

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

**IN THE MATTER OF THE
APPLICATION OF PACIFICORP DBA
UTAH POWER & LIGHT COMPANY
FOR APPROVAL OF CHANGES TO ITS
ELECTRIC SERVICE SCHEDULES**

) CASE NO. PAC-E-05-1
)
) Direct Testimony of Stan K. Watters
)
)

PACIFICORP

CASE NO. PAC-E-05-1

January 2005

1 **Q. Please state your name, business address and position with PacifiCorp (the**
2 **Company).**

3 A. My name is Stan K. Watters. My business address is 825 NE Multnomah,
4 Portland, Oregon, 97232. My present position is Senior Vice President of the
5 Commercial and Trading Department. My position is part of PacifiCorp's
6 regulated merchant function.

7 **Qualifications**

8 **Q. Please describe your education and business experience.**

9 A. I joined the Company in 1982 and I have held various positions in engineering,
10 finance, and wholesale prior to my current position. In my position as Senior
11 Vice President of Commercial and Trading, I am responsible for the Company's
12 resource planning, resource procurement, and wholesale sales and trading
13 functions including the economic dispatch of PacifiCorp's system resources. I
14 graduated from Oregon State University in 1981 with a Bachelor of Science in
15 Civil Engineering.

16 **Purpose of Testimony**

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

18 A. The purpose of my testimony is to provide information regarding the Company's
19 acquisition of three long-term system resources that are or will be in-service
20 during the relevant periods in this case: the West Valley lease agreement ("West
21 Valley Lease"), the installation of three General Electric LM-600 generation units
22 at the Gadsby plant site (the "Gadsby Project"), and the 525 MW combined cycle
23 combustion turbine at Currant Creek (the "Currant Creek Project"). My

1 testimony will demonstrate that these resources were prudently acquired and
2 explain to the Commission how these resources provide system-wide benefits to
3 all of the Company's customers, particularly the Company's Idaho customers.

4 **Q. Would you please summarize your testimony in this proceeding?**

5 A. My testimony will first describe PacifiCorp's need for additional resources. My
6 testimony will next discuss each of the three resources (the West Valley Lease,
7 the Gadsby Project, and the Currant Creek Project). For each resource, my
8 testimony will discuss generally the acquisition process, the reasonableness of the
9 resource costs, consideration of alternatives, and how these new resources provide
10 benefits for the Company's Idaho customers.

11 **PacifiCorp's Need for Additional Resources**

12 **Q. Please describe how the Company determined these resources were**
13 **necessary.**

14 A. PacifiCorp's resource needs are determined through its Integrated Resource Plan,
15 or IRP. PacifiCorp is required to file an IRP in four of its six state jurisdictions
16 every two years. Consistent with the Standards and Guidelines of those four
17 states, PacifiCorp develops its IRP through an open and public process. Specific
18 requirements of the plan vary in each state, although each state generally requires
19 that the Company develop a report summarizing PacifiCorp's load and resource
20 balance as well as providing an outline of the resource needs expected in the
21 future. PacifiCorp currently implements these varying requirements through a
22 rigorous public input process that combines multiple stakeholder input sessions
23 with rigorous analysis. PacifiCorp's latest Integrated Resource Plan was filed in

1 Idaho in January 2003.

2 **Q. What were the general findings of the 2003 Integrated Resource Plan?**

3 A. The 2003 Integrated Resource Plan found a need for substantial new resources;
4 particularly in PacifiCorp's Eastern control area. Alternatively stated, PacifiCorp
5 has a gap between the load in its service territories and the resources available to
6 serve it. This gap grows through time. Rising demand, particularly demand
7 during peak hours, rather than needs during all hours, principally drives increases
8 in the gap. However, expiring supply contracts, declining hydroelectric output as
9 well as thermal plant reductions also contribute. The 2003 IRP identified this gap
10 to be approximately 4,000 MW by Fiscal Year (FY) 2013.

11 **Q. Please summarize the Findings of Need and the resulting Action Plan**
12 **identified in the IRP.**

13 A. The IRP analysis in conjunction with input from the public process resulted in 9
14 specific Findings of Need and 28 specific action items. The findings and actions
15 are listed in Tables 9.1 and 9.2 of the Integrated Resource Plan.

