

Rocky Mountain Power
Docket No. 10-035-124
Witness: Stefan A. Bird

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

Direct Testimony of Stefan A. Bird

REC Revenues & Top of the World Wind Project

January 2011

1 **Q. Please state your name, business address and present position.**

2 A. My name is Stefan A. Bird. My business address is 825 NE Multnomah, Suite
3 600, Portland, Oregon 97232. I am Senior Vice President, Commercial and
4 Trading, for PacifiCorp Energy, a division of PacifiCorp (the “Company”).

5 **Q. Please describe your educational and business background.**

6 A. I hold a B.S. in mechanical engineering from Kansas State University. I joined
7 PacifiCorp Energy and assumed my current position in January 2007. From 2003
8 to 2006, I served as president of CalEnergy Generation U.S., an owner and
9 operator of Qualifying Facility and merchant generation assets, including
10 geothermal and natural gas-fired cogeneration projects across the United States.
11 From 1999 to 2003, I was vice president of acquisitions and development for
12 MidAmerican Energy Holdings Company (“MEHC”). From 1989 to 1997, I held
13 various positions at Koch Industries, Inc., including energy marketing, financial
14 services, corporate acquisitions, project engineering and maintenance planning in
15 the Americas and Europe.

16 In my current position I oversee the Company’s Commercial and Trading
17 organization which is responsible for dispatch of the Company’s owned and
18 contracted generation resources, procurement of new generation resources, and
19 natural gas and electricity wholesale purchases and sales to balance the
20 Company’s load and resources. I am also responsible for PacifiCorp’s load and
21 revenue forecast, integrated resource plan (“IRP”) and net power costs modeling.
22 Most relevant to this docket, I am responsible for the procurement of generation
23 resources through the request for proposals process and I oversee PacifiCorp’s

24 renewable energy credit (“REC” or “RECs”) portfolio, including sale of RECs in
25 excess of compliance requirements.

26 **Q. What is the purpose of your testimony?**

27 A. The first section of my testimony addresses the level of revenue in this case
28 related to the sale of RECs. I support the test period REC revenue forecast of
29 \$55.7 million and explain the basis for that forecast. I explain why the REC
30 revenue in the test period of twelve months ending June 2012 is lower than the
31 actual revenue booked in the base year of twelve months ending June 2010. I also
32 provide some insight into expectations for future REC sales. Second, my
33 testimony addresses, and demonstrates the prudence of, the Top of the World
34 Wind Energy, LLC (“Top of the World”) power purchase agreement (“PPA”), for
35 which the Company is seeking cost recovery in this proceeding. Specifically, I
36 will describe the history and the process of the selection of the Top of the World
37 PPA.

38 **Test Period REC Revenue**

39 **Q. How much revenue from the sale of RECs is included in the Company’s test**
40 **period?**

41 A. The Company’s test period includes \$55.7 million of REC revenue on a total
42 Company basis, or \$32.9 million on a Utah-allocated basis. My testimony
43 provides support for the total Company level of REC sales, and Company witness
44 Mr. Steven R. McDougal provides details of the allocation of total Company REC
45 revenue to Utah.

46 **Q. How does the Company calculate the forecast REC revenue in the test**
47 **period?**

48 A. Similar to the Company's previous general rate case in Utah, the Company
49 includes REC revenue from executed and commission approved contracts in place
50 at the time the case is filed ("Existing Contracts") plus additional revenue forecast
51 to be generated by selling remaining available RECs from wind generation at
52 market prices. The volume of RECs available for sale in the test period is
53 determined by adding the system-wide wind generation output during the test
54 period net of amounts banked to satisfy renewable portfolio standards in
55 California, Oregon, and Washington ("RPS Banking Requirements"). After
56 accounting for RPS Banking Requirements, the Company sells 75 percent of the
57 RECs in the current year and 15 percent of the RECs in the subsequent year.

58 **Q. Why does the Company sell only 75 percent of its forecast wind RECs?**

59 A. The Company sells only 75 percent of the forecast wind RECs on a forward basis
60 to ensure that it can perform under any contracts, bundled or unbundled, that it
61 may enter into. The estimated long-term annual capacity factors for the
62 Company's wind plants are based on a fifty percent probability ("P50"); meaning
63 there is a reasonable expectation that actual production will be higher or lower
64 than forecast during any calendar year. The attached Exhibit RMP____(SAB-1)
65 demonstrates the data from four of the east side wind projects (the Company does
66 not have annual actual data from the other east side resources). These charts show
67 how the actual output differs from the expected output. Based on our experience
68 thus far and based on the wind data we have received, selling 75 percent of the

69 estimated P50 output ensures the Company can perform under its contracts and
70 avoids exposing the Company or customers to costs associated with liquated
71 damages or nonperformance.

