

UE-991832/PacifiCorp
March 24, 2000
WUTC Staff Data Request No.182

Exhibit 198

WUTC Staff Data Request No. 182 Re: Power Supply

Please provide all documents related to the acquisition of the James River facility filed at the WUTC.

Response to WUTC Staff Data Request 182:

The Company did not file any information specific to the James River transaction with the WUTC. However, the Company did make a filing before the Oregon Public Utility Commission. Provided as WUTC Staff Data Request Attachment Response 182 is the testimony and exhibit of Rodger Weaver in that application. See also PacifiCorp's responses to other WUTC Staff Data Requests, including numbers 1, 144, and 145.

WUTC	UE-991832	
EXHIBIT #	198	
ADMIT <input checked="" type="checkbox"/>	W/D <input type="checkbox"/>	REJECT <input type="checkbox"/>

WASHINGTON

UE-991832

PACIFICORP

March 24, 2000

**WUTC STAFF DATA REQUEST
ATTACHMENT RESPONSE 182**

Docket No. _____
Exhibit No. 3
Witness: Rodger Weaver

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

PACIFIC POWER & LIGHT COMPANY

Proposed Direct Testimony

of

Rodger Weaver

February 1993

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

3 A. My name is Rodger Weaver. My business address is 424
4 Public Service Building, Portland, Oregon 97204. My
5 present position is Power Planning Regulatory
6 Administrator.

7 Q. Have you prepared an exhibit which shows your education,
8 experience and duties at the Company?

9 A. Yes. Table 4-1 provides that information.

10 Q. What is the purpose of your testimony?

11 A. I will discuss the benefits to the Company and its
12 customers of the James River Cogeneration Project
13 introduced by Mr. Duvall.

14 Q. What do you see as the primary benefits of the James
15 River Cogeneration project?

16 A. The most obvious benefit is the acquisition of a new
17 low-cost generation resource. This resource fits well
18 with the Company's current resource acquisition planning
19 in terms of timing, size, and type of resource. Its low
20 cost when compared to the avoided cost filings derived
21 from both of the Company's Resource and Market Planning
22 Programs (RAMPP-1 and RAMPP-2) is a clear indicator of
23 the benefit of this project. The risk reduction aspects
24 of the business arrangements between the Company and
25 James River discussed by Mr. Duvall augment the low-cost
26 resource advantages.

1 Another significant benefit is derived from the location
2 of the project at the Company's major load center on the
3 west side of the Cascade Mountains. Also, the agreement
4 implementing the project gives PacifiCorp a "right of
5 first refusal" to participate in James River's future
6 combustion turbine generation project as described by
7 Mr. Duvall. Since such resources constitute a
8 significant portion of the Company's future resource
9 acquisition planning, this option on the west side is
10 likely to be particularly attractive.

11 Q Do you believe the James River Cogeneration project
12 would be constructed without the Company's participation
13 as detailed by Mr. Duvall?

14 A. Yes. Absent PacifiCorp's participation in this project,
15 either James River itself or some other third party
16 would, in all likelihood, develop the cogeneration
17 project. This scenario would probably lead to
18 PacifiCorp buying the output at full avoided cost or
19 losing James River as a customer and foregoing the other
20 benefits listed above.

21 Q. How do the costs of the James River cogeneration
22 facility compare with the Company's avoided costs?

23 A. Table 4-2 compares the cost of power from the James
24 River cogeneration facility to the Company's avoided
25 cost. The first page is based on the Company's most
26 recent avoided cost estimate. This avoided cost stream
27 is an update of the draft RAMPP-2-based avoided costs

1 provided to the Commission staff in anticipation of
2 acknowledgment of the Company's RAMPP-2 integrated
3 resource planning report. For illustrative purposes,
4 the second page compares the costs of the James River
5 facility to the avoided costs currently approved by the
6 Oregon Public Utility Commission.

7 Q. Please describe the contents of Table 4-2.

8 A. Table 4-2 shows year-by-year figures for the cost of an
9 assumed level of capacity and energy production from the
10 James River cogeneration facility under the terms of the
11 agreement. It also compares these costs with the cost
12 of the purchase of the same amount of capacity and
13 energy at full avoided cost. This analysis includes the
14 full \$59 million anticipated capital cost of the James
15 River Project.

16 The table shows that for the first five years, power
17 from the project is more expensive than if it were
18 purchased at avoided cost. From the sixth through the
19 20th years, the project is less expensive than capacity
20 and energy priced at avoided cost. The present value of
21 the savings from the project over the 20 years of the
22 agreement is almost \$11 million. This represents a 5%
23 saving relative to energy purchased at avoided costs.
24 In other words, the levelized cost per MWh of the James
25 River Cogeneration project is 95% of a corresponding
26 capacity and energy purchase at the Company's avoided
27 costs.

1 Q. Please discuss the second page of Table 4-2.

2 A. This page compares the cost of James River project
3 energy to the avoided cost stream based on RAMPP-1 and
4 currently approved by the Oregon Commission. This page
5 differs from page 1 only in the avoided costs used and
6 the resulting calculations and comparisons. It shows
7 that the present value of the James River project power
8 cost savings is almost \$17 million relative to these
9 avoided costs. The cost corresponds to 93% of currently
10 approved avoided costs. This page confirms that the
11 project's costs are favorable when compared to recent
12 PacifiCorp avoided cost projections.

