

RECEIVED
2010 MAY 28 PM 12:00
IDAHO PUBLIC
UTILITIES COMMISSION

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

**IN THE MATTER OF THE)
APPLICATION OF ROCKY) CASE NO. PAC-E-10-07
MOUNTAIN POWER FOR)
APPROVAL OF CHANGES TO ITS) Direct Testimony of Stefan A. Bird
ELECTRIC SERVICE SCHEDULES)
AND A PRICE INCREASE OF \$27.7)
MILLION, OR APPROXIMATELY)
13.7 PERCENT)**

ROCKY MOUNTAIN POWER

CASE NO. PAC-E-10-07

May 2010

1 **Q. Please state your name, business address and present position with Rocky**
2 **Mountain Power (“Company”).**

3 A. My name is Stefan A. Bird. My business address is 825 NE Multnomah, Suite
4 600, Portland, Oregon 97232. My present position is Senior Vice President of
5 Commercial and Trading.

6 **Qualifications**

7 **Q. Please describe your educational and professional background.**

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

18 In my current position I oversee the Company’s Commercial and Trading
19 organization which is responsible for electricity and natural gas wholesale
20 activities, dispatch of all of the Company’s owned and contracted generation
21 resources, and wholesale purchases and sales to balance the Company’s load and
22 resources. My organization is also responsible for the Company’s load and
23 revenue forecast, integrated resource plan (“IRP”) and net power costs (“NPC”)

1 modeling. Most relevant to this case, I am responsible for acquisition of power
2 resources for utilization in the Company's east and west balancing authorities (the
3 "System") by means that include the negotiation of power purchase agreements
4 ("PPAs") and the acquisition of generation resources through the requests for
5 proposals ("RFP") process.

6 **Purpose and Overview of Testimony**

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

8 A. The purpose of my testimony is to demonstrate the prudence of the Three Buttes
9 Windpower LLC ("Three Buttes") PPA, the Top of the World Wind Energy, LLC
10 ("Top of the World") PPA, and the Dunlap I wind-powered generation resource
11 ("Dunlap I") for which the Company is seeking cost recovery in this proceeding.
12 In addition, my testimony describes the 2010 renewable energy credit ("REC")
13 sales revenue included in this proceeding and includes discussion of REC sales
14 volume, price and revenue uncertainty. Specifically, my testimony:

- 15 • Describes the procedural history of the 2008R RFP;
- 16 • Provides a description of Three Buttes, and describes the economic
17 analysis and selection of Three Buttes as a resource for the Company;
- 18 • Describes the procedural history of the 2008R-1 RFP;
- 19 • Provides a description of Top of the World and describes the economic
20 analysis and selection of Top of the World as a resource for the Company;
- 21 • Describes the procedural history of the 2009R RFP;
- 22 • Provides a description of Dunlap I and describes the economic analysis
23 and selection of Dunlap I as a resource for the Company; and

- 1 • Provides a description of 2010 REC sales revenue and a description of
2 forecast REC sales volume, price and revenue uncertainty.

3 **Q. Please summarize your testimony.**

4 A. The Three Buttes PPA, the Top of the World PPA and Dunlap I resources are
5 prudent acquisitions that contribute to PacifiCorp's diverse and cost-effective
6 portfolio of resources. The Three Buttes PPA was acquired as a result of a fair,
7 transparent and robust competitive solicitation process, the 2008R RFP, that
8 solicited bids for renewable resources less than 100 megawatts ("MW") or any
9 size with contract term less than five years. The Top of the World and the Dunlap
10 I projects were also both acquired through fair, transparent and robust competitive
11 bidding processes, namely the 2008R-1 RFP and the 2009R RFP, which were
12 both overseen by an independent evaluator ("IE"). I discuss each resource in
13 sequence by first providing a general overview of the 2008R RFP, 2008R-1 RFP
14 and 2009R RFP. I then provide a description of the economic analysis and
15 selection of the Initial Shortlist and Final Shortlist in each RFP. Last I describe
16 the negotiation and ultimate selection of each resource.

17 In addition to the three renewable resources, I discuss PacifiCorp's 2010
18 REC sales revenues included in this proceeding, which is \$91.8 million. A large
19 portion of the 2010 REC sales revenue is based on known and measurable
20 transactions. However, actual 2010 REC sales revenue will be higher or lower
21 due to uncertainty in REC market prices and due to uncertainty in actual 2010
22 REC production which could be higher or lower due primarily to weather
23 uncertainty. Forecasting REC sales revenue beyond 2010 is highly speculative

1 and could vary by tens of millions of dollars per year given the one-off nature of
2 high value REC transactions in 2010, lack of REC market transparency and
3 liquidity, uncertain REC market regulatory environment, uncertain REC market
4 prices, uncertain REC production, uncertain legislative renewable compliance
5 requirements, and potential requirement for carbon offsets to comply with carbon
6 legislation, which could potentially reduce REC sales revenue to zero.

7 **The 2008R RFP**

8 **Q. Did the Company issue a renewable Request for Proposals (“2008R RFP”) in**
9 **2008?**

10 **A.** Yes. The 2008R RFP was issued on January 31, 2008, and solicited renewable
11 resources less than 100 MW or any size with contract term less than five years.
12 Bids under the 2008R RFP were due and received on March 31, 2008. The 2008R
13 RFP is posted on the Company website at
14 <http://www.pacificorp.com/sup/rfps/r2rr.html>.

