

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of)
PacifiCorp for Approval of an IRP)
Based Avoided Cost Methodology)
For QF Projects Larger than 3 MW)

Docket No. 03-035-14

**Direct Testimony of
Abdinasir M. Abdulle
Division of Public Utilities**

July 29, 2005

1 **Q: Please state your name, business address, and employer for the record.**

2 A: My name is Abdinasir M. Abdulle; my business address is 160 East 300 South,
3 Salt Lake City, Utah 84114; I am employed by the Utah Division of Public
4 Utilities (“Division”).

5 **Q: On whose behalf are you testifying in these proceedings?**

6 A: I am testifying on behalf of the Division.

7 **Q: Would you please summarize your educational background for the record?**

8 A: I have a Ph.D. in Economics from Utah State University. I have been employed
9 by the Division for about three years. I also am teaching at Weber State
10 University as an adjunct professor of economics.

11 **Q: What is the purpose of your testimony in these proceedings?**

12 A: The purpose of my testimony is to address the issues of ownership of Renewable
13 Energy Credits (RECs) and capacity contribution of wind resources.

14 **Q: What is a REC?**

15 A: RECs, also know as Green Tags, Tradable Renewable Certificates (TRC), Green
16 Tickets, Renewable Certificates, and Renewable Resource Credits, represent the
17 environmental attributes of renewable energy generation. They can be sold
18 separately from the electricity that created it. RECs can be purchased from
19 someone other than your electricity provider. What you pay for when you buy
20 RECs is the benefit of displacing other non-renewable sources from the regional
21 or national electric grid. There are markets in which RECs are sold. The revenue
22 generated by selling RECs can significantly benefit the finances of a renewable
23 energy facility.

24 **Q: What is the purpose of RECs?**

25 A: Renewable Energy Credits have been created in recent years to ease
26 implementation of government programs designed to advance various policy
27 goals, including, but not limited to, improved air and water quality, reduction of
28 greenhouse gas emissions, and hedging against the volatility of electricity or fossil
29 fuels prices.

30 **Q: What are the RECs used for?**

1 A: RECs are used for regulatory compliance and commercial purposes. RECs are
2 being used to verify Renewable Portfolio Standards (RPS) by state legislators and
3 utility regulators.¹ Commercially, RECs are universally accepted part of whole
4 transactions for sale of electricity from wind projects.

5 **Q: How are RECs and RPS related?**

6 A: Renewable Portfolio Standard programs require retail sellers of electricity to
7 include in their resource portfolios a certain amount of electricity from renewable
8 energy resources. This obligation can be satisfied by owning renewable energy
9 facilities, by purchasing power from other renewable facilities, or by purchasing
10 RECs which correspond to a certain amount of renewable energy generated by a
11 third party.²

12
13 RECs present certain advantages in the implementation of an RPS program.
14 Renewable generators that are certified under the RPS program may produce and
15 sell two different products: generic power, traded in the power market, and
16 RECs, traded in a separate RECs market. Unbundling power from RECs
17 generally reduces the cost of compliance with RPS requirements, because it
18 allows retail sellers to purchase RECs where they are more cost-effective,
19 especially when renewable resources are not locally available, and allows
20 regulators to easily verify whether retail sellers have purchased the required
21 amount of RECs. RECs also promote the environmental goals that are behind
22 most RPS programs. Unlike payments received for the generic power sold, the
23 payments that generators receive for RECs are intended to provide compensation
24 for the environmental attributes of renewable generation and, thus, encourage
25 investment in renewable resources.

26 **Q: Does the avoided cost compensate the QFs for RECs?**

27 A: No. Avoided costs are designed to compensate for the energy and capacity
28 generated by a QF at purchasing utility's alternative costs of generating or
29 purchasing as equivalent amount of energy and capacity.

¹ The states that have RPS include, Arizona, Texas, New Mexico, Nevada, Connecticut, Main, Massachusetts, New Jersey, and Wisconsin.)

² One REC represents 1 MWh of renewable energy generation.

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Both Section 210(b) of PURPA and FERC’s implementation regulations³ provide for the pricing of QF power at the purchasing utility’s avoided cost. Thus QFs are paid for energy and capacity produced by their facilities based on the purchasing utility’s alternative costs of power from any power source, not on the environmental attributes of the selling QF. Further, once a utility’s avoided costs are determined, the same power purchase price applies to all QFs, be they renewable energy resource or fossil fuel-fired cogenerators. Therefore avoided cost does not compensate QFs for RECs associated with renewable generation.

Q: You said that the same power purchase price applies to all QFs. Can you elaborate?

A: Conveyance of RECS under PURPA contracts based solely on avoided cost would effectively discriminate among different types of QFs, in violation of section 210(b)2 of PURPA. Under the FERC’s regulations, a QF may be either a qualifying cogeneration facility or a qualifying small power production facility.⁴ Only qualifying small power production facilities using renewable energy resources could be allocated REC’s. Qualifying cogeneration facilities operating on fossil fuels are typically not eligible for RECs under any state RPS program. If RECs were conveyed to the purchasing utility solely in exchange for avoided cost, the avoided cost would effectively vary based on whether the utility was buying from renewable energy small power QF or a fossil fuel-fired cogeneration QF, because the cost of power to utilities buying from small power QFs would be reduced by the value of the RECs that the utilities receive. However, both small power and cogeneration QFs provide the same generic energy and power product at the same utility avoided cost. Applying the same power purchase to these two types of QFs is, therefore, discriminating against the small renewable power production facilities. This is inconsistent with the framework created under section 210 of PURPA, Which requires, among other things that rates for

³ 18 C.F.R. § 292.304(a)
⁴ 18C.F.R. §§292.101(b)(1); 292.203.