72 **Q. What is the basis for assuming 15 percent of the forecast sales are sold in the**
73 **subsequent year?**

74 A. In practice, the Company attempts to monetize RECs that may have been
75 generated and not sold in the prior year. As a proxy for these additional sales, the
76 test period includes the sale of 15 percent of the un-banked RECs from the
77 previous 12 month period. RECs that are generated in prior years are called
78 Vintage RECs.

79 **Q. How much of the test period revenue is from Existing Contracts?**

80 A. Approximately \$41.9 million out of the \$55.7 million is forecast revenue from the
81 two Existing Contracts. The remainder is from the sale of remaining wind RECs
82 available for sale at market prices. Additional details of the Existing Contracts are
83 provided in Confidential Exhibit RMP____(SAB-2).

84 **Q. Has the Company sold any RECs on a forward firm basis other than the two**
85 **Existing Contracts in the test period?**

86 A. No.

87 **Q. What market price is assumed for sales not from Existing Contracts?**

88 A. Wind RECs generated and sold during the test period are priced at \$7.00 per
89 megawatt hour. Vintage RECs are sold at \$4.00 per megawatt hour.

90 **Q. What is the basis for these market prices?**

91 A. The broker market provides the only visible forward market for the Company to

92 rely on for the forward purchase and sale of RECs in the Western Electric
93 Coordinating Council (“WECC”). The current price for an unbundled REC is
94 approximately \$7.00 per megawatt hour. The broker market splits Vintage RECs
95 into the first and second half of the prior year and the years prior. An average
96 price for Vintage RECs for the first and second half of the year is between \$2.00
97 per megawatt hour and \$4.00 per megawatt hour.

98 **Q. Are the test period REC revenues substantially lower than the amount**
99 **actually received in the base period? If so, why?**

100 A. Yes. During the base period (the twelve months ending June 2010) the Company
101 accrued \$98.5 million of REC revenue, compared to \$55.7 million in the test
102 period. The drop is due to the lack of negotiated contracts at prices that cannot be
103 achieved through the broker market. As explained further below, the California
104 REC market was paralyzed and the opportunities to enter into bilateral contracts
105 such as our Existing Contracts have not been available.

106 **Q. Does the Company acquire wind resources with the expectation that it will**
107 **sell RECs to the California market?**

108 A. No. The Company acquires wind resources to serve its growing need for new
109 resources on a diversified basis consistent with its integrated resource plan. This
110 does not mean, however, that the Company won’t take advantage of opportunities
111 to monetize REC value, after fulfilling its own RPS Banking Requirements, to
112 benefit our customers and by selling surplus RECs into California and other REC
113 markets when it is prudent.

114 **Q. Do you anticipate entering into any negotiated contracts comparable to the**
115 **Existing Contracts with California entities in the future?**

116 A. Up until January 14, 2011, the California market had been paralyzed and potential
117 buyers there were not pursuing any out of state transactions. It is uncertain what
118 the California market will entail going forward as a result of the January 14, 2011,
119 California Public Utilities Commission (“CPUC”) ruling that redefines renewable
120 energy credit transactions eligible for compliance.

121 **Q. Why had the California REC market been paralyzed prior to January 14,**
122 **2011?**

123 A. On March 15, 2010, the CPUC issued Decision (D.) 10-03-021 authorizing the
124 use of tradable renewable energy credits (“TRECs”) for compliance with the
125 California renewable portfolio standard (“RPS”) program, defined the TREC
126 transactions for RPS purposes, and set out market and compliance rules for the
127 use of TRECs. On April 12, 2010, Southern California Edison Company (“SCE”),
128 Pacific Gas and Electric Company (“PG&E”), and San Diego Gas & Electric
129 Company (“SDG&E”) filed the Joint Petition of Southern California Edison
130 Company, Pacific Gas and Electric Company, and San Diego Gas & Electric
131 Company for Modification of Decision 10-03-021. The CPUC subsequently
132 issued a Decision 10-05-018 on May 6, 2010 staying approval of any REC
133 contracts by the investor-owned utilities for use of out of state resources. Since
134 utilities could not obtain approval for out of state resource transactions, they no
135 longer pursue them. In addition, through the remainder of 2010 the CPUC further
136 considered and subjected to varying stages of regulatory process a number of