15 **Q. Why did the Company issue the 2008R RFP without seeking certain state**
16 **Commission approval in contrast to the 2008R-1 RFP and 2009R RFP?**

17 **A.** As of January 2008 the production tax credit had not been extended beyond the
18 end of 2009 and renewal of the production tax credit was uncertain. The
19 Company determined it had a short window to issue a request for proposals,
20 receive bids, evaluate, negotiate and execute cost-effective transaction(s) that
21 could be constructed and achieve commercial operation prior to the expiration of
22 the production tax credit. The Company limited bids to less than 100 MW or any
23 size with contract term less than five years to comply with Oregon Public Utility

1 Commission (Oregon Commission) and Public Service Commission of Utah
2 (Utah Commission) procurement guidelines. Without the resource size limitation,
3 maintaining compliance with the Oregon Commission and Utah Commission
4 procurement guidelines would have otherwise required a more protracted
5 procurement timeframe and put at risk the ability to acquire cost effective
6 renewable resource(s) through a competitive solicitation before the production tax
7 credit expired.

8 **Q. Is the 2008R RFP consistent with regulatory guidelines for resource**
9 **procurement?**

10 **A.** Yes. The 2008R RFP is consistent with regulatory guidelines for resource
11 procurement as stipulated by the Oregon and Utah Commissions. The Idaho
12 Commission does not have specific resource procurement guidelines.

13 **Q. Please describe the market response to the 2008R RFP.**

14 **A.** PacifiCorp received 29 proposals from 11 different bidders.

15 **Q. Please describe the evaluation process for the 2008R RFP.**

16 **A.** The economic analysis for the 2008R RFP was completed in two steps. The
17 Initial Shortlist evaluation was a screening process that evaluated proposals on
18 price (70%) and non-price (30%) considerations. This initial screening was
19 followed by the Final Shortlist evaluation which used the IRP Planning and Risk
20 (“PaR”) model consistent with the Company’s renewable resource valuation
21 methodology, the alternative cost for compliance (“ACC”).

22 **Q. Explain the evaluation which resulted in the Initial Shortlist.**

23 **A.** The Initial Short List resulted from a screening process that ranked the proposals

1 on price and non-price factors. The price factors were determined using
2 PacifiCorp's Structuring and Pricing RFP Base Model to develop a comparison
3 metric that projected net present value revenue requirement (net PVRR) per
4 kilowatt month (net PVRR/kW-mo) for each bid. The net PVRR component
5 combines the positive value of energy and capacity with negative offsetting costs.
6 The net PVRR/kW-mo metric is the levelized annuity value which, when applied
7 to the nominal kilowatts on a monthly basis and present-valued, will result in the
8 net PVRR. The non-price factors included evaluation of positive or negative
9 conformity to 2008R RFP bid requirements including the draft PPA or build own
10 transfer documents, transmission availability and interconnection status,
11 development status of the resource, bidder experience, bidder creditworthiness
12 and performance guarantees. Of the 29 proposals received, five proposals had a
13 positive net present value and were placed on the Initial Short List.

14 **Q. Please describe the Final Short List evaluation in the 2008R RFP.**

15 **A.** PacifiCorp used the IRP PaR model to complete an ACC calculation for each of
16 the five proposals on the Initial Short List to determine the Final Shortlist.

17 **Q. What is the ACC method?**

18 **A.** The ACC method uses the Company's IRP production cost simulation model and
19 its Forward Price Curve to generate a market-based alternative cost comparison of
20 bid resources. To establish the market-based alternative, the Company first runs
21 the IRP production cost simulation model (the Planning and Risk, or PaR model)
22 in stochastic mode using the then current IRP preferred portfolio. The IRP PaR
23 model is then run a second time with the uncommitted future renewable resources

1 removed from the preferred portfolio. The difference between the two runs
2 establishes the market-based alternative cost. Costs and benefits of the specific
3 bid resources being considered are compared against the IRP PaR model market-
4 based alternative. The resulting comparison metric is an ACC value for each
5 resource bid, which represents the resource cost over the life of the project that
6 yields a zero net PVRR difference with respect to the IRP PaR model's market-
7 based resource alternative. A negative ACC value, expressed in dollars-per-
8 MWh, indicates that the bid resource compares favorably to the market-based
9 alternative, whereas a positive ACC value indicates that the bid resource
10 compares unfavorably to the market-based alternative.

11 **Q. Please describe the results of the 2008R RFP Final Short List.**

12 **A.** The Final Short List resulted in three proposals with favorable ACC values. All
13 three projects were located in Wyoming. Two of the three proposals were
14 substantially more favorable than the third. Therefore, PacifiCorp elected to
15 engage the two more favorable bids in negotiations for a PPA.

16 **Q. Please describe the results of the negotiations with the 2008R RFP Final**
17 **Short List bidders.**

18 **A.** PacifiCorp entered into negotiations with two of the bidders included on the Final
19 Short List in early summer 2008. The first bidder's project was a 49.5 megawatt
20 project located in Wyoming. PacifiCorp terminated negotiations with this
21 counterparty in late 2008 after several months of negotiations because the
22 counterparty was unwilling to agree to terms and conditions in the PPA that
23 would provide adequate protection to customers consistent with terms and

1 conditions in other PacifiCorp executed wind PPAs. The second bidder's project
2 is a 99 megawatt project located in Wyoming. Following successful negotiations
3 that were held in parallel with the negotiations with the other bidder described
4 above, PacifiCorp executed a PPA with this bidder on September 5, 2008. This
5 bidder is identified as Three Buttes Windpower LLC, an entity owned by Duke
6 Energy Corp.

