BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Applic of PacifiCorp for Approva of an IRP Based Avoided of Methodology for QF Proje Larger than 1 Megawatt	l) Cost)	Docket No. 03-035-14		
Direct Testimony of Bob Anderson				
on behalf of Utah Clean Energy and Western Resource Advocates				
July 27, 2005				
I. <u>Introduction</u>				
Q. Please state your name	e, business addre	ess and present position.		
A. I am Bob Anderson, tes	tifying on behalf o	of Utah Clean Energy and Western		
Resource Advocates. M	My business address	ss is 1512 Highway 395, Suite 7D,		
Gardnerville, NV 89410	0. I am an indeper	ndent consultant in electric utility policy,		
with emphasis on renev	vable energy in the	e western interconnection.		
Q. Please briefly describe	e your educationa	al and professional experience.		
A. I received a BS degree	in civil engineerin	g from Montana State University in		
1967 and an MS degree	in civil (environn	mental) engineering from Montana State		
University in 1972. In	1990 I was elected	d to the Montana Public Service		
Commission; I was ree	elected in 1994 and	d 1998. After leaving the Montana PSC		

in January, 2003, I began an independent consulting practice, focusing on

1		renewable energy policy in the electric utility sector of the western
2		interconnection of the United States.
3	Q.	As a commissioner, were you active in the National Association of Regulatory
4		Utility Commissioners?
5	A.	Yes. I was NARUC president in 1995. Throughout my 12-year career on the
6		Montana PSC, I served on NARUC's Committee on Energy Resources and
7		Environment and chaired that committee from 1999-2002.
8	Q.	What is the subject matter scope of the NARUC Committee on Energy
9		Resources and Environment?
10	A.	Renewable energy and energy conservation.
11	Q.	Is one of your current projects WREGIS?
12	A.	Yes. WREGIS is the Western Regional Energy Generation Information System.
13		It will account for and track the renewable electricity generation in the West for
14		the purposes of verifying compliance with state policies and to prevent fraud such
15		as double counting (double selling). In 2004, I co-chaired the WREGIS
16		Institutional Committee. This year I chair the Interim (Governing) Committee
17		which will establish a Stakeholder Advisory Committee and a permanent
18		(Governing) Committee within the structure of the Western Electricity
19		Coordinating Council (WECC). WREGIS will be operational in 2007.
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Q. Does WREGIS make policy decisions?

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- 2 A. No. WREGIS is and will be policy neutral. It will strictly be an accounting
- 3 system that enables states to assess and monitor compliance with policies of their
- 4 choosing, such as Renewable Portfolio Standards or Green Pricing.

5 Q. Does Utah have any such policies?

- 6 A. The state has no such explicit policies. However, PacifiCorp's Blue Sky¹ green
- 7 pricing program could benefit from WREGIS because customers who chose to
- 8 buy "green" will have confidence they're getting what they pay for and their
- 9 "green" electrons aren't being also sold to someone else.

10 Q. What are the purposes of your testimony?

- 11 A. The purposes of my testimony are: 1) to summarize state and federal policies on
- the ownership of Renewable Energy Certificates (RECs) or green tags, 2) to
- discuss PacifiCorp's proposed treatment of RECs from renewable energy QF's,
- and 3) to make recommendations on Commission policy on the ownership of
- RECs associated with new renewable energy PURPA QF's.

II. Treatment of RECs in federal and state policy

17 Q. What is a Renewable Energy Certificate?

- 18 A. Over the last few years, the concept of RECs or green tags has emerged.
- Renewable electricity may be separated into two components: the energy (kWh or
- MWh) and the renewable attributes (usually also expressed in kWh or MWh).
- 21 The energy goes to customers; the renewable attributes, represented by RECs,

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¹ http://www.utahpower.net/Article/Article22009.html

may be traded, bought and sold, or retired for state policy compliance. The owner of a REC is entitled to claim the environmental attributes of the renewable energy resource that generated the electricity, including, for example, the air emissions reduction benefits, the rural economic development benefits and the reduced water use. Although the REC can be separated from the electricity, the REC is inseparable from the environmental attributes.

