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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE PETITION OF WASATCH WIND, LLC FOR APPROVAL OF A CONTRACT FOR THE SALE OF CAPACITY AND ENERGY FROM THEIR PROPOSED QF FACILITIES Docket No. 06-035-42

PREFILED TESTIMONY OF TRACY LIVINGSTON

Wasatch Wind hereby submits the Prefiled Testimony of Tracy Livingston in this docket.

DATED this 15th day of May, 2006.

Tracy Livingston

/s/_____

Tracy Livingston Wasatch Wind, LLC

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was sent by United States mail, postage prepaid, or by email this 15th, May 2006 to the following:

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PREFILED TESTIMONY

Tracy Livingston Wasatch Wind, LLC

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

Docket No. 06-035-42

May 15, 2006

Of

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3 **BACKGROUND**

4	Q.	Please state your name and occupation.
5	A.	My name is Tracy Livingston. I am the Manager of Wasatch Wind, LLC, a wind
6		project development company, manager of Spanish Fork Wind Park 2, LLC a
7		special purpose entity, and CEO of Wind Tower Composites, LLC a technology
8		engineering firm funded by the US Department of Energy and the California
9		Energy Commission to develop next generation, lower cost, multi megawatt class
10		wind turbine towers. All companies are located in Heber City, UT
11	Q.	On whose behalf are you filing testimony in this Docket?
12	A.	Wasatch Wind, LLC
13	Q.	Have you submitted testimony to this Commission before?
14	A.	Yes in Docket 03-35-14.
15	Q.	What is the status of your Spanish Fork wind project?
15 16	Q. A.	What is the status of your Spanish Fork wind project? WW has been monitoring wind resources at the mouth of Spanish Fork Canyon in
16		WW has been monitoring wind resources at the mouth of Spanish Fork Canyon in
16 17		WW has been monitoring wind resources at the mouth of Spanish Fork Canyon in the industrial zone of Spanish Fork City for the past 1.5 years for the purpose of
16 17 18		WW has been monitoring wind resources at the mouth of Spanish Fork Canyon in the industrial zone of Spanish Fork City for the past 1.5 years for the purpose of building, owning, and operating a wind farm of 18.9 MW as a special purpose
16 17 18 19		WW has been monitoring wind resources at the mouth of Spanish Fork Canyon in the industrial zone of Spanish Fork City for the past 1.5 years for the purpose of building, owning, and operating a wind farm of 18.9 MW as a special purpose entity called Spanish Fork Wind Park 2, LLC. In addition to the recent data, 3
16 17 18 19 20		WW has been monitoring wind resources at the mouth of Spanish Fork Canyon in the industrial zone of Spanish Fork City for the past 1.5 years for the purpose of building, owning, and operating a wind farm of 18.9 MW as a special purpose entity called Spanish Fork Wind Park 2, LLC. In addition to the recent data, 3 years of historical wind data from one of our partner companies with a permanent
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 16 17 18 19 20 21 22 		WW has been monitoring wind resources at the mouth of Spanish Fork Canyon in the industrial zone of Spanish Fork City for the past 1.5 years for the purpose of building, owning, and operating a wind farm of 18.9 MW as a special purpose entity called Spanish Fork Wind Park 2, LLC. In addition to the recent data, 3 years of historical wind data from one of our partner companies with a permanent facility and two towers at the site have been evaluated to establish long term energy predictability. Analysis shows that wind predictability and capacity factor

