, around 300 kilowatts during normal operation, 45 is sold to PacifiCorp. The facility came online in 1987 and has been selling 46 excess power to PacifiCorp since 1994. Power generated by the facility is 47 considered renewable by the State of Utah and the Federal Government.

48 Q. Please describe your current contract with PacifiCorp.

49 A. Wasatch is currently selling firm net output surplus power to PacifiCorp under an
50 eleven (11) year Power Purchase Agreement (PPA) effective January 1, 2013.
51 Pricing of the current PPA in accordance with Schedule 37 and Wasatch is being
52 compensated for capacity and energy under the contract.

53 Q. Is Watatch planning on developing additional QF projects?

54 A. Yes. Wasatch is currently considering and expansion of the electrical output of
55 the ERF which would make additional energy available for sale.

### 56 Q. Please describe the new QF project Watasatch is planning on developing.

57 A. The Davis Energy Recovery Facility was constructed to provide energy in the 58 form of steam to HAFB. During the winter months, output from the Energy 59 Recovery Facility can meet about 60 percent of HAFB's peak steam demand and 60 all steam generated at the facility, approximately 90,000 pounds per hour net of 61 the parasitic load, is sold and shipped to HAFB. In the summer and during warm 62 weather the demand at HAFB drops to a low of approximately 15,000 pounds per 63 hour during which time the execss steam is simply condensed and the energy is 64 lost.

Wasatch is studying the installation of a new condensing turbine which would utilize the currently unused steam to generate additional electrical power when the demand for steam at HAFB is less than the facility's output. The new condensing turbine would generate a net export capacity of 5.4 megawatts of electrical power. The output of the project would be greatest during summer months, when the demand for steam from HAFB is low. PacifiCorp is currently

71		completing a Small Generator Interconnection Level 3 System Impact Study. The
72		current engineering cost estimate for the project is 9.5 million dollars.
73		
74 75	III.	CONTRACT TERMS SHOULD NOT BE REDUCED
76 77	Q.	Do you support Rocky Mountain Power's proposal to reduce the contract term for all QFs to three years?
78	А.	No. I support maintaining long term contracts because reducing the term of the
79		contract increases project uncertainty and risk and will make project financing
80		more expensive and more difficult, if not impossible.
81 82 83	Q.	The Office of Consumer Services supports Rocky Mountain Power's proposal on the grounds that QFs no longer need long term contracts to obtain financing. Do you agree?
84	А.	No. The most likely mechanism to provide financing for these type of projects
85		will be revenue bonds. Without a long term contract, a project developer will not
86		be able to demonstrate with any certainty the projected revenue a proposed project
87		will generate. Higher uncertainty equals higher risk which increases the cost of
88		capital. Also, these type of projects tend to be very expensive resulting in long
89		payback periods, typicall much longer than 3 years. The risk of investing in a
90		project which has a payback longer than the term of guaranteed sales will not be
91		received favorably by potential investors.
92 93	Q.	Please explain how the three year contract terms would impact your current QF project's needs for continued operation, and additional investments.
94	А.	Our current QF project provides consistent base load power to the grid. As a firm
95		power supplier we guarantee that the power will be delivered and are a resource
96		for Rocky Mountain Power as they plan to meet future demand. If and when
97		replacement and repairs to the existing facility are required the investment will be

98 difficult to justify. When we entered into our current contract with PacifiCorp, 99 the negotiation period lasted about one year. Entering into a new contract every 100 three years would mean that we would be involved with contract negotations 101 about 1/3 of the time making the simple task of keeping under contract 102 unnecessarily burdensome.

#### 103 Please explain how the three year contract terms would impact your 0. 104 potential new QF projects.

105 It is my opinion that our potential new QF project could not be completed if a A. 106 PPA were limited to a three year contract period. Any new QF project, not just 107 Wasatch's, will need to find an end user of the energy other than PacifiCorp if the 108 project is have the ability to attract financing. I do not believe this approach is 109 good public policy that we need to encourage diversification of our power supply

110

#### Do existing QFs need pricing stablility? **Q**.

111 Yes. Price stability and certainty for current and potential new power purchase A. 112 agreements is of utmost importance. Pricing stability and certainty are essential 113 for reliable services of all kinds. For QFs with existing contracts, reliability on 114 power purchase agreement pricing is commensurate with water being available 115 out of the faucet at your home, or not.

#### 116 **O**. Why is it important for existing OFs to not renegotiate their contracts every three years? 117

118 A. In addition to the reasons above, frequent renegotiations would harm our ability to 119 make long-term plans that rely upon stable prices. Entering into a standard power 120 purchase agreement every three-years would be extremely challenging, and 121 subject us to unnecessary costs, risks, harm, and even the re-opening of 122 interconnection agreements. Changing the standard price and contract threshold

123		to a lower level, thereby requiring us to negotiate pricing and contracts every
124		three years would be unmanageable at best. Existing QFs should not be subjected
125		to perpetual and wasteful negotiation.
126		
127	IV.	CONCLUSION
128	Q.	Does this conclude your testimony?

129 **A.** Yes