7 **Q. Please describe the basic terms of the transaction with Three Buttes**
8 **Windpower LLC.**

9 **A.** The transaction is a 99 megawatt PPA with Three Buttes Windpower LLC. The
10 transaction allows PacifiCorp to purchase all of the output and RECs of the 99
11 megawatt project for a term of 20 years. PacifiCorp has the option to purchase
12 the facility at fair market value at the conclusion of the initial 20 year term. The
13 project reached commercial operation on December 1, 2009. The project is
14 located in Natrona and Converse counties in Wyoming. The project utilizes 66
15 General Electric 1.5 megawatt sle (model) wind turbine generators. The terms
16 and conditions included in the PPA are consistent with other PacifiCorp wind
17 PPAs. The 2008R RFP resulted in acquisition of a cost-effective 99 megawatt
18 wind resource in Wyoming. Confidential Exhibit No. 15 is a copy of the PPA
19 with Three Buttes Windpower LLC.¹ The contract was included in the
20 Company's net power cost analysis, for a summary of the net power cost please
21 refer to Company witness Dr. Hui Shu's testimony.

¹ Due to the large size of the exhibits attached to the PPA with Three Buttes Windpower LLC, only the contract is attached hereto. The Company will be pleased to provide copies of the exhibits upon request.

1 **The 2008R-1 RFP**

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

3 A. The Company filed its initial application for the 2008R-1 RFP on March 4, 2008.
4 The purpose of the 2008R-1 RFP was to request and evaluate proposals to fulfill a
5 portion of the renewable resource generation identified in the Company's 2007
6 Integrated Resource Plan ("2007 IRP"). To that end, the 2008R-1 RFP solicited
7 System-wide renewable resources that would enable the Company to meet its
8 service obligations. The 2008R-1 RFP targeted acquisition of up to 500 MW of
9 renewable resources with commercial operation dates prior to December 31, 2011
10 and with a limit of 300 MW per resource.² The 2008R-1 RFP was issued to the
11 market on October 6, 2008, with proposals due December 22, 2008.

12 **Q. Did the Idaho Commission approve the 2008R-1 RFP?**

13 A. The Idaho Commission does not require approval of Company RFPs.

14 **Q. Was the 2008R-1 RFP approved by a commission in another state?**

15 A. Yes, on September 23, 2008, the Oregon Commission approved the 2008R-1
16 RFP, with certain conditions that were all satisfied by the Company.³

17 **Q. Was an independent evaluator hired to oversee the 2008R-1 RFP?**

18 A. Yes, the Oregon Commission hired and the Company contracted with Boston
19 Pacific to be the IE.

20 **Q. Describe the market response to the 2008R-1 RFP.**

21 A. The Company received 37 bids from 20 bidders on December 22, 2008.

² 300 MW is the upper limit permitted by Utah Senate Bill 202. Qualifying Facilities that are at least 10 MW were eligible, pursuant to Guideline 6 in Order No. 06-446.

³ See Order No. 08-476.

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

3 A. Yes. Because the acquisition of a successful resource under the 2008R-1 RFP
4 would not occur until 2009, the Company was required to amend and reissue the
5 2008R-1 RFP to accommodate Utah's resource procurement law.⁴

6 **Q. What were the changes to the Amended 2008R-1 RFP?**

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

11 **Q. Was the Amended 2008R-1 RFP approved by a commission in another state?**

12 A. Yes. The Oregon Commission approved the Amended 2008R-1 RFP on January
13 21, 2009.⁵ The Company issued the Amended 2008R-1 RFP to the market on
14 January 26, 2009, with proposals due February 27, 2009.

15 **Q. Describe the market response to the Amended 2008R-1 RFP.**

16 A. The Company received 50 bids from 22 bidders on February 27, 2009.

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

18 A. The Company's analysis of the Amended 2008R-1 RFP proposals focused on
19 determining which resources would provide the best value to customers on a
20 System-wide planning basis to meet customer requirements at the least cost, on a
21 risk-adjusted basis. To achieve these objectives, the Company evaluated
22 alternatives in a two step process. First, the Company selected three Initial

⁴ See Utah Code Ann. 54-17-502(2) (a) (i).

⁵ See Order No. 09-017.

1 Shortlists: (a) west wind; (b) east wind; and (c) all other renewable resources.

2 The purpose of first selecting three separate Initial Shortlists was to capture
3 location resource diversity and the different sources of renewable resources.

4 To select groups of proposals to comprise each of the three Initial
5 Shortlists, the IE agreed with the Company's goals to: (1) select the proposals
6 with the greatest net benefit in terms of price and non-price benefits; (2) select a
7 diversity of bidders and projects; (3) select a mix of PPA and build-own-transfer
8 ("BOTs") alternatives; (4) determine a relatively clear split between the score of
9 the last proposal evaluated and the next proposal that was not selected; and (5)
10 achieve the RFP goal that each category contain up to 500 MW or 5 proposals.⁶
11 Each proposal received up to a maximum of 100 points. The three Initial
12 Shortlists were comprised of the highest scoring proposals in each of the three
13 respective segments, based on price (up to 70 points) and non-price factors (up to
14 30 points). The price factor was derived by using the PacifiCorp Structuring and
15 Pricing RFP base model, which determines the top-performing proposals on the
16 basis of the net pVRRR/kW-mo. The Net PVRR component views the value of
17 the energy and capacity as a positive and the offsetting costs of the proposal as a
18 negative. The more positive the Net PVRR, the more valuable a given resource is
19 to the Company's customers.