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26		by some residents of Spanish Fork City that the wind farm will be too close to the
27		residents. With the move, the support from the community has been
28		overwhelming positive. The city mayor and the city council have been fully
29		supportive and cooperative and have also provided land for several of the
30		turbines. Wasatch Wind i.e. Spanish Fork Wind Park 2, LLC has filed an
31		interconnect agreement with the Company per "FERC Docket No. RM02-12-000;
32		Order No. 2006" regarding interconnect procedures for small generators of less
33		then 20 MW. The Company has also provided a method for indicative pricing
34		that Wasatch Wind finds acceptable pending the outcome of a recent Docket
35		initiated by Pioneer Wind.
36	Q:	Are their any other barriers to project completion.
37	A:	Yes. The Company offered Wasatch Wind a PPA nearly identical to the 64.5 MW
38		proxy wind farm PPA. Wasatch Wind and the Spanish Fork project as a small
39		(less then 20 MW) wind farm cannot proceed with a firm energy contract that is
40		more suitable for a large wind farm. Our financial and turbine availability
41		metrics are different thus requiring a different contract. The Company has stated
42		it is unable to agree to a contract with substantive differences to the proxy.
43	Q:	What is your summary recommendation to the Commission that will allow
44		Wasatch Wind to proceed with an 18.9 MW wind farm at Spanish Fork?
45	A:	It's really quite simple. The commission should rule that small wind projects of
46		20 MW or less as an intermittent resource should be approved to use non-firm
47		contracts typically used by the Company for some other non-firm QF's and
48		should further clarify that the proxy method as previously defined by the

- 49 commission should be used only as a determiner of price and is not to be
- 50 construed as a determiner of contract provisions.
- 51 Q: What are your specific recommendations?
- 52 A: The commission should order the company to negotiate a good faith non-firm
- energy contract similar to the Tesoro and Kennecott QF contracts for 20 MW and
- 54 smaller projects using the proxy pricing and recommended adjusters from the
- 55 previous related dockets.
- 56 Q: Do you have an alternative recommendation to the Commission?
- A: Yes I do. The commission could rule that wind power is a non-firm resource and as such require that the liquidated damages, and associated contract provisions be removed from the present contract for 20 MW and smaller wind projects, be allowed to receive the proxy pricing, and then make a further decision regarding
- 61 the necessity of the amount of security provisions.
- Q: What provisions of the Company provided PPA are barriers for Wasatch
 Wind?
- A: There are several. Liquidated damages are the most egregious with several other
 contract provisions directly tied to this requirement. These "associated
 provisions" include: turbine mechanical availability, delay damages, guaranteed
 commercial operation date, and cost to cover. These related provisions are found
 in the Companies firm power PPA's but are not necessary and have not been
 required in non firm Company contracts.
- 70 Q: Are there any other alternatives to reaching an agreement with the
 71 Company?

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72	A:	Not in my opinion. Company negotiators have stated that alternative contract
73		clauses that make adjustments to liquidated damages or "associated provisions"
74		would be considered if Wasatch Wind would be willing to agree to a downward
75		price adjustment. This appears to be an egregious interpretation by the Company
76		of the Order in Docket 03-35-14. The Company has stated in negotiations that
77		Wasatch Wind must accept nearly all the major provisions of the firm power
78		proxy contract including liquidated damages and associated provisions in order to
79		receive the proxy price (adjusted for on peak/off peak delivery). The Company
80		has stated they are unable to move beyond this point.
81	Q:	In your opinion should non-firm contracts be structured differently than
82		firm contracts?
83	A:	Yes, a firm resource provides capacity value to the utility. The pricing of such
84		contracts usually includes a capacity payment and an energy payment. Such a
85		pricing structure puts the utility and its ratepayers at risk if the producer fails to
86		deliver power. This is especially true if the contract has a capacity payment. The
87		utility needs contractual assurances that the producer will provide power
88		according to the contract. These firm contracts generally include a penalty for
89		non-delivery of power, this protects the purchaser of power against the potential
90		for non-delivery. However wind resources are regarded as non-firm resources
91		and under the current RFP contract proxy method do not receive an explicit
92		capacity payment. The wind resource is only paid when it provides power.
93	Q:	Is there capacity value associated with wind resources?
94	A:	In Docket No. 03-035-14, some parties argued that capacity value should be