1 purchase of QF power “shall not discriminate against qualifying cogenerators or
2 qualifying small production.

3 **Q: What is FERC’s position in relation to RECs ownership?**

4 A: In an order granting petitioner’s petition for a declaratory order, FERC declared
5 that “contracts for the sale of QF capacity and energy entered into pursuant to
6 PURPA do not convey RECs to the purchasing utility (absent an express
7 provision in a contract to the contrary). While a state may decide that a sale of
8 power at wholesale automatically transfers ownership of the state-created RECs,
9 that requirement must find its authority in state law not PURPA.”⁵

10 **Q: What is the Company’s position?**

11 A: According to Mr. Griswold’s direct testimony, “the Company retains the Green
12 Tags for the benefit of the Company’s ratepayers without any additional payment
13 when it buys power from the QF resource.” This is true if the QF is a renewable
14 or not and if the contract delivers the ownership of the RECs to the Company or
15 is silent about the ownership.

16 **Q: Does the Company’s position follow logically the Company’s policy and IRP?**

17 A: Appendix J of the IRP indicates that the addition of wind power to the resource
18 portfolio proved to be beneficial to overall system operations by reducing the 20-
19 year PVRR through reductions in system emissions and total fuel costs.
20 Portfolios with renewable resources were also less susceptible to highly variable
21 fuel costs in the risk analysis. This shows that the Company recognizes the
22 environmental attributes of renewable resources. However, the Company neither
23 included these attributes in the calculations of the avoided costs nor wants to
24 purchase it from the QF. Rather, the Company wants to acquire these attributes
25 along with power it purchases pursuant with the PURPA without paying for it.

26 **Q: What is the purpose of the Blue Sky Program?**

27 A: The purpose of the Blue Sky Program is to encourage the development of wind
28 generators in the Western United States. Currently, the Blue Sky program
29 purchases Green Tag products. PacifiCorp customers voluntarily purchase

⁵ FERC Docket No. EL03-133-000. Order Granting Petition for Declaratory Order. Issued on October 1, 2003.

1 certain number of blocks of renewable energy or RECs to encourage the
2 development of renewable energy facilities, particularly wind power generators.
3 The money that the participants pay is used to purchase bundled energy or RECs
4 from new wind, geothermal, or solar generation facilities.

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6 According PacifiCorp's Advice filing 03-02, Schedule 70 – New Wind,
7 Geothermal and Solar Power Rider, the sources of the renewable energy or RECs
8 will be from WECC with a preference to the states within PacifiCorp's
9 jurisdiction. The following preferential order for procurement will be followed.

- 10 • *“Local” (Oregon, Washington, or Idaho for West; Wyoming or Utah*
11 *for East) and newly installed wind farm.*
- 12 • *“Local” wind farms and compliance with Blue Sky standard tariff or*
13 *Renew 2000 standards whichever is more stringent, for tags vintage.*
- 14 • *WECC for location newly installed wind farms.*
- 15 • *WECC for location and compliance with Blue Sky standard tariff or*
16 *Renew 2000 standards whichever is more stringent, for tags vintage.*

17 **Q: Do Blue Sky participants know what they are paying for?**

18 A: Yes. The Company clearly communicates, through a number channels including,
19 but not limited to, bill inserts, the purpose of the Blue Sky Program and how it
20 helps the environment to its customers.

21 **Q: How does the Company's position compare to the Blue Sky purpose?**

22 A: The payments that generators receive for RECs are intended to compensate the
23 environmental attributes of renewable generation and, thus, encourage investment
24 in renewable resources. The combination of the revenues from RECs and
25 Production Tax Credits make the renewable resources profitable for the
26 developers. Because of this some PacifiCorp customers signed for the Blue Sky
27 Program to encourage renewable resource development. The position that the
28 Company took, as mentioned in Mr. Griswold's direct testimony, is contrary to
29 the intentions of the Blue Sky Program participants. The Company's position
30 does not encourage the development of renewable resources.

31 **Q: What is the Division's position regarding the ownership of Green Tags?**

1 A: Because payments for RECs are intended to compensate for the environmental
2 attributes of renewable generation and therefore provides an incentive to develop
3 renewable resources, the Division maintains that contracts for the sale of QF
4 capacity and energy entered into pursuant to PURPA should not transfer the
5 ownership of RECs to the purchasing utility. Ownership of RECs should stay
6 with the QF.

7 **Q: Is the 20% capacity payment for wind resources with 35% annual on-peak
8 capacity factor appropriate?**

9 A: In the IRP 2003, the Company was not paying any capacity payment for wind
10 resources. The 20% capacity payment represents a move in right direction.
11 However, the calculation of the 20% capacity payment is based on limited data. It
12 is based on analysis of just two sites, Foote Creek and Confidential (Stateline),
13 and one month of one year and hence focuses on meeting the summer peak. It
14 does not reflect winter peak capacity factors. As more data becomes available
15 and the methodology is improved to reflect diurnal and seasonal capacity factors,
16 I believe that the wind resource capacity contribution may increase. The extent of
17 increase is unknown to me for there is no data to calculate it. Therefore, the
18 proposed capacity payment should be accepted subject to change as more data
19 become available and the methodology is improved.

20 **Q: Does that conclude your testimony?**

21 A: Yes.