16 **Q. How do the findings and actions summarized in the IRP relate to**
17 **PacifiCorp's acquisition of the West Valley Lease, the Gadsby Project, and**
18 **the Currant Creek Project?**

19 A. Among the Findings of Need, the IRP identified a need in the Eastern control area
20 for approximately 570 MW of new resource by the summer of 2007 (Finding 2),
21 200 MW of new resource by the summer of 2005 (Finding 4) and a range of
22 shaped/super-peaking products (Finding 6).

1 **The West Valley Lease**

2 The Acquisition Process

3 **Q. Please describe how the Company selected the West Valley Lease to meet its**
4 **resource needs.**

5 A. In September 2001, PacifiCorp issued an RFP soliciting bids for resources in
6 excess of 25 MW and capable of delivery in or to its East control area beginning
7 in the summer of 2002. The RFP was issued in response to projections that the
8 Company would experience a shortage of resources. The Company's goal was to
9 secure cost effective resources to meet its East-side capacity requirements.

10 Description of the West Valley Lease

11 **Q. Please provide a general description of the West Valley Lease.**

12 A. The West Valley Lease is a 15-year operating lease between PacifiCorp and West
13 Valley Leasing Company, LLC, for the output of a 200 MW gas-fired, simple-
14 cycle combustion turbine electric generating station. The generating station
15 consists of five nominal 40 MW units in West Valley, Utah near Salt Lake City
16 ("West Valley Project"). West Valley Leasing Company, LLC, is a subsidiary of
17 PPM Energy who, at the time, was doing business as PacifiCorp Power Marketing
18 ("PPM"). The West Valley Project's units became operational during the summer
19 of 2002. The West Valley Project has access to natural gas from both the Questar
20 and Kern River pipelines.

21 **Q. Please describe the lease terms.**

22 A. Under the lease, PacifiCorp has the total responsibility for operation and
23 maintenance of the West Valley Project, provides all of the fuel used by the West

1 Valley Project, and has the exclusive right to dispatch and receive all of the
2 generation from the West Valley Project, as well as all of the use of the West
3 Valley Project to produce ancillary services, such as operating reserves. The lease
4 requires PacifiCorp to make quarterly payments of \$749,150 for each of the five
5 units (\$14,983,000/year).

6 **Q. Does the lease give PacifiCorp an option to purchase the West Valley Project**
7 **or terminate the lease?**

8 A. Yes, the lease is very flexible. PacifiCorp has two options (vesting in years three
9 and six) to either terminate the lease or purchase the West Valley Project.

10 **Q. Please describe how the West Valley Lease addresses the Company's need**
11 **for additional East-side on-peak resources and provides system benefits.**

12 A. The West Valley Lease gives PacifiCorp full discretion to dispatch and adjust the
13 output of the West Valley Project. The West Valley Project has quick-start (fast-
14 responding) units that can be deployed as necessary in response to changing load,
15 generation, or transmission conditions on the system. Similarly, the West Valley
16 Project can be dispatched based on changing market conditions to either displace
17 higher cost resources or to sell excess power into the wholesale markets.

18 In addition, the West Valley Project provides system benefits by
19 expanding resource diversity, increasing voltage support and reliability, and
20 reducing the risk of incurring unexpectedly high costs associated with wholesale
21 market purchases. This level of flexibility is important to the Company because it
22 enhances the ability of the East control area to recover from the unexpected loss
23 of transmission import capability or the unexpected loss of other generation units.

1 Lastly, because the West Valley Project is located in the Company's major load
2 center east of the Cascade Mountains, it avoids transmission costs and constraints
3 historically incurred in meeting summer peak load in the East control area. In
4 summary, the West Valley Lease gives PacifiCorp new and highly valuable
5 flexibility in meeting its load profile, increases system reliability, and reduces the
6 Company's exposure to transmission and energy price risks associated with
7 volatile wholesale markets.