137 competing proposed decisions that had a significant impact on the use of out of
138 state resources by compliance entities, including all California investor owned
139 utilities and energy service providers. Also, the California Air Resources Board in
140 its final approval of the regulations for the California Renewable Energy Standard
141 added, at the last minute and without prior public review or comment, a provision
142 requiring conformity with the California RPS; the meaning and scope of which is
143 unclear.

144 **Q. What happened on January 14, 2011?**

145 A. On January 14, 2011, the CPUC issued Decision 11-01-025 resolving petitions for
146 modification of Decision 10-03-021, authorizing the use of TRECs for
147 compliance with California RPS requirements, and lifting the stay imposed by
148 Decision 10-05-018. Decision 11-01-025 authorizes limited use of TRECs for
149 compliance with the California RPS, for a limited period of time.

150 **Q. Does this mean that the Company can resume pursuing deals in California?**

151 A. Yes, but because the California market has only just now reopened due to the stay
152 that was just lifted, the level of interest from California utilities, the volume of
153 TRECs and the prices utilities are willing to pay for RECs/TRECs is currently
154 unknown. Given this uncertainty in the California market, it is difficult to predict
155 how long it will take to execute any contracts for the sale of RECs/TRECs with
156 California utilities. In addition, another unknown is whether these utilities will
157 issue time consuming requests for proposals (“RFP”) or whether they will
158 negotiate bilateral transactions that might include 2011 transactions. Further, the
159 Company does not know what pricing it can expect for RECs/TRECs. It is

160 possible that the decision to lift the stay and allow California utilities to meet their
161 RPS requirements with the purchase of out of state TRECs will increase the
162 available California RPS eligible supply and thus drive down prices relative to
163 those that the Company was able to achieve in 2009 and 2010.

164 **Q. Does the Company anticipate making REC sales to counterparties located**
165 **outside of California within the test period?**

166 A. Yes, primarily through the broker market at prevailing prices.

167 **Q. Are there other opportunities beyond the broker market?**

168 A. Yes, however the market has very few participants, is not transparent, and deals
169 are done on either a bilateral basis or through responding to requests for proposals
170 issued by other utilities.

171 **Q. Is the Company pursuing these types of opportunities?**

172 A. Yes. On November 4, 2010, NV Energy issued its Short-Term RFP for renewable
173 energy resources for a period of one month up to three years. [REDACTED]

174 [REDACTED]

175 [REDACTED]

176 [REDACTED]

177 **Q. When will the Company know if its proposal is selected by NV Energy?**

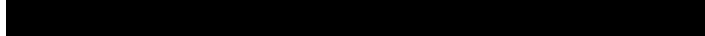
178 A. NV Energy's Short-Term RFP documentation provides that NV Energy may take
179 up to 180 days to notify bidders whether they were selected as the winning bid.

180 NV Energy does not have an obligation to pursue any of the proposals. [REDACTED]

181 [REDACTED]

182 [REDACTED]

183



184 **Q. Will the Company update the REC revenue forecast in this case if it is**
185 **successful in the NV Energy Short-Term RFP?**

186 A. Yes, and if the Company were successful, such an update would bring this rate
187 case closer to the estimate used in the settlement of the second major plant
188 addition case.

189 **Issues in Entering into New Contracts**

190 **Q. Please explain the complexity of the REC certification process.**

191 A. All renewable resources must be registered with Western Renewable Generation
192 Information System (“WREGIS”) to be sold and tracked as a REC in the Western
193 Electric Coordinating Council (“WECC”) market. Prior to March 2010, contracts
194 that were structured as a bundled product (REC with energy) required that the
195 seller schedule energy bundled with a REC. The REC must be generated from an
196 eligible resource certified by the California Energy Commission (“CEC”), which
197 requires it to meet several laws, ordinances, rules and standards (“LORS”) to be
198 an eligible resource from out of state to be used for compliance in the California
199 RPS.