20 The non-price factors evaluated were negative or positive based on the
21 following criteria: (a) conformity with Amended 2008R-1 RFP proposal
22 requirements; (b) conformity with the *pro forma* PPA or BOT documents and/or

⁶ See The Oregon Independent Evaluator's Final Closing Report on PacifiCorp's 2008R-1/Renewables RFP (May 15, 2009) at p. 13, (Exhibit No. 16).

1 Asset Acquisition and Sale Agreement, attached as exhibits to the Amended
2 2008R-1 RFP; (c) feasibility of the proposal; (d) site control or permitting of the
3 proposal; and (e) operational viability of the proposal. Based on the application
4 of the price and non-price factors, the Company selected proposals to comprise
5 the Initial Shortlists.

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

7 A. After the Company selected the three Initial Shortlists, it moved to step two of the
8 evaluation process – selection of the Final Shortlist. To select the Final Shortlist,
9 the Company applied its ACC analysis methodology for renewable resources to
10 each of the three Initial Shortlists. This resource-specific analysis allows the
11 Company to compare a resource against the potential next highest alternative cost
12 for renewable resource compliance. In essence, the result of the ACC analysis
13 shows how the resource compares to the undifferentiated power market. The
14 ACC analysis also incorporates a resource's risk-adjusted system benefit, using
15 the Company's IRP stochastic production cost model. A negative ACC indicates
16 that the resource is valued below undifferentiated market alternatives; whereas a
17 positive ACC indicates that the resource is valued above undifferentiated market
18 alternatives. Upon completion of the ACC analysis and the PVRR (d) analysis,
19 the Company selected four alternatives for inclusion in the Final Shortlist, one of
20 which was Top of the World.

21 **Q. Did the IE concur with the Amended 2008R-1 Final Shortlist and**
22 **recommend acknowledgment?**

23 A. Yes. The IE concurred with the selection of the Final Shortlist and recommended

1 its acknowledgment by the Oregon Commission. See The Oregon Independent
2 Evaluator's Final Closing Report on PacifiCorp's 2008R-1 Renewables RFP
3 (May 15, 2009) ("2008 R-1 Final Report"), attached as Confidential Exhibit No.
4 16.⁷

5 **Q. Please explain the basis of the IE's recommendation, as outlined in the IE's**
6 **2008 R-1 Final Report.**

7 A. The IE based its recommendation to acknowledge the Amended 2008R-1 RFP
8 Final Shortlist on six key points. First, the selected proposals represented the
9 resources with the greatest net benefits to customers as determined by the ACC.
10 Second, the proposals represented the top options from a competitive process.
11 Third, the IE's analysis confirmed that the selected proposals represent the lowest
12 cost alternatives for customers, with an accounting for risk. Fourth, the shortlist
13 provided a diversity of projects, bidders, and transaction types for negotiations
14 going forward. Fifth, the Amended 2008R-1 RFP aligned with the Company's
15 IRP process. Sixth, the Company agreed to conduct an analysis at the time it
16 made its procurement decision to show how the accuracy of output projections
17 and asset life were reflected in the final decision.

18 **Q. Did the IE determine that the Amended 2008R-1 RFP process was fair and**
19 **transparent?**

20 A. Yes. On page 14, the 2008 R-1 Final Report states:

21 [Throughout the 2008R-1 process the IE was] in constant contact
22 with the Company and had multiple discussions on dozens of
23 issues. The IE believes the quality of the effort is reflected in the
24 excellent response to the RFP. All of this work has led to what we

⁷ Due to the large size of the exhibits included in the 2008 R-1 Final Report, only the report itself is attached hereto. The Company will be pleased to provide copies of the exhibits upon request.

1 believe was a fair and transparent process which complies with
2 Commission guidelines and will, we hope, lead to a positive result
3 with the supply of new renewable resources for the ratepayers...

4 **Q. Did the IE conclude that the negotiation phase of the RFP was conducted in a**
5 **fair and reasonable manner?**

6 A. Yes. The IE concluded that the negotiation phase of the Amended 2008R-1 RFP
7 process was carried out in a fair and reasonable manner. *See* Boston Pacific
8 report of the Independent Evaluators on negotiations in PacifiCorp 2008R-1RFP
9 (September 18, 2009) at p. 1, attached as Confidential Exhibit No. 17.⁸

10 **Q. Did the IE's report on the negotiation phase of the RFP conclude that Top of**
11 **the World was the best choice of projects from the final shortlist?**

12 A. Yes. The IE considered price, technology and willingness to meet the
13 requirements of the RFP in reaching this conclusion.

14 **Q. Does the record developed in the RFP process show that Top of the World is**
15 **a prudent and cost-effective resource?**

16 A. Yes. Additionally, the acquisition of Top of the World is consistent with
17 PacifiCorp's IRP action plan and PacifiCorp's renewable resource commitments
18 resulting from the MidAmerican Energy Holdings Company acquisition. These
19 are generally discussed in the direct testimony of Company witness Mr. Mark R.
20 Tallman in this Application.

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

22 A. Top of the World is a 20-year PPA for 200.2 MW and associated renewable
23 energy credits. The Company will purchase all of the output associated with the

⁸ Due to the large size of the exhibits in the Boston Pacific report of the Independent Evaluators on negotiations in PacifiCorp 2008 R-1RFP (September, 2009), only the report is attached hereto. The Company will be pleased to provide copies of the exhibits upon request.