8 **Q. Please describe the benefits of the structure of the West Valley Lease.**

9 A. The structure of the Lease Agreement is particularly beneficial for several
10 reasons. First, as noted above, it allows PacifiCorp full discretion to adjust the
11 output of the West Valley Project. Second, the purchase and termination options
12 in the Lease Agreement allow PacifiCorp to hedge against changes in market
13 prices and load forecasts by revisiting the economics of the transaction in three-
14 and six-year windows. These are very attractive contractual provisions, given the
15 volatility of the power markets in recent years. Finally, because the West Valley
16 Project utilizes the same model of generation units as PacifiCorp's Gadsby
17 Project, discussed below, PacifiCorp is able to functionally integrate the resource
18 into the Company as if it were an owned resource. This functional integration
19 allows the Company to pursue efficiency enhancements such as the consolidation
20 of spare parts inventory, the scheduling and procurement of major maintenance
21 activities, and the use of employees in operating other generation projects.

1 **Q. Please describe the terms of the West Valley Lease with regard to the**
2 **termination options.**

3 A. The West Valley Lease provides the Company with the ability to decide in years
4 three and six to continue the lease, purchase the project at a pre-determined price,
5 or terminate the lease. Regarding the first option, PacifiCorp issued a notice of
6 termination and subsequently rescinded it. Had the Company not rescinded its
7 notice of termination, the lease would have terminated as of June 2005. Since the
8 Company did rescind the notice of termination, the lease will continue through at
9 least May 31, 2008. The second option requires PacifiCorp to provide notice of
10 termination by December 1, 2006. Such a notice must be rescinded June 30, 2007
11 if the Company determines that it desires to continue with the lease agreement.

12 **Q. What process did PacifiCorp follow before deciding to retain its lease option**
13 **on the West Valley plant for an additional three years?**

14 A. PacifiCorp issued RFP 2004-X to seek potential resources to replace the West
15 Valley Lease. The Company solicited resource alternatives that would be
16 available by June 1, 2005 for terms of: (1) three-years, or (2) three-years with a
17 nine-year extension at the option of PacifiCorp, or (3) up to twelve-years with a
18 three-year minimum term.

19 **Q. What was the response to the RFP 2004-X?**

20 A. RFP 2004-X yielded intent to bid forms from six counterparties with three
21 counterparties ultimately choosing to submit proposals. Proposals from the three
22 counterparties fell into three categories: (1) a 150 megawatt market purchase for
23 3-years, (2) a 140 megawatt purchase for more than 12-years associated with a to-

1 be-constructed 10,000 mmbtu/kWh natural gas fired plant, and (3) a 200
2 megawatt purchase from the West Valley Project contingent on the project being
3 sold to the bidder.

4 **Q. Did PacifiCorp take proper steps to ensure the RFP process was unbiased?**

5 A. Yes. In recognition that the West Valley Lease is an affiliate transaction, the
6 Company retained the services of Lands Energy Inc. (a private consulting firm) to
7 serve the role of RFP process monitor.

8 **Q. What was the basis of PacifiCorp's ultimate decision to rescind the West
9 Valley termination option?**

10 A. The decision to rescind the first termination option was based on a combination of
11 economics, the impact to reliability for our customers, and the impact to
12 PacifiCorp's load/resource position. In consultation with Lands Energy, the three
13 alternatives were narrowed to the 150 megawatt market alternative. This resulted
14 in the Company comparing the attributes of the 3-year 150 megawatt market
15 purchase proposal against the attributes of the West Valley Lease for the same 3-
16 year period. The Company determined: (1) that the economic analysis indicated
17 that the West Valley Lease is more economic than the market purchase
18 alternative, (2) termination of the lease can lead to a higher risk of customer
19 outages (on both an amount basis and an exposure basis), and (3) the market
20 purchase alternative adversely impacts the ability to balance the load/resource
21 position. (The market purchase alternative did not replace the full 200 megawatts
22 lost by terminating the lease and would require the Company to utilize allocated
23 firm transmission rights that are otherwise needed to balance the expected

1 position.) Finally, retention of the lease also retains the second option to continue
2 the lease, purchase the project, or terminate the lease. The value of this second
3 option was not included in the economic comparison of the alternative.