200 **Q. Are there any projects that are in rate base in this case that lack certification**
201 **or that are currently going through the certification process?**

202 A. Yes. The Dunlap I wind project, which was included and approved in the major
203 plant addition case, Docket no. 10-035-89, and the Top of the World PPA have
204 yet to be granted certification by the CEC; however, applications were submitted
205 by the Company with the CEC on August 31, 2010. Consequently the RECs

206 associated with such projects can be sold in the broker market at this time as
207 RECs which have been registered in WREGIS but not CEC certified.

208 **Q. Does the broker market require a REC to be registered before it can be sold?**

209 A. Yes, a REC must be registered in WREGIS to be sold in the broker market as an
210 unbundled REC. However, if RECs are not sold to California compliance entities,
211 these RECs need not be further certified by the California Energy Commission,
212 which certification process can take several additional months to complete.

213 **Q. Does the Company enter into unit contingent sales of RECs?**

214 A. Currently the market for unit contingent REC sales is very limited. Because
215 customers are seeking to meet either voluntary or regulatory annual RPS
216 requirements they do not want to buy something that does not have certainty. To
217 the extent the Company does not perform, customers expect the Company will
218 pay liquidated damages equivalent to the penalty that they would otherwise be
219 required to pay for noncompliance.

220 **Q. Has the Company proposed accounting treatment for REC revenues in Utah
221 other than including projected REC sales in general rate cases?**

222 A. Yes. It is the Company's position that REC revenues be accounted for in an
223 Energy Cost Adjustment Mechanism ("ECAM") due to the fact that they share
224 similar characteristics to net power costs. REC revenues are volatile and largely
225 outside of the Company's control. Doing so would resolve many of the issues that
226 parties raise in general rate cases.

227 **The 2008R-1 RFP and Top of the World PPA**

228 **Q. Is the Company seeking cost recovery of the Top of the World PPA in this**
229 **case?**

230 A. Yes.

231 **Q. What is the history of the Top of the World PPA?**

232 A. The Top of the World PPA was chosen as the winning bid in the 2008R-1
233 Request for Proposal (“2008R-1 RFP”).

234 **Q. Please describe the 2008R-1 RFP procedural history.**

235 A. The Company filed its initial application on March 4, 2008. The Oregon Public
236 Utilities Commission subsequently opened Docket UM 1368 and selected Boston
237 Pacific Company to serve as the Independent Evaluator (“IE”).¹ The purpose of
238 the 2008R-1 RFP was to request and evaluate proposals to fulfill a portion of the
239 renewable resource generation identified in the Company’s 2007 Integrated
240 Resource Plan (“2007 IRP”). To that end, the 2008R-1 RFP solicited system-wide
241 renewable resources that would enable the Company to meet its service
242 obligations. The 2008R-1 RFP targeted acquisition of up to 500 megawatts
243 (“MW”) of renewable resources with commercial operation dates prior to
244 December 31, 2011 and with a limit of 300 MW per resource.² The 2008R-1 RFP
245 was issued to the market on October 6, 2008 with proposals due December 22,
246 2008.

¹ See Order No. 08-248.

² 300 MW is the upper limit permitted by Utah law. Qualifying Facilities that are at least 10 MW were eligible, pursuant to Guideline 6 in Order No. 06-446.

247 **Q. Did the Company re-issue the 2008R-1 RFP after receipt of proposals on**
248 **December 22, 2008?**

249 A. Yes. Because the acquisition of a successful resource under the 2008R-1 RFP
250 would not occur until 2009, the Company was required to amend and reissue the
251 2008R-1 RFP to accommodate Utah’s resource procurement statutes.³

252 **Q. Were there any changes to the Amended 2008R-1 RFP?**

253 A. Yes. The Amended 2008R-1 RFP included three changes: (1) it allowed the
254 original bidders to update their proposals; (2) it provided new bidders the
255 opportunity to bid into the Amended 2008R-1 RFP; and (3) it modified the
256 schedule to allow for updated and new proposals.

257 **Q. Did the Utah Commission retain a consultant consistent with Utah Code**
258 **Ann. § 54-17-502, Renewable Energy Source Solicitation - Consultant, to**
259 **monitor the Amended 2008R-1 RFP?**

260 A. Yes, the Commission retained Merrimack Energy Group, Inc. (“Utah
261 Consultant”) to serve as a consultant for the Amended 2008R-1 RFP.