7 Q. Do RECs have value? If so, what is their value?

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A. Yes. RECs have value in the marketplace, where they are bought by customers
who value their attributes; and they are generated or purchased by load serving
entities who need them for policy compliance. Their value is not always revealed
by traders, but, anecdotally, they typically sell for \$5-15/MWh.

Q. Does Utah's lack of a renewable portfolio standard diminish their value?

13 A. Probably not, because they can often be traded across state lines to meet other
14 states policy compliance needs or sold in the green power market. Some states do
15 have in-state generation or delivery requirements or preferences under their RPSs,
16 which may increase the value of in-state RECs relative to out-of-state RECs.

Q. What does PacifiCorp's 2004 Integrated Resource Plan (IRP) say about renewable QF's?

19 **A.** The preferred portfolio in PacifiCorp's 2004 IRP expects that QF's will contribute
20 100 MW of capacity in the next 10 years.² The IRP does not distinguish between
21 renewable QF's and non-renewable QF's towards meeting this target. For this

Direct testimony of Bob Anderson for UCE & WRA

² http://www.utahpower.net/File/File47422.pdf at p. 2

target to be reached, Utah must have a QF tariff in place that is economically sound and that gives QF's a clear price signal so they can acquire financing for economical projects. Therefore, it is important for QF project developers, the utility and its customers to have the REC ownership issue settled.

Q. What has the Federal Energy Regulatory Commission (FERC) said about the ownership of RECs from renewable QF facilities?

FERC has stated that its QF avoided cost regulations did not contemplate the existence of RECs, and that the avoided cost rates for capacity and energy sold under contracts entered into pursuant to PURPA do not convey the RECs, in the absence of an express contractual provision. FERC further stated that, although a state may decide that a sale of power at wholesale automatically transfers ownership of the state-created RECs, that requirement must find its authority in state law, not PURPA.³ FERC further clarified that, because avoided cost rates are not intended to compensate a QF for more than capacity and energy, it follows that other attributes (*e.g.* RECs) associated with the facilities are separate from, and may be sold separately from, the capacity and energy.⁴

Q. What factors do you recommend the Commission consider when determining REC ownership under Utah law?

19 A. The Commission should consider three factors. The first is state policy. E.g., if a state has a renewable portfolio standard, the utility has an obligation to acquire

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³ American Ref-Fuel Co., 105 FERC ¶ 61,004 (Oct. 1, 2003); order denying reh'g, 107 FERC ¶ 61,016 (April 15, 2004; order dismissing petition sub nom, Xcel Energy Servs. V. FERC, Decision No. 04-1182 (May 17, 2005).

⁴ American Ref-Fuel Co., 107 FERC, at ¶ 16.

renewable resources and could use RECs for compliance. The second is how the avoided cost is calculated. If the avoided resource is a fossil fuel generator, then no renewable attributes would be avoided by the QF. The third factor is the presence of substantial state subsidies. If the utilities' ratepayers or state taxpayers substantially subsidize renewable projects, they are entitled to some or all of the value of the RECs.

Q. What is the situation in Utah with respect to these three factors?

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- 8 A. With respect to the first factor, Utah has no RPS or other policy that would require the utility to acquire renewable resources or retire RECs.
- Regarding the second factor, PacifiCorp uses a natural gas-fired turbine as its avoided resource.

Finally, concerning the third factor, Utah has two tax subsidies. One is a sales tax exemption, scheduled to expire on June 30, 2009, for equipment used to generate electricity from renewable resources.⁵ The second is a corporate income tax credit which expires December 32, 2006; this credit is 10% of cost of a wind generator, up to a maximum of \$50,000.⁶

Q. What is your estimate of the value of both these tax subsidies?

A. Making such an estimate requires several assumptions, *e.g.*: the purchase cost of installed equipment; the quality of the wind resource and the capacity factor of the generator; the life of the turbine; and the extension of the subsidies. My

⁵ Utah Code Annotated, Title 59, Chapter 12, Sections 102 to 104.