4 **Q. Given the lease will be in effect until the next option exercise period, how**
5 **does the Company propose to handle the decision it will face with respect to**
6 **the option to lease, purchase, or reject, effective May 31, 2008?**

7 A. The Company's latest Integrated Resource Plan (IRP) that will be issued in
8 January 2005 studied planning scenarios as if the lease was terminated effectively
9 May 31, 2008. This means that the long-term resource planning process was able
10 to take advantage of the second lease option and explore a variety of portfolio
11 alternatives. As a result, the IRP assumes the lease will be terminated to be able
12 to study other more economic resource alternatives such as the emerging
13 intercooled aero combustion turbine design and combined cycle combustion
14 turbine design. For example, the General Electric LMS 100 natural gas turbines
15 are expected to have heat rates lower than General Electric's LM-6000 design. As
16 the Company is implementing the IRP action plan it will have the added benefit of
17 the second West Valley Lease option in the event more economic alternatives are
18 not viable.

19 **The Gadsby Project**

20 The Acquisition Process

21 **Q. Why did the Company acquire the Gadsby Project?**

22 A. The Company pursued the Gadsby Project because it represented a least-cost, new
23 resource option that was consistent with the demand for summer peak capacity in

1 PacifiCorp's East control area. The Gadsby Project compared very favorably
2 with the resources acquired through the September 2001 RFP.

3 **Q. Please explain.**

4 A. Exhibit No. 12 provides a comparison of the Gadsby Project with other
5 transactions from the RFP.

6 **Q. What does the exhibit show?**

7 A. The first column on the left shows the criteria used to analyze the four
8 alternatives. Moving from left to right, the second, third, fourth, and sixth
9 columns summarize the results for the Gadsby Project, West Valley Lease and
10 other transactions. The exhibit shows that the Gadsby Project has the highest
11 NPV benefit (\$6,940,631, or \$5,783,859 on a per/100 MW basis) of any of the
12 alternatives and an overall relative ranking of number one. Thus the Gadsby
13 Project was the least-cost resource alternative at the time.

14 Description of the Gadsby Project.

15 **Q. Please describe the Gadsby Project.**

16 A. The Gadsby Project consists of three highly-efficient, 40 MW, gas turbine
17 generators located in Salt Lake City, Utah. The three units are designated Unit 4,
18 Unit 5 and Unit 6. Unit 4 was first synchronized to the grid on July 10, 2002.
19 Unit 5 was synchronized on July 14, 2002 and Unit 6 was synchronized on
20 July 29, 2002. During the period from July 10 to August 1, 2002, the units were
21 tested at varying loads and the energy was supplied to the grid. On August 1,
22 2002 all three units were declared commercial and became available for dispatch.

1 **Q. What is the cost of the Gadsby Project?**

2 A. The Gadsby Project came in under budget, at a total cost of \$75,273,023 as
3 compared to an estimated cost of \$80,400,000.

4 **Q. Please explain the design and operating assumptions of the Gadsby Project.**

5 A. The Gadsby Project was designed to be operated when the incremental generation
6 cost is below market and during instances when a resource is required with short
7 notice (as little as ten minutes in some instances) or when PacifiCorp has load
8 service obligations in the East control area and there is no remaining transmission
9 import capability left. Price forecasts at the time indicated that annual average
10 capacity factors in the range of 30-35 percent could reasonably be expected. This
11 capacity factor anticipated that the units would operate during the heavy load
12 hours of the peak seasonal periods and would be off-line during other hours.
13 Because the LM-6000 units in the Gadsby Project can start and reach full load in
14 less than 10 minutes, the gas turbines can provide ancillary services in the form of
15 operating reserves.

16 **Q. How has the Gadsby Project performed against those initial assumptions?**

17 A. The Gadsby Project has met and continues to meet expectations. The equivalent
18 availability of the plant has been nearly 95 percent since 2003 and the capacity
19 factors for the project has averaged more than 33 percent during the same period.

20 **Q. What would you conclude regarding the construction and operation of the**
21 **Gadsby Project?**

22 A. The Gadsby Project was completed on time and within budget. It has been, and
23 continues to be, used and useful in providing service to the Company's retail

1 customers.

2 **The Currant Creek Project**

3 The Acquisition Process

4 **Q. Please describe the process followed by the Company in deciding to proceed**
5 **with the Currant Creek Project.**

6 A. PacifiCorp issued a request for proposal (RFP) on June 6, 2003. The RFP, called
7 RFP 2003A, solicited 995 MW of supply-side resources in three bid categories.