262 **Q. What was the role of the Utah Consultant?**

263 A. The Utah Consultant was required to prepare and submit several reports to the
264 Commission including regular status reports, a report on the Bidder Pre-Approval
265 process, a Report on the Bid Evaluation and Shortlist Selection process, and a
266 Draft Final Report within two weeks after completion of the contract negotiation
267 process. Specifically, the consultant documented all aspects of the process from

³ See Utah Code Ann. 54-17-502(2) (a) (i).

268 beginning of the assignment through the contract negotiation process and was
269 charged with indicating whether the Company followed the process contained in
270 the RFP and with making recommendations for changes in future solicitation
271 processes.

272 **Q. Please describe the Amended 2008R-1 RFP Initial Shortlist selection process.**

273 A. The Company's analysis of the Amended 2008R-1 RFP proposals focused on
274 determining which resources would provide the best value to customers on a
275 system-wide planning basis to meet customer requirements at the least cost, on a
276 risk-adjusted basis. To achieve these objectives, the Company evaluated
277 alternatives in a two step process. First, the Company selected three Initial
278 Shortlists: (a) west wind; (b) east wind; and (c) all other renewable resources. The
279 purpose of first selecting three separate Initial Shortlists was to capture location
280 resource diversity and the different sources of renewable resources. To select
281 groups of proposals to comprise each of the three Initial Shortlists, the IE agreed
282 with the Company's goal to: (1) select the proposals with the greatest net benefit
283 in terms of price and non-price benefits; (2) select a diversity of bidders and
284 projects; (3) select a mix of PPA and build-own-transfer ("BOTs") alternatives;
285 (4) determine a relatively clear split between the score of the last proposal
286 evaluated and the next proposal that was not selected; and (5) achieve the RFP
287 goal that each category contain up to 500 MW or 5 proposals.⁴ Each proposal
288 received up to a maximum of 100 points. The three Initial Shortlists were
289 comprised of the highest scoring proposals in each of the three respective

⁴ See The Oregon Independent Evaluator's Final Closing Report on PacifiCorp's 2008R-1/Renewables RFP (May15, 2009) at p. 13.

290 segments, based on price (up to 70 points) and non-price factors (up to 30 points).
291 The price factor was derived by using the PacifiCorp Structuring and Pricing RFP
292 base model, which determines the top-performing proposals on the basis of the
293 net present value revenue requirement (“Net PVRR”) per kilowatt month. The Net
294 PVRR component views the value of the energy and capacity as a positive and the
295 offsetting costs of the proposal as a negative. The more positive the Net PVRR,
296 the more valuable a given resource is to the Company’s customers.

297 The non-price factors evaluated were negative or positive based on the
298 following criteria: (a) conformity with Amended 2008R-1 RFP proposal
299 requirements; (b) conformity with the *pro forma* PPA or BOT documents and/or
300 Asset Acquisition and Sale Agreement, attached as exhibits to the amended
301 2008R-1 RFP; (c) feasibility of the proposal; (d) site control or permitting of the
302 proposal; and (e) operational viability of the proposal. Based on the application of
303 the price and non-price factors, the Company selected proposals to comprise the
304 Initial Shortlists.

305 **Q. Did the Utah Consultant agree with the Company’s initial shortlist?**

306 A. Yes, the Utah consultant agreed on the selection of the resources, as demonstrated
307 in the Final Report of the Utah Consultant, attached as Confidential Exhibit
308 RMP___(SAB-3).

309 **Q. Please describe the 2008R-1 RFP Final Shortlist selection process.**

310 A. After the Company selected the three Initial Shortlists, it moved to step two of the
311 evaluation process – selection of the Final Shortlist. To select the Final Shortlist,
312 the Company applied its next highest alternative cost for compliance (“ACC”)

313 analysis methodology for renewable resources to each of the three Initial
314 Shortlists. This resource-specific analysis allows the Company to compare a
315 resource against the potential next highest alternative cost for renewable resource
316 compliance. In essence, the result of the ACC analysis shows how the resource
317 compares to the undifferentiated power market. The ACC analysis also
318 incorporates a resource's risk-adjusted system benefit, using the Company's IRP
319 stochastic production cost model. A negative ACC indicates that the resource is
320 valued below undifferentiated market alternatives; whereas a positive ACC
321 indicates that the resource is valued above undifferentiated market alternatives.
322 Upon completion of the ACC analysis and the PVRR (d) analysis, the Company
323 selected four alternatives for inclusion in the Final Shortlist, one of which was
324 Top of the World PPA.