⁶ Utah Code Annotated, Title 59, Chapter 7, Section 614.

1 rough calculation, which applies no economic discount factors, yields an estimate 2 between \$1 and \$2/MWh. 3 Q. Is this a large enough subsidy that would entitle ratepayers or taxpayers to 4 **REC** ownership? 5 A. Not in my opinion, especially considering the likely result I discuss beginning on 6 p. 11, line 11. 7 Q. What is your conclusion as to whether these three factors support 8 automatically transferring ownership of RECs to the utility under Utah law? 9 A. None of the three factors I have outlined supports automatically transferring 10 ownership of the RECs to the utility under Utah law. 11 III. **PacifiCorp's Treatment of RECs** 12 Have you reviewed PacifiCorp's avoided cost methodology? 0. 13 Yes. I have read the testimony of Mr. Duvall and Mr. Griswold. I have also read A. 14 the Lawrence Berkeley Laboratory (LBL) paper which compares Utah's avoided 15 cost methods with those of Idaho.⁷ 16 What was the purpose of your review? Q. 17 A. My purpose was principally to understand what PacifiCorp uses as its avoided 18 resource.

⁷ Bolinger, Mark and Ryan Wiser. 2005. An examination of avoided costs in Utah. Ernest Orlando Lawrence Berkeley National Laboratory. January 7.

- 1 Q. Are you an expert on avoided cost methodology and, if so, what are your
- 2 observations with respect to PacifiCorp's methods?
- 3 A. No, I'm not an expert, although I sat on avoided cost cases in Montana over the
- 4 years. Because, according to the LBL paper, Utah's avoided costs are
- significantly lower than Idaho's, they should be scrutinized in detail.
- 6 Q. Did you read the May 2005 testimony of Mr. Griswold of PacifiCorp?
- 7 A. Yes.
- 8 Q. Mr. Griswold, on p. 3, specifies the standard of "customer indifference" in
- 9 determining avoided cost. Do you agree?
- 10 A. Yes.
- 11 Q. On p. 8-9 Mr. Griswold addresses RECs and REC ownership. Do you agree
- with Mr. Griswold?
- 13 A. I generally agree with Mr. Griswold's characterization of RECs on p. 8 of his
- testimony. However, on p. 9 he argues that ratepayers are paying for the
- delivered capacity and energy from PURPA contracts, renewable or not, and
- therefore are the end-use customers of the green tags from renewable QFs;
- therefore they own the green tags. Mr. Griswold appears to make the argument
- rejected by FERC. I disagree with both his logic and the conclusion.

1 Q. Has California decided the REC ownership issue, as Mr. Griswold asserts on 2 p. 9 of his testimony? 3 No. In a May 5, 2005 decision, 8 the California PUC ruled on the ownership of A. 4 RECs associated with distributed renewable generation facilities, assigning 5 ownership of RECs to the customer-generator, but stated: "Our decision today does not prejudge any REC issues associated with qualifying facilities currently 6 7 under litigation at the Federal Energy Regulatory Commission and in the federal 8 Court of Appeals, nor does it prejudge how this Commission will resolve issues related to qualifying facility (QF) RECs."9 9 10 Q. Also on p. 9 Mr. Griswold testified that FERC held in 2003 that 11 determination of control and ownership of QF Green Tags should be made by the individual states. Is that correct? 12 13 A. Yes. But FERC also determined that, absent an express contractual provision, avoided cost rates do not convey RECs to the utilities. 10 14 15 Have any other states addressed the QF REC ownership issue? Q. 16 A. Yes, three states have addressed the issue. 17 In 2002, the Maine PUC issued a tentative "notice" that, for existing QF contracts, the RECs should belong to the utility. 11 Unlike Utah, Maine has a renewable 18

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¹⁰ Order issued October 1, 2003. Docket No. EL03-133-000.

portfolio standard.