8 **Q. Please provide a general description of the RFP 2003A process.**

9 A. RFP 2003A employed a blind bid evaluation process wherein bid responses were
10 submitted to an external consultant (Navigant Consulting Inc or "Navigant")
11 which, in turn, assured that the responses were adequately blinded such that the
12 bidding entity was not known to PacifiCorp. Navigant then supplied the blinded
13 bid responses to the Company for evaluation.

14 **Q. What was Navigant's overall role?**

15 A. Navigant's overall role was: (1) to make certain that the Company evaluates its
16 own build option in a manner that is reasonable, fair, unbiased, and comparable to
17 the extent practicable ("Fair Manner"), against other bids, and (2) to submit
18 detailed reports on whether the process followed by the Company adequately
19 meets these objectives.

20 **Q. Has the Company made available to the Commission a clear synopsis of the**
21 **RFP 2003-A process?**

22 A. Yes. Navigant prepared a report entitled "Navigant Consulting's Final Report on
23 PacifiCorp's RFP 2003-A, dated September 8, 2004." This report has been filed

1 with the Commission and posted to the Company's web site at
2 <http://www.pacificorp.com/File/File42188.pdf>.

3 **Q. What did Navigant's report conclude?**

4 A. Page 48 of the Navigant report concluded that:

5 "PacifiCorp executed a fair and consistent process throughout the RFP to
6 identify the most cost effective resources for meeting its projected supply
7 needs. The criteria, tools, and types of personnel used were similar to
8 other resource solicitations used by other investor owned and municipal
9 utilities elsewhere."

10
11 **Q. Was the decision to construct Currant Creek made due to RFP 2003-A?**

12 A. Yes. Upon evaluating the alternatives presented via RFP 2003-A, the Company
13 determined that the Currant Creek resource was the best alternative.

14 **Q. Did Navigant agree with that decision?**

15 A. Yes. Page 45 of the Navigant report states that PacifiCorp's Next Best
16 Alternative (NBA) "was determined to be the lowest cost resource option within
17 the context of the RFP process."

18 Description of the Currant Creek Project

19 **Q. Please describe the size and location of the Currant Creek resource.**

20 A. The Currant Creek resource is adjacent to the Company's Mona Substation in
21 Juab County, Utah. Phase One of the Currant Creek project consists of two
22 natural gas-fired simple cycle combustion turbine generators, each with a nominal
23 140 MW capacity, for a total of 280 MW. Phase One of Currant Creek has a
24 planned operation date of July 1, 2005. Phase Two of the project, planned for
25 completion by March 2006, converts the plant to a combined-cycle combustion
26 turbine with a total capacity of 525 MW.

1 **Q. Has the decision to construct Currant Creek been reviewed by any other**
2 **commission?**

3 A. Yes. On March 5, 2004, the Utah Public Service Commission (“UPSC”) issued
4 an order granting a Certificate of Public Convenience and Necessity authorizing
5 the Company to proceed with construction of the Currant Creek Project. In its
6 Order, the UPSC examined five alternative courses of action that the Company
7 could have followed to meet its summer 2005 peak deficiency: (1) rely
8 exclusively on wholesale market power purchases, (2) re-bid the peak bid
9 category of the 2003-A RFP, (3) re-analyze the bids already received, (4) restart
10 negotiations with bidders, and (5) proceed with building a new resource. The
11 Commission found that a review of these alternative actions “shows no better
12 alternative at the present time than proceeding with building a new resource,” and
13 therefore concluded that the Currant Creek Project is required by the public
14 convenience and necessity. (UPSC Docket No. 03-035-29, March 5, 2004 Order,
15 p. 20)

16 **Q. What costs related to Currant Creek are reflected in the Company’s revenue**
17 **requirement in this filing?**

18 A. The Company has included only Phase One of Currant Creek in this filing, which
19 will come on line prior to the rate effective date in this proceeding.

20 **Q. What is the expected cost of the Currant Creek resource?**

21 A. The total cost of the Currant Creek resource is approximately \$350 million. The
22 cost associated with Phase One of Currant Creek is \$133 million.

1 **Q. Is construction proceeding on schedule and within budget?**

2 A. Yes, construction is proceeding on time and within budget. Phase one is currently
3 estimated to enter service by July 1, 2005.

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

5 A. Yes.