95	studied further; others stated that a 20 percent value was appropriate, while others
96	said it should equal the capacity factor of the plant, and some said it should not be
97	considered at all. For example, Bruce Griswold in testimony under Docket No.
98	03-35-14 stated, "Under the Company's proposal, the Company will pay twenty
99	(20) percent of the avoided capacity costs as determined using the Commission
100	approved avoided cost methodology for QF projects over 3 MW." He further
101	states, "The Company proposes that a wind QF resource receive a volumetric
102	price structured as on-peak and off-peak prices where the 20% capacity payment
103	would be included only within on-peak hours. In order for the wind QF to receive
104	the full 20% capacity payment in the on-peak energy price, it would need to
105	maintain a 35% wind capacity factor." This method was disputed vigorously with
106	little agreement. Of note, the proxy resource's capacity factor is lower than Mr.
107	Griswold's threshold and since it is suggested by him that the value is only for on
108	peak hours, even the company places little value on this capacity.
109	We understood that the final Order in 03-35-14 for using the proxy pricing
110	was based on creating a simple pricing method for wind QF's. The Order has
111	achieved this goal. If the Company was allowed to make adjusters to the contract
112	price, then the development of a methodology for determining this adjustment
113	whether it be based on risk allocation or a capacity difference, would clearly
114	devolve into another endless debate. We would be in proceedings yet again. We
115	are already near the limit of what can be absorbed from a resource and financial
116	prospective. Yet the debate of this controversial issue would continue the delay.
117	Not to mention the action of which could unduly delay integration of small wind

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118 projects at competitive prices into the system.

119 Q: Are the capacity values of the Spanish Fork and the Proxy projects similar?

- A: No one seems to know and that is my point. No agreed analysis can be completed by the Company to put a relative value on this capacity portion. Considering the contract is structured to imply a price for energy and a price for capacity with an unknown explicit value for that capacity and an inability to separate the capacity value with no method by the company to adjust the value of that capacity as a function of energy predictability, then improper pricing signals are the result and the method leaves confusion on how to make an adjustment.
- Q: Does the Commission need only to clarify the Order in Docket 03-35-14
 stating that the proxy plant comparisons are for pricing only to enable the
 contract negotiations to proceed?
- 130 A: I do not believe it will be enough. In our early negotiations with the Company, I believed this simple clarification would be sufficient. Statements were made by 131 Company personnel saying our contract must be nearly identical to the proxy 132 contract and that contract terms and pricing were inextricably combined and 133 therefore less this clarification they could not proceed with significant contract 134 changes. Therefore, I believed a pricing clarification from the Commission would 135 then give the Company the ability to disconnect pricing from contract terms and 136 thereby negotiate different terms suitable for small wind. However this is a 137 necessary but not sufficient condition for a successfully negotiated contract with a 138 small, under 20 MWs, wind producer. We believe that the Commission should 139 make an explicit finding that small non-firm wind resources should receive 140

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141	similar contract terms that were granted to other non-firm providers such as
142	Tesoro. In the alternative, the Commission could find that liquidated damages for
143	non-firm power is inappropriate contract condition. Such an explicit finding will
144	help streamline the contractual negotiations and lead to a greater number of
145	successfully completed small wind contracts.

Q: Why would small wind farm development be hampered if the contract was not changed to a standard non-firm type?

In general, project development costs (those prior to construction) are nearly the 148 same for a small project versus a large one. As such, these costs are a larger 149 150 percentage of the projects total costs for a small wind farm. Therefore, in order for a small wind farm to be viable, other costs such as contract provisions and 151 even the very act of PPA negotiation and regulatory issues must be streamlined 152 for the small project to be on equal financial terms with the large ones. This 153 process for Wasatch Wind has been expensive, long, and difficult and now we are 154 being asked to absorb liquidated damage provisions that are also more difficult for 155 a small wind farm. The combination is more than a small project can absorb. 156 One of our investors is providing testimony in this docket of the problems that a 157 firm power contract creates for a small wind project. Based on our discussions 158 with other investors as well, small projects have difficulty absorbing the 159 undefined costs associated with the risks of liquidated damages especially in 160 161 states with regulatory and PPA difficulties.

Q: Do you personally have knowledge of particular small wind projects that would be hampered in addition to the Spanish Fork project?

