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**BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

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IN THE MATTER OF THE PETITION OF  
PIONEER RIDGE, LLC AND MOUNTAIN  
WIND, LLC FOR APPROVAL OF A  
CONTRACT FOR THE SALE OF  
CAPACITY AND ENERGY FROM THEIR  
PROPOSED QF FACILITIES

Docket No. 05-035-09

IN THE MATTER OF THE PETITION OF  
SPRING CANYON FOR APPROVAL OF A  
CONTRACT FOR THE SALE OF  
CAPACITY AND ENERGY FROM ITS  
PROPOSED QF FACILITIES

Docket No. 05-035-08

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**PREFILED DIRECT SUPPLEMENTAL TESTIMONY OF ROGER J. SWENSON**

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Pioneer Ridge, LLC and Mountain Wind, LLC hereby submits the prefiled supplemental Direct Testimony of Roger J. Swenson in this Docket.

DATED this 18<sup>th</sup> day of March, 2005.

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Roger J. Swenson  
Consultant for Pioneer Ridge, LLC and Mountain Wind, LLC

PREFILED DIRECT TESTIMONY

Of

ROGER J. SWENSON

On behalf of Pioneer Ridge LLC and Mountain Wind, LLC

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IN THE MATTER OF THE PETITION OF PIONEER RIDGE, LLC AND MOUNTAIN WIND,  
LLC FOR APPROVAL OF A CONTRACT FOR THE SALE OF CAPACITY AND ENERGY  
FROM ITS PROPOSED WIND GENERATION FACILITIES

Docket No. 05-035-09

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March 18, 2005

**Background**

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**Q. Please state your name and business address.**

A. Roger J. Swenson , 1592 East 3350 South, Salt Lake City, Utah 84106.

**Q. By whom are you employed and in what capacity?**

A. I am an independent utility and energy consultant.

**Q. Have you filed testimony previously in this matter?**

A. Yes. I filed testimony on January 28, 2005 and February 28<sup>th</sup> regarding a request for contract approval regarding the two wind powered projects, Pioneer Ridge, LLC and Mountain Wind, LLC.

**Q. What questions you will address with this testimony?**

A. I will address capacity allocation, I will also address the basis for the reason why we should encourage renewable development, and finally I will deal with some of the specific pricing issues associated with intermittent generation sources.

**Q. What more do you want to say about the allocation capacity under the stipulation cap?**

A. The central question is when does capacity get taken. I believe that the capacity is gone, under the stipulation, when a contract becomes effective. Until that time there is no assurance that the project developer can or will want to go forward until there are assurances that all contractual conditions imposed by the regulatory approval process are completely understood.

**Q. Can you provide an example of such an instance?**

A. Yes, if the green tags associated with the wind projects are deemed to be the property of the utility with no additional consideration provided to the developer it

1 is unlikely that the wind projects will go forward with development. Another  
2 example would be a requirement that provided shorter contract term than  
3 financing can be arranged. If Spring Canyon needs a 20 year contract to cover  
4 financing periods and they are forced to take a 5 year term the project is not likely  
5 to be developed.

6 **Q. Why is it in the public interest to provide avoided cost rates for wind?**

7  
8 A. Each MWH generated by wind means that up to 8-10 Dths of natural gas or  
9 approximately ½ Ton of coal will be saved for future generations use. With gas  
10 prices exceeding \$7.00 per Dth and data showing declining output of Utah coal it  
11 is more important than ever to promote this resource conserving technology. It is  
12 important to actually see developments go forward and break down the  
13 contracting barriers and negative perception concerning cost that exist.

14 **Q. What does the Scottish Power Environmental and Social Impact Report state  
15 concerning renewable resources?**

16 A. The report states that the IRP process has identified that additional renewable  
17 capacity as providing a critical component of the resources that will be needed for  
18 the future. In fact the latest IRP talks about the development of 1400 MWs of  
19 renewable resources.

20 **Q. Are there issues associated with ratepayers paying too high a price for this  
21 power you are offering to sell?**

22 A. On the contrary from the data responses it appears that the fixed cost alternative  
23 from the stipulation may be too low. DPU Data Request to Pacificorp 1.2 asked  
24 to have the updated QF filing using 100 MW resource rather than a 10 MW

1 resource. As I understand the pricing as shown in that Data Request response from  
2 Pacificorp, the levelized 85% capacity factor price is \$59.08/MWH or  
3 \$9.05/MWH higher than the stipulation fixed pricing at 85% capacity factor for  
4 the same period.