⁸ Decision 05-05-011 May 5, 2005. Rulemaking 04-04-026 (Filed April 22, 2004) http://www.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/46213.htm

⁹ p. 2

¹¹ http://mainegov-images.informe.org/mpuc/orders/2002/2002-506noi.pdf

- 1 The Idaho PUC considered the matter in 2004 and concluded it was not ripe. 12
- 2 The Connecticut PUC ruled in 2004 that, for an existing QF contract, the RECs
- 3 should belong to the utility. 13 Connecticut also has a renewable portfolio
- 4 standard.
- 5 Q. Do any of these state actions provide guidance for Utah in this case?
- 6 A. No. Where rulings have been made, they are in states with renewable portfolio
- standards and they apply to existing contracts. In Utah, there is no renewable
- 8 portfolio standard and the issue in this proceeding is a new tariff for new QFs.
- 9 Q. Is there anything for the Utah PUC to consider with respect to any of these10 other states' rulings?
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- 11 A. Yes. In Connecticut I agree with the outcome, but not all the reasoning. The
- order stated: "The renewable attributes of the electricity sold by MM to CL&P
- included the renewable attributes of the MM facility because they were the
- necessary condition for the Department to approve CL&P's entering into the
- Agreement with MM."¹⁴ I take that to mean that the Connecticut PUC believes
- that the act of qualifying (as a QF) transferred the RECs to the utility. This is a
- point of view frequently expressed by utilities.
- 18 Q. Do you disagree with that?
- 19 A. Yes. Being renewable is merely a qualifying characteristic. It is not a transaction or a conveyance.

¹² http://www.puc.state.id.us/search/orders/dtsearch.html

¹⁴ CL&P is Connecticut Light and Power, the utility. MM is Minnesota Methane, the QF.

- Q. Going forward, who should own RECs in Utah for new PURPA QFs?
- 2 A. Once it qualifies, a QF gets long term payments at a set price (or price schedule).
- That price has nothing to do with the QF; it has only to do with what is avoided.
- 4 In PacifiCorp's proposal, the avoided resource is a combustion turbine, which
- 5 lacks the renewable attributes of a QF. The utility and its customers should be
- 6 indifferent to purchasing electricity from the QF or the avoided resource. If the
- 7 QF owns the RECs, it would have a strong incentive to maximize the value and
- 8 revenue from the project by selling RECs to enhance project feasibility. The
- 9 result would be indifferent ratepayers and an indifferent utility, but perhaps more
- renewable energy development in Utah than there otherwise would be.
 - Q. If the RECs were awarded to the utility without compensation to the QF,
- what would be the outcome?

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- 13 A. The utility could sell the RECs. If it did, the proceeds would theoretically belong
- to ratepayers, but, until a rate case, the funds would be indistinguishable from any
- other revenue. 15 The effect could conceivably be a slight deferral of a rate case
- filing, although considering the small magnitude of these revenues relative to the
- gross revenues of the utility, this is far from certain. Conversely, the QF
- developer would have less revenue to help finance a project. To a QF developer,
- these revenues could be significant and the outcome could be less renewable
- 20 energy development in Utah.

¹⁵ The Commission, however, could require that any such revenues be accounted for and dedicated to a public purpose, such as efficiency or renewables development.

1 Q. If the utility obtains the RECs without compensating the project developer 2 for them, should it be allowed to use the RECs towards a voluntary green 3 pricing program? 4 A. No. Blue Sky customers are promised that their \$1.95/mo. stimulates the development of new renewable projects in lieu of more polluting ones, 16 not for 5 6 what would be tantamount to a windfall to the utility. 7 **Recommendations to the Commission** IV. 8 Q. What is your recommendation to the Commission? 9 A. I recommend that the Commission find that RECs associated with energy 10 produced by qualifying renewable facilities are the property of the QF owner 11 under Utah law. Of course, PacifiCorp is free to acquire those RECs from the QF, 12 but it must compensate the QF owner for that value. 13 Q. Do you have recommendations on whether the Commission should require 14 the utility to purchase the RECs, or whether the Commission should 15 establish a price for RECs? 16 A. Those are both interesting questions, but I do not have recommendations on those issues at this time. 17 18 Does this complete your testimony? Q. 19 A. Yes.

¹⁶ http://www.utahpower.net/Article/Article22009.html