1 project. PacifiCorp has the option to purchase the facility at fair market value at
2 the conclusion of the initial 20-year term. The Top of the World project is
3 comprised of 66 General Electric turbines (each capable of producing 1.5 MW)
4 and 44 Siemens Energy, Inc. turbines (each capable of producing 2.3 MW). The
5 project is located near Casper, Wyoming and is expected to reach commercial
6 operation on or before November 1, 2010. The terms and conditions of the PPA
7 are consistent with other wind PPAs entered into by the Company. Confidential
8 Exhibit No. 15 also contains a copy of the PPA with Top of the World.⁹ The
9 contract was included in the Company's net power cost analysis, for a summary
10 of the net power cost please refer to Company witness Dr. Shu's testimony.

11 **The 2009R RFP**

12 **Q. Please describe the 2009R RFP.**

13 **A.** The 2009R RFP targeted acquisition of up to 500 MW of System-wide renewable
14 resources with commercial operation dates between 2010 and 2012 and where no
15 single resource exceeding 300 MW¹⁰ would be acquired. Eligible resources were
16 also required to: (1) meet an expected annual output of at least 25,000 megawatt-
17 hours ("MWh") after accounting for planned and unplanned outages; (2) include
18 associated renewable energy credits ("RECs"); and (3) comply with renewable
19 portfolio standard ("RPS") requirements in the Company's six-state service area.
20 The 2009R RFP also allowed for the submission of a Company Benchmark.

⁹ Due to the large size of the exhibits attached to the PPA with Top of the World, only the contract is attached hereto. The Company will be pleased to provide copies of the exhibits upon request.

¹⁰ 300 MW is the upper limit permitted by Utah Code Ann. § 54-17-502. Qualifying Facilities that are at least 10 MW are eligible, pursuant to Guideline 6 in Order No. 05-446.

1 **Q. Was an Independent Evaluator hired to oversee the 2009R Request for**
2 **Proposal?**

3 A. Yes, on May 22, 2009, the Oregon Commission hired and the Company
4 contracted with Boston Pacific to be the IE.

5 **Q. Was the 2009R RFP approved by a commission?**

6 A. Yes. The Oregon Commission approved the 2009R RFP at its Public Meeting on
7 July 7, 2009.

8 **Q. Please describe the timeline associated with the 2009R RFP process.**

9 A. The 2009R RFP was issued to the market July 8, 2009, with the Company's
10 Benchmark submittal due no later than September 3, 2009. Proposals from the
11 market were due September 10, 2009. Following review by the IE, the Company
12 Benchmark was formally submitted to the IE on September 3, 2009. The price
13 and non-price analysis of the Benchmark was completed by the Company and
14 reviewed by the IE prior to the Company opening proposals from the market on
15 September 10, 2009. The IE provided a memo on the Benchmark to the Company
16 on September 11, 2009 (the "Benchmark Memo"), attached as Confidential
17 Exhibit No. 18.

18 **Q. Describe the market response to the 2009R RFP.**

19 A. The Company received 82 bids from 26 bidders on September 10, 2009.

20 **Q. Please explain how the IE conducted its analysis and established the**
21 **conclusions set forth in the Benchmark Memo.**

22 A. The IE undertook a detailed examination of the Company's Benchmark by
23 reviewing the submittal and detailed cost backup sheets and through

1 conversations with the Company's generation personnel. The IE's stated primary
2 concern was the potential omission of capital costs. Accordingly, the IE focused
3 on ensuring that appropriate capital costs were included in the Company
4 Benchmark. As an additional check, the IE compared the Company Benchmark
5 capital costs and estimated capacity factors to proposals from the 2008R-1 RFP
6 the IE considered comparable.

7 **Q. What did the Benchmark Memo conclude with respect to the inclusion of**
8 **capital costs in the Benchmark?**

9 A. The Benchmark Memo concluded that all capital costs were properly included
10 and that the level of the Company Benchmark's estimated capital costs were
11 appropriate. The IE also found that the Company Benchmark capital costs were
12 within the range of comparable costs as indicated by proposals in the 2008R-1
13 RFP. Finally, the IE found that the estimated annual Benchmark capacity factor,
14 while in the high range compared to all proposals in the 2008R-1 RFP, was within
15 the range of capacity factors from proposals associated with potential resources in
16 the nearby vicinity.¹¹

17 **Q. Why did the Company submit a Company Benchmark and what role did it**
18 **play in the RFP process?**

19 A. The Company's Benchmark played an important role in the 2009R RFP process
20 by providing a cost-based alternative for the benefit of customers. The Company
21 received proposals in the 2009R RFP under a multitude of structures with varying
22 terms and conditions that served as alternatives to the Company Benchmark
23 including PPAs, and BOTs. Including a Benchmark provides a benefit for

¹¹ See Benchmark Memo at p. 11-12, (Exhibit No. 18).

1 customers because it serves as a check on market-based proposals, it provides a
2 resource alternative that the Company is prepared to undertake, and it shields
3 customers from 100 percent market exposure.

4 **Q. Please describe the 2009R RFP Initial Shortlist selection process.**

5 A. The Company's analysis of the 2009R RFP proposals focused on determining
6 which resources would provide the best value to customers on a System-wide
7 planning basis to meet customer requirements at the least cost, on a risk adjusted
8 basis. To achieve these objectives, the Company evaluated alternatives in a two
9 step process. First, the Company selected three Initial Shortlists: (a) west wind;
10 (b) east wind; and (c) all other renewable resources. The purpose of first selecting
11 three separate Initial Shortlists was to capture location resource diversity and the
12 different sources of renewable resources.