5 **Q. Are there other issues that have come up looking at the data responses and**  
6 **avoided costs specifically for wind resources?**

7 A. Yes. In Pacificorp's data response to CCS 6.8 in Docket 03-035-14 provided  
8 February 14, 2005, there is an admission that renewable resources will have  
9 higher costs to rate payers than non-renewable projects. Yet as mentioned above,  
10 the IRP has this type of resource as a considerable percentage of new development  
11 that the Company will acquire over the next 10 years. The data response states;

12 "The Company expects that a winning bid in a renewable RFP will have  
13 higher costs to ratepayers, after adjusting for the integration costs of the  
14 resource, than a winning bid under a non-renewable RFP. The Company  
15 and its ratepayers are willing to incur these incremental costs to obtain the  
16 benefits of renewable resources including the ownership rights of having  
17 acquired renewable resources..."

18 Here there is a clear admittance that there are benefits that out way the integration  
19 costs. If that wasn't the case the IRP would not be choosing so much of this  
20 resources to add.

21 **Q. What can we look at to quantify this value that offsets the integration cost?**

22 A. In my initial testimony I stated that two of the positive benefits of renewable  
23 resources are; the value of providing a fixed price for a long period of time and

1 the avoidance of margin costs associated with fixing prices in this manner, and  
2 also reduced exposure to environmental costs.

3 **Q. Have you calculated the value of avoiding the margin costs?**

4 A. Yes. The levelized value per MWH of providing a fixed price using the margin  
5 cost approach is \$2.69/MWH. The calculation is based on the margin cost  
6 associated with taking out enough futures contracts to cover the fuel cost  
7 associated with a generation plant for the 20-year period. The margin as required  
8 on a year by year basis is shown on RJS Supplemental 2 Exhibit 1. The capital  
9 required has a cost associated with it and that cost is levelized using the 7.2%  
10 levelization factor.

11 **Q. What about the value of emissions?**

12 A. I have used information from the latest IRP to calculate a levelized value for  
13 emissions costs for a CCCT that would be avoided with a wind resource. The  
14 levelized value that I calculate is \$2.37/MWH. The levelized number is derived  
15 from emission costs projections and the unit emission costs as called out in the  
16 IRP. The calculations are shown on RJS Supp 2 Exhibit 2.

17 **Q. What is the total of benefits value that you have calculated with these 2**  
18 **benefits?**

19 A. The sum of the hedging value of \$2.69/MWH and the emission value of  
20 \$2.37/MWH is \$5.07/MWH value for the benefits provided.

21 **Q. What does PacifiCorp say that the integration cost for wind is?**

22 A. The IRP Appendix J, Page 150 says that integration cost is \$4.64/MWH for wind  
23 projects. That shows that the benefits as calculated are in excess of even the

1 projected Pacificorp integration costs by \$.42/MWH.

2 **Q. Do you have any more information concerning the capacity value for wind**  
3 **projects as you suggest in your initial testimony?**

4 A. The IRP in Appendix J page 141 discusses capacity contributions of up to 30% in  
5 some instances and goes into detail concerning an approach used at one site to  
6 derive a 20% expected capacity contribution. The approach that I suggest using  
7 provides a method to track actual contribution of a project. One issue that using a  
8 singular site determination falls short is the contribution with a class of suppliers  
9 that would have independent contributions that when combined reduce the  
10 volatility of output that Pacificorp is modeling.

11 **Q. Do you have any additional information concerning the ownership of green**  
12 **tags?**

13 A. Yes. I have FERC Staff Briefing Paper that discusses the State of Wind Energy in  
14 Wholesale Electricity Markets, Docket No. AD-04-13-000. The paper offers up  
15 the following finding;

16 “...Furthermore, in American Ref-Fuel Co., et al, the Commission granted  
17 a petition for a declaratory order finding that PURPA contracts for the sale  
18 of capacity do not convey renewable energy credits or similar tradeable  
19 certificates to the purchasing utility absent agreement among the Parties.”

20 Therefore unless there is a clear agreement between the Parties that the pricing  
21 includes consideration for the green tags there is no presumption as Pacificorp has  
22 implied.

23

1 Q. Does this conclude your testimony?

2 A. Yes it does

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was mailed, postage prepaid, this  
18<sup>th</sup> day of March, 2005, to the following

Edward Hunter  
John Eriksson  
STOEL RIVES  
201 South Main Street, Suite 1100  
Salt Lake City, UT 84111

Michael Ginsberg  
Patricia Schmid  
ASSISTANT ATTORNEY GENERAL  
Division of Public Utilities  
500 Heber M. Wells Building  
160 East 300 South  
Salt Lake City, UT 84111

Reed Warnick  
ASSISTANT ATTORNEY GENERAL  
Committee of Consumer Services  
160 East 300 South, 5<sup>th</sup> Floor  
Salt Lake City, UT 84111

Steve Mecham

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