164		A: Yes. The Spanish Fork site appears to have similar winds to at least three
165		other canyon sites in Utah with diurnal wind patterns. At this time, the likelihood
166		that these sites are viable from a wind resource and land logistics issue is high.
167		Each site is also constrained in size due to site logistics thus all three would be
168		smaller than 20 MW's each. Since the winds and thus the financial metrics are
169		similar to the Spanish Fork site, the contract issues will be the same.
170	Q:	Would no action in this Docket be considered rate payer neutral?
171	A:	No. Doing nothing will mean that small wind projects will be delayed or
172		canceled in Utah because of insurmountable contract terms thus hampering the
173		Company's efforts in reaching its IRP goals for wind projects. This delay will
174		thus subject the ratepayers to greater portfolio risk as the IPR has already deemed
175		that 1400 MW's of wind are the appropriate balance. This also means losing
176		valuable economic development benefits Governor Huntsman has stressed are so
177		important in rural Utah via construction, operation, and tax base increases from
178		wind farm development.
179	Q:	Why do you believe the use of a non-firm contract is a fair proposal?
180	A:	Non-firm contract provisions should apply to small wind projects because of the
181		importance of keeping contracts simple yet reasonably fair and accurate to
182		achieve minimal administrative and overhead burden for the Company, the
183		Commission, the Division and the Committee all while providing equal and fair
184		opportunity for small wind farm developers while maintaining rate neutrality. I
185		believe Wasatch Wind's proposal accomplishes all that and yet keeps in place the
186		motivations for the wind farm owner to produce power.

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Can you provide some background for specific examples of the Companies 187 **Q**: use of firm power PPA's? 188 A: A sample PPA can be obtained from PacifiCorp at 189 http://www.pacificorp.com/File/File25896.pdf. We understand that this 190 Company provided contract was approved by the Commission as a framework for 191 negotiations for QF's by an Order issued in DOCKET NO. 03-35-15 on August 192 193 26, 2003. The Order stated in part, "The Commission finds that the proposed generic PPA provides a 194 reasonable basis for negotiations with Large QFs, and that it would be in the 195 196 public interest for the Commission to approve the proposed generic PPA." We believe the intent of the Generic PPA was to allow large QF's 197 delivering firm power to have a baseline for negotiations. These contracts include 198 liquidated damages and related provisions which make sense for firm power 199 deliveries as witnessed by several larger QF contracts entered into by the 200 Company including Desert Power and Sunnyside Cogen. Both these contracts 201 appear to be patterned after the Generic PPA as they include many of the 202 liquidated damages, performance, security, and default provisions previously 203 204 mentioned and include firm power obligations by the QF. **Q**: Has the company used different QF contracts for non-firm power? 205 A: Yes in at least two cases in the past year entirely different contracts were used for 206 these non-firm power QF's. The contracts where with Tesoro signed by the 207 Company on January 9, 2006 for a 25 MW gas fired co-generation facility located 208 in Salt Lake City, Utah and another contract with Kennecott signed on December 209

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210		20, 2005 for up to 31.8 MW from a waste heat fired co-generation facility located
211		in Magna, Utah. Neither of these contracts have provisions for liquidated
212		damages, availability requirements, delay damages, commercial operation start
213		date penalties, Cost to Cover provisions, etc. Although I have not reviewed the
214		US Magnesium contract, I have been told that it also is a non-firm PPA without
215		these previsions as well. The consistent message here is that non-firm power
216		requires a different type of contract.
217	Q:	Have other parties testified previously that wind is a "non-firm resource".
218	A:	Yes. Among others, Phil Hayet in docket no. 03-035-14, testimony dated 12
219		April 2004 states, "The Company is correct that wind generation is intermittent
220		(non-firm) and should not be afforded the same treatment as firm QF resources." I
221		concur with this statement.
222	Q:	Would the Company be at significant risk of energy non delivery from the
223		wind farm without the penalties of liquidated damages and associated
224		provisions in the contract?
225	A:	No. Provisions to cover liquidated damages have historically been used to ensure
226		that fossil fuel generators continue to deliver power under firm energy contracts.
227		For example, a fuel generator without a tolling arrangement that under predicts
228		future fuel costs has a strong incentive to stop producing as the costs of the fuel
229		place them in a negative financial situation. In this case, the liquidated damages
230		provisions are crucial. In fact damage provisions tend to be significant to avoid
231		non-delivery at times when the Company must depend on the QF for delivery.
232		These provisions also help ensure that generators strongly consider the