13 To select groups of proposals to comprise each of the three Initial
14 Shortlists, the IE agreed with the Company's goal to: (a) select the proposals with
15 the greatest net benefit in terms of price and non-price benefits; (b) select a
16 diversity of proposals and projects; (c) select a mix of PPAs and BOTs; (d)
17 determine a relatively clear split between the score of the last proposal priced and
18 the next proposal that was not selected; and (e) achieve the RFP goal that each
19 category contain up to 500 MW or five proposals. *See The Oregon Independent*
20 *Evaluator's Final Closing Report on PacifiCorp's 2009R Renewables RFP*
21 *(November 5, 2009) ("2009R Final Report")* at p. 12. The 2009R Final Report is
22 attached as Confidential Exhibit No. 19.¹²

¹² Due to the large size of the exhibits to the 2009R Final Report, only the report itself is attached hereto. The Company will be pleased to provide copies of the exhibits upon request.

1 Each proposal received up to a maximum of 100 points. The three Initial
2 Shortlists were comprised of the highest scoring proposals in each of the three
3 respective segments, based on price (up to 70 points) and non-price factors (up to
4 30 points). The price factor was derived by using the PacifiCorp Structuring and
5 Pricing RFP base model, which determines the top performing proposals on the
6 basis of the Net PVRR/kW-mo. The Net PVRR component views the value of
7 the energy and capacity as a positive and the offsetting costs of the proposal as a
8 negative. The more positive the Net PVRR, the more valuable a given resource is
9 to the Company's customers.

10 The non-price factors evaluated were negative or positive based on the
11 following criteria: (a) conformity with 2009R RFP proposal requirements; (b)
12 conformity with the *pro forma* PPA or BOT documents and/or Asset Acquisition
13 and Sale Agreement attached as exhibits to the 2009R RFP; (c) feasibility of the
14 proposal; (d) site control or permitting of the proposal; and (e) operational
15 viability of the proposal. Based on the application of the price and non-price
16 factors, the Company selected proposals to comprise the Initial Shortlists. The
17 Initial Shortlist contained a total of 14 resource alternatives (13 proposals from
18 the market and the Company Benchmark). The 14 alternatives contained five east
19 wind resources, four west wind resources and five other renewable resources.

20 **Q. Did the IE agree with the Company's selection of alternatives contained in**
21 **the three Initial Shortlists?**

22 **A. Yes. The IE agreed with the Company's selection of the three Initial Shortlists.**¹³

¹³ See 2009R Final Report at pp. 11-14, (Exhibit No. 19).

1 **Q. Please describe the 2009R Final Shortlist selection process.**

2 A. After the Company selected the three Initial Shortlists, it moved to step two of the
3 evaluation process – selection of the Final Shortlist. To select the Final Shortlist,
4 the Company applied its next highest ACC analysis methodology for renewable
5 resources to each of the three Initial Shortlists. This resource-specific analysis
6 allows the Company to compare a resource against the potential next highest
7 alternative cost for renewable resource compliance. In essence, the result of the
8 ACC analysis shows how the resource compares to the undifferentiated power
9 market. The ACC analysis also incorporates a resource’s risk-adjusted system
10 benefit, using the Company’s IRP stochastic production cost model. A negative
11 ACC indicates that the resource is valued below undifferentiated market
12 alternatives; whereas a positive ACC indicates that the resource is valued above
13 undifferentiated market alternatives. Upon completion of the ACC analysis and
14 the PVRR(d) analysis, the Company selected two alternatives for inclusion in the
15 Final Shortlist. The Final Shortlist included: (1) Dunlap I, the Company
16 Benchmark; and (2) Proposal B, a BOT. Both Dunlap I and Proposal B are
17 located in Wyoming.

18 **Q. Did the IE concur with the Final Shortlist?**

19 A. Yes. The IE concurred with the selection of the Final Shortlist and recommended
20 that the Company include two additional back-up proposals for potential
21 consideration in the event the other alternatives did not materialize. Both of the
22 back-up alternatives are less cost-effective than Dunlap I and Proposal B.
23 Moreover, one of the back-up proposals is not currently viable because it is sited

1 in a location recently designated as a Greater Sage-Grouse Core Area.

2 Wyoming's Greater Sage-Grouse Core Area is discussed in more detail later in
3 my testimony.

4 **Q. What did the IE conclude in its 2009R Final Report on the Final Shortlist?**

5 A. The IE based its recommendations to acknowledge the Final Shortlist on six key
6 points. First, the selected alternatives represented the resources with the greatest
7 net benefits to customers as determined by the ACC. Second, the alternatives
8 represented the top options from a competitive process where the Company
9 received proposals from 26 suppliers offering a total of 39 projects. Some of
10 these projects offered multiple options for a total of 82 proposal options and over
11 9,400 MW. Third, the IE's report states:

12 independent analysis confirmed that the selected bids
13 represent the lowest cost alternatives for ratepayers, with an
14 accounting for risk. Our independent analysis included the
15 creation of our own cost annuity models for each bid
16 option, a review of PacifiCorp's models, and a thorough
17 review of the terms and condition of each bid.¹⁴

18 Fourth, The RFP aligns with the Company's IRP process. The Initial and Final
19 Shortlist analyses used current assumptions from the IRP. In addition, the ACC
20 analysis uses a model from the Company's IRP process to calculate the benefit of
21 renewable resources. Fifth, the Company Benchmark is included in the Final
22 Shortlist and the IE took special care to confirm that selection, noting:

23 [w]e confirmed the accuracy of the Benchmark costs and
24 scoring and provided the Commission with a complete
25 review of all costs of the project prior to bid receipt. We
26 also confirmed the Benchmark's status by; (a) reviewing
27 the project's initial and final shortlist scores and models,
28 (b) independently scoring the project's non-price

¹⁴ *Id.* at p. 3.