325 **Q. Did the IE and the Utah Consultant concur with the 2008R-1 Final Shortlist?**

326 A. Yes. The IE and the Utah Consultant concurred with the selection of the Final
327 Shortlist and recommended its acknowledgment by the Oregon Commission, as
328 demonstrated in The Oregon Independent Evaluator's Final Closing Report on
329 PacifiCorp's 2008R-1 Renewable RFP (May 15, 2009) in Docket UM 1368
330 ("Final Report"), and in the Final Report of the Utah Consultant, attached as
331 Confidential Exhibit RMP____(SAB-4) and Confidential Exhibit RMP____(SAB-
332 3), respectively.

333 **Q. Please explain the basis of the IE's recommendation, as outlined in the IE's**
334 **Final Report.**

335 A. The IE based its recommendation in the 2008R-1 RFP Final Shortlist on six key

336 points. First, the selected proposals represented the resources with the greatest net
337 benefits to customers as determined by the ACC. Second, the proposals
338 represented the top options from a competitive process. Third, the IE's
339 independent analysis confirmed that the selected proposals represent the lowest
340 cost alternatives for customers, with an accounting for risk. Fourth, the shortlist
341 provided a diversity of projects, bidders, and transaction types for negotiations
342 going forward. Fifth, the 2008R-1 RFP aligned with the Company's IRP process.
343 Sixth, the Company agreed to conduct an analysis at the time it made its
344 procurement decision to show how the accuracy of output projections and asset
345 life were reflected in the final decision.

346 **Q. Please explain the basis of the Utah Consultant's conclusions.**

347 A. The Utah consultant concluded "[t]he solicitation process and procedures
348 developed and implemented by PacifiCorp, including the bid evaluation and
349 selection process and methodologies are, in substance, consistent with Utah
350 competitive procurement requirements and industry standards and led to a fair and
351 consistent evaluation and selection process. The results from the 2008R-1
352 competitive procurement process should lead to the acquisition, production and
353 delivery of electricity at the lowest reasonable cost to PacifiCorp's retail
354 customers taking into consideration long-term and short-term impacts, risks,
355 reliability and financial impacts on PacifiCorp. In that regard, the resource
356 selected through this process represents a resource that was subject to detailed
357 scrutiny and evaluation, was vetted through a fair and equitable process, is subject
358 to a contractual arrangement that ensures an effective balance of risk with benefits

359 to customers, and represents the lowest cost resource available through this
360 competitive solicitation process to meet renewable resource requirements”. *See*
361 Utah Consultant Final Report, p.36.

362 **Q. Did the IE and the Utah Consultant determine that the 2008R-1 RFP process**
363 **was fair and transparent?**

364 A. Yes.

365 **Q. Did the IE’s report on the negotiation phase of the 2008R-1 RFP conclude**
366 **that the Top of the World PPA was the best choice of projects from the Final**
367 **Shortlist?**

368 A. Yes. The IE considered price, technology and willingness to meet the
369 requirements of the 2008R-1 RFP in reaching this conclusion.

370 **Q. Does the record developed in the 2008R-1 RFP process show that the Top of**
371 **the World PPA is a prudent and cost-effective resource?**

372 A. Yes. Additionally, the Top of the World PPA is consistent with PacifiCorp’s IRP
373 action plan and PacifiCorp’s renewable resource commitments resulting from the
374 MidAmerican Energy Holdings Company acquisition.

375 **Q. Please describe the Top of the World PPA.**

376 A. The Top of the World PPA is a 20-year contract for 200.2 MW wind resource and
377 associated renewable energy credits. The Company will purchase all of the output
378 associated with the project. PacifiCorp has the option to purchase the facility at
379 fair market value at the conclusion of the initial 20-year term. The Top of the
380 World project is comprised of 66 General Electric turbines (each capable of
381 producing 1.5 MW) and 44 Siemens Energy, Inc. turbines (each capable of

382 producing 2.3 MW). The project is located in located near Casper, Wyoming and
383 reached commercial operation on October 1, 2010. The terms and conditions of
384 the Top of the World PPA are consistent with other wind PPAs entered into by
385 the Company.

386 **Q. Does this conclude your direct testimony?**

387 A. Yes.