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233		implications of fixed price contracts before entering into a PPA. The issue with a
234		wind plant is vastly different. More than 70% typically of the cost of power from
235		a wind plant consists of sunk capital costs with the remainder consisting of
236		variable costs associated with maintenance, administration, and land owner
237		royalties, none of which is dependent on fuel. This is contrasted to fossil plants
238		where most of the energy costs are for fuel. Thus wind plant owners are entirely
239		driven by a necessity to keep turbines operational to cover the capital costs and
240		achieve the expected return on investment i.e. the greater diligence to keep wind
241		turbines mechanically ready, the more energy will be produced, and therefore the
242		higher the return. This is always true.
243	Q:	Are there any other remaining provisions that are difficult?
244	A:	Yes there are. The provided PPA requires that the Project Development Security
245		be in place within 10 days after the Effective Date i.e. after Parties and
246		Commission approval. This is to cover the costs associated with the project not
247		being able to achieve operation by the Expected Commercial Operation Date.
248		This short time frame is egregious, and doesn't capture the reasonable purpose of
249		this clause even in a firm wind energy contract. For example, if two identical
250		projects entered into a contract on the same day and one project had a three year
251		time frame to Operation and the other a one year time frame, do both have the
252		same risk of non-performance at the date of contract signing? While the answer is
252		clearly no, the risk is similar at the time that both projects are within one year of
253		
253 254		operation. For a small project using a non-firm contract, security provisions are
		operation. For a small project using a non-firm contract, security provisions are not necessary as the intent is that capacity is available on the system whether the

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256		wind farm is in place or not. If the Commission MUST require this security and
257		believes there is some increasing risk to the Company and/or ratepayers as the
258		Expected Commercial Operation Date comes closer then we suggest a method
259		similar to some other wind contracts. We propose that within one year of
260		Expected Commercial Operation Date that the security funding begins as a linear
261		escalator starting at zero at one year from operation date to full security funding at
262		time of Expected Commercial Operation Date as updated on quarterly basis.
263	Q:	Why does the Project Development Security provision presently hinder your
264		project?
265	A:	Small wind projects are typically developed by firms that ultimately do not
266		provide the final project construction or final capital takeouts as they either do not
267		have the resources or the capability of effectively using the federal production tax
268		credit. Therefore, only after the site development work is nearly completed and
269		the PPA has been signed are these investors willing to negotiate an interest in a
270		wind project. The good news is that these investors are readily available and
271		willing to negotiate but in general they are unwilling to negotiate prior to the local
272		developer on a small project signing a PPA. There are just too many projects in
273		states where contracts have been able to be signed by local developers and
274		utilities because the contracts do not have an imminent security provision.
275	Q:	Did you bid into the most recent RFP?
276	A:	Yes we did because of encouragement from PacifiCorp from two sources. The
277		first encouragement was based on Bruce Griswolds surebuttal testimony in
278		Docket No. 03-35-14 where he states, "PacifiCorp's alternative proposal is that

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279		the Commission could require that all renewable QF's (over the Schedule 37
280		threshold) participate in renewable RFP's." and second that we were encouraged
281		to participate by PacifiCorp personnel during the negotiation process.
282	Q:	Were you accepted as a qualified bidder?
283	A:	No. We did not meet the minimum annual energy delivery requirements of
284		70,000 MWh which is equivalent to an approximately 20 MW capacity wind
285		farm.
286	Q:	Where does that leave the 18.9 MW Spanish Fork Project?
287	A:	We are left in contract limbo. We are too small to participate in the RFP process
288		and yet because we are small we need different contract provisions for success in
289		the QF proxy process.
290	Q:	If 20 MW or smaller projects receive non-firm contracts doesn't that create a
291		bias against larger wind QF's subject to firm contract provisions?
292	A:	No. Larger QF's have the opportunity to bid into the RFP. As part of this RFP
293		process the bidder also has the opportunity to adjust contract terms. While the
294		company may chose bidders that are willing to accept firm power contract
295		provisions, they are also under obligation to consider all viable bidder offers in a
296		competitive process gauged against the requirements of the IRP. Less than 20
297		MW wind projects are unable to participate in this process.
298	Q:	Does this conclude your testimony
299	A:	Yes it does.