1 characteristics, (c) comparing the cost and output of the
2 project to recent third-party bids, and (d) evaluating the bid
3 costs in our own cost model.¹⁵

4 Sixth, while there were two bids targeted for acquisition the shortlist also includes
5 two 'back- up' bids which provides some assurance that, should negotiations fall
6 through with a bidder, the RFP may still result in a winner in addition to the
7 Benchmark.¹⁶

8 **Dunlap I**

9 **Q. Please describe Dunlap I.**

10 A. Dunlap I is a 111 MW wind project consisting of 74 wind turbine generators, an
11 electrical collector system, a 34.5 to 230 kV collector substation (known as the
12 Dunlap substation), a 230 kV transmission line (approximately 11 miles in
13 length), 230 kV breakers, access roads, an operations & maintenance building and
14 required communication and control facilities (e.g., metering, hardware, software,
15 and associated communication circuits and other equipment).

16 **Q. Where will Dunlap I be located?**

17 A. Dunlap I will be located approximately eight miles north of Medicine Bow,
18 Wyoming in Carbon County on property consisting of approximately 16,500
19 acres (the "Site").

20 **Q. Why is the Site an appropriate place to construct Dunlap I?**

21 A. The Site is appropriate for Dunlap I for three primary reasons: (1) studies indicate
22 the Site will result in a desirable wind resource; (2) the Site is located in close
23 proximity to the Company's transmission system and another Company-owned

¹⁵ 2009R Final Report at p. 3, (Exhibit No. 19).

¹⁶ *Id.* at p. 4.

1 wind project; and (3) the Company owns the majority of the Site land, thereby
2 avoiding third-party royalty payments at a benefit to customers.

3 **Q. Please explain the division of land ownership within the Site.**

4 A. The Company owns the vast majority of the Site land. The Bureau of Land
5 Management (“BLM”) owns two sections, the state of Wyoming owns
6 approximately two and one half sections and one section is held by a private a
7 third party.

8 **Q. Please explain if any of the Dunlap I facilities will be located on land not
9 owned by the Company.**

10 A. The Company has no rights at this time to use the BLM land and no plans to place
11 facilities on BLM lands. The Company holds a lease for the state lands and
12 intends to cross one section with a 230 kV transmission line. At this time,
13 placement of wind turbine generators (“WTGs”) on the state lands is not planned
14 for Dunlap I. Although the Company plans to install electrical facilities on the
15 third-party lands, there are no plans for the placement of Dunlap I WTGs on such
16 lands at this time. Finally, the Company holds a lease to an additional state
17 section that the transmission line from the Site to the point of interconnection with
18 the Company’s transmission system will cross. The remainder of the transmission
19 right-of-way is on land leased from a private entity.

20 **Q. Has the Company performed an evaluation of the wind potential at the Site?**

21 A. Yes. Wind potential studies were performed by the Company’s consultant as part
22 of the Company’s Benchmark submittal. In addition, as part of the 2009R RFP
23 process, the Company retained a separate independent consultant to perform an

1 independent wind study for the Company Benchmark and Proposal B. The
2 second study confirmed the Site's suitability for Dunlap I. The second study also
3 supplied its own independent estimate of the annual capacity factor forecast for
4 Dunlap I. The independent studies were used in the RFP analysis of the Company
5 Benchmark and Proposal B.

6 **Q. Who will supply the towers, WTGs and control systems for Dunlap I?**

7 A. The towers, WTGs and control systems will be supplied by General Electric
8 Company ("GE").

9 **Q. How was GE selected as the turbine supplier?**

10 A. The Company solicited offers from multiple turbine suppliers and it was
11 determined that GE provided the lowest cost and risk to customers.

12 **Q. Is GE a proven supplier of WTG equipment?**

13 A. Yes. GE is one of the leading and most creditworthy WTG suppliers in the
14 market and has an established track record of manufacturing wind generation
15 components.

16 **Q. Will GE supply a warranty?**

17 A. Yes. GE will provide a two-year warranty.

18 **Q. What is your understanding of the 2008 Executive Order issued by Wyoming
19 Governor David Freudenthal designating Greater Sage-Grouse Core Areas?**

20 A. The Executive Order maps out the state of Wyoming's prime sage-grouse habitat
21 areas and lists a number of requirements that restrict new development of coal,
22 wind, oil, gas, recreation and agriculture within those areas.

1 **Q. Is Dunlap I in the Greater Sage-Grouse Core area?**

2 A. No. The Dunlap I facilities, including the 230 kV transmission line, are not
3 located in the Greater Sage-Grouse Core Area.

4 **Q. What is the projected commercial operation date for Dunlap I?**

5 A. The projected commercial operation date for Dunlap I is November 1, 2010.

6 **Q. What investment related to the Dunlap I resource is included in the revenue
7 requirement in this case?**

8 A. The Company has included \$261.2 million for Dunlap I in this case. This amount
9 is consistent with the amount utilized in the evaluation and selection of the 2009R
10 RFP Final Shortlist and reviewed by the IE. The operation and maintenance costs
11 included in this case associated with Dunlap I are \$2.4 million for WTG
12 maintenance, permitting obligations, local levy tax, and land use payments. The
13 testimony of Company witness Mr. Steven R. McDougal includes the revenue
14 requirement calculations with the inclusion of this resource. Dunlap I was
15 included in the Company's net power cost analysis, for a summary of the net
16 power cost please refer to Company witness Dr. Shu's testimony.

17 **Q. Does the record developed in the RFP process show that Dunlap I is a
18 prudent and cost-effective resource?**

19 A. Yes. Additionally, the acquisition of Dunlap I is consistent with PacifiCorp's IRP
20 action plan and PacifiCorp's renewable resource commitments resulting from the
21 MEHC acquisition.

1 **2010 Renewable Energy Credit sales revenue**

2 **Q. What is PacifiCorp's 2010 REC sales revenue in this proceeding?**

3 A. PacifiCorp's 2010 REC sales revenue in this proceeding is \$91.8 million. The
4 testimony of Company Witness Mr. McDougal includes the revenue requirement
5 impacts of the 2010 REC sales revenue. Page 3.6.3 of Mr. McDougal's Exhibit
6 No. 2 provides the detail behind the 2010 REC sales revenue.

7 **Q. Is there uncertainty in the 2010 REC sales revenue?**

8 A. Yes. Although a large portion of the 2010 REC sales revenue is based on known
9 and measurable transactions, actual 2010 REC sales will be higher or lower due to
10 speculation related to unknown REC transactions given the uncertain REC market
11 regulatory environment, uncertain REC market prices and uncertain REC
12 production volume due primarily to weather uncertainty.

13 **Q. Is it reasonable to use 2010 REC sales revenue as a proxy for future REC**
14 **sales?**

15 A. No. The 2010 REC sales revenue is extraordinary due to several high value one-
16 off transactions that were executed during a unique window of opportunity in a
17 highly illiquid market. Current regulatory uncertainty in California regarding
18 eligible REC transactions prevents the ability to execute incremental comparable
19 transactions with the investor owned utilities in California. PacifiCorp's ability to
20 execute comparable high value REC sales transactions with other counterparties is
21 limited by market demand, counterparty resource eligibility and transmission
22 delivery restrictions.

1 **Q. Could REC sales revenue beyond 2010 vary by tens of millions of dollars and**
2 **potentially fall to zero?**

3 A. Yes. PacifiCorp has executed certain high value REC transactions that extend
4 through 2012, so those revenues are known and measurable assuming the RECs
5 supporting these sales are produced. However, REC sales that have not been
6 executed are highly speculative due to the uncertain REC market regulatory
7 environment, uncertain REC market prices, uncertain legislative renewable
8 compliance standards and potential need for carbon offsets. PacifiCorp's annual
9 REC sales revenue beyond 2010 could vary by tens of millions of dollars based
10 on REC price uncertainty alone. REC sales beyond 2012 could potentially fall to
11 zero if RECs are needed for renewable portfolio standard compliance or as carbon
12 offsets to satisfy potential new carbon legislation.

13 **Q. Due to the uncertainty of REC sales revenue what treatment is the Company**
14 **proposing?**

15 A. The Company is proposing REC sales should be included in the ECAM. Mr.
16 McDougal describes this proposal in his testimony.

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

18 A. Yes.

CONFIDENTIAL

Case No. PAC-E-10-07

Exhibit No. 15A

Witness: Stefan A. Bird

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

CONFIDENTIAL

Exhibit Accompanying Direct Testimony of Stefan A. Bird

Three Buttes Windpower LLC Purchase Power Agreement

May 2010

**THIS EXHIBIT IS CONFIDENTIAL
AND IS PROVIDED UNDER
SEPARATE COVER**

CONFIDENTIAL

Case No. PAC-E-10-07

Exhibit No. 15B

Witness: Stefan A. Bird

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

CONFIDENTIAL

Exhibit Accompanying Direct Testimony of Stefan A. Bird

Top of the World Purchase Power Agreement

May 2010

**THIS EXHIBIT IS CONFIDENTIAL
AND IS PROVIDED UNDER
SEPARATE COVER**

CONFIDENTIAL

Case No. PAC-E-10-07

Exhibit No. 16

Witness: Stefan A. Bird

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

CONFIDENTIAL

Exhibit Accompanying Direct Testimony of Stefan A. Bird

Independent Evaluator's Final Closing Report (Summary)

May 2010

**THIS EXHIBIT IS CONFIDENTIAL
AND IS PROVIDED UNDER
SEPARATE COVER**

CONFIDENTIAL

Case No. PAC-E-10-07

Exhibit No. 17

Witness: Stefan A. Bird

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

CONFIDENTIAL

Exhibit Accompanying Direct Testimony of Stefan A. Bird

Independent Evaluator's Report on Negotiations (Summary)

May 2010

**THIS EXHIBIT IS CONFIDENTIAL
AND IS PROVIDED UNDER
SEPARATE COVER**

CONFIDENTIAL

Case No. PAC-E-10-07

Exhibit No. 18

Witness: Stefan A. Bird

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

CONFIDENTIAL

Exhibit Accompanying Direct Testimony of Stefan A. Bird

Independent Evaluator's Benchmark Memo

May 2010

**THIS EXHIBIT IS CONFIDENTIAL
AND IS PROVIDED UNDER
SEPARATE COVER**

CONFIDENTIAL

Case No. PAC-E-10-07

Exhibit No. 19

Witness: Stefan A. Bird

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

ROCKY MOUNTAIN POWER

CONFIDENTIAL

Exhibit Accompanying Direct Testimony of Stefan A. Bird

Independent Evaluator's Closing Report (Summary)

May 2010

**THIS EXHIBIT IS CONFIDENTIAL
AND IS PROVIDED UNDER
SEPARATE COVER**