13 Q. Does the James River project fit in with the RAMPP-1 and
14 RAMPP-2 action plans?

15 A. Yes. RAMPP-1's short term action plan included a
16 Marketplace Opportunity section that looked at the
17 addition of industrial cogeneration and the
18 participation by the Company in the development of
19 cogeneration projects. The RAMPP-1 cogeneration goal
20 was set at 0-180 MWa by the year 1995.

21 RAMPP-2's action plan included a goal of up to 300 MWa
22 of cogeneration on line by the year 1997. Cogeneration
23 was included in all of the RAMPP-2 plans except the low
24 load forecast.

25 The James River project is consistent with and
26 implements both RAMPP action plans.

1 Q. Please discuss the benefits of location of the new
2 generator at a major west-side load center.

3 A. Installation of the 50 MW facility at James River's
4 Camas site will provide benefits to all power users in
5 the Willamette Valley and southwest Washington areas.
6 These benefits are due to reduced exposure to possible
7 transmission system voltage collapse. This event could
8 be triggered by loss of critical 500 kV lines which
9 cross the Cascades. Like all transmission facilities,
10 these lines are vulnerable to storms and other risk
11 factors. While no immediate danger exists, voltage
12 collapse of the sort described is projected to become a
13 risk by the winter of 2002. The James River Camas
14 cogeneration facility will reduce the region's exposure
15 to load loss by one MW for each MW of plant size.
16 Utilities in the affected area are planning other
17 improvements to reduce this exposure. Reliable
18 generation operating in the area will help defer such
19 expenditures.

20 Q. Can you summarize your testimony?

21 A. Yes. The James River Camas cogeneration project offers
22 significant benefits to the Company as an efficient, low
23 cost source of power for meeting customers' needs for
24 electric service. It is consistent with the Company's
25 long-range planning objectives to provide high quality
26 reliable service at the lowest possible cost as embodied
27 in both the RAMPP-1 and RAMPP-2 processes. It also

1 provides additional benefits due to its location in the
2 Willamette Valley-southwestern Washington load center
3 area.

4 Q. Does this complete your testimony?

5 A. Yes.

Docket No. _____
Exhibit No. 4
Witness: Rodger Weaver

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

PACIFIC POWER & LIGHT COMPANY

Exhibit Accompanying
Proposed Direct Testimony
of
Rodger Weaver

February 1993

RESUME OF EXPERIENCE AND EDUCATION

RODGER WEAVER

PROFESSIONAL EXPERIENCE

- 1984 - 1987 Public Service Commission of Utah
- * Senior Economist
- 1987 - 1992 Utah Division of Public Utilities
- * Senior Economist
- 1992 - Present PacifiCorp, Portland, Oregon
- * Power Planning Regulatory Administrator
- Current Duties:
- * Direct and coordinate net power cost and related analyses.
 - * Represent the Company on Power Resource issues and information before the various regulatory commissions.

HIGHER EDUCATION

- 1967 Bachelor of Arts, Economics - University of Utah
- 1974 Ph.D., Economics - University of Utah

Assumptions:
 Capital Cost: \$59,162,000
 Discount Rate: 8.81%
 Capacity: 50 MW
 Capacity Factor: 95%

Year	PacifiCorp's Project Costs			Updated RAMPP-2 Based Avoided Costs				Difference (James River less Avoided Cost)	
	Production (MWh) (1)	Contract Price (\$/MWh) (2)	Estimated Cost (\$000) (3) - (1) x (2)	Capacity Cost (\$/kW/mo) (4)	Energy Cost (\$/MWh) (5)	Combined 95% CF (\$/MWh) (6)	Total Avoided Cost (\$000) (7) - (1) x (6)	Energy (\$/MWh) (8) - (2) - (6)	Total Cost (\$000) (9) - (3) - (7)
1996	416,100	41.14	\$ 17,118	5.22	20.74	28.26	\$ 11,781	12.88	\$ 5,358
1997	416,100	42.31	\$ 17,605	5.46	23.68	31.54	\$ 13,125	10.77	\$ 4,480
1998	416,100	43.77	\$ 18,213	5.70	28.58	36.80	\$ 15,311	6.97	\$ 2,901
1999	416,100	45.63	\$ 18,987	5.96	31.47	40.06	\$ 16,670	5.57	\$ 2,316
2000	416,100	45.15	\$ 18,787	6.23	34.72	43.70	\$ 18,183	1.45	\$ 604
2001	416,100	45.28	\$ 18,841	6.51	38.18	47.56	\$ 19,789	(2.28)	(\$ 948)
2002	416,100	47.10	\$ 19,598	6.80	42.09	51.90	\$ 21,594	(4.80)	(\$ 1,995)
2003	416,100	48.64	\$ 20,239	7.10	46.30	56.54	\$ 23,528	(7.90)	(\$ 3,289)
2004	416,100	52.33	\$ 21,775	7.42	50.85	61.56	\$ 25,615	(9.23)	(\$ 3,840)
2005	416,100	56.48	\$ 23,501	7.76	55.28	66.47	\$ 27,656	(9.99)	(\$ 4,155)
2006	416,100	56.82	\$ 23,643	8.11	59.07	70.76	\$ 29,443	(13.94)	(\$ 5,800)
2007	416,100	59.95	\$ 24,945	8.47	62.97	75.19	\$ 31,287	(15.24)	(\$ 6,341)
2008	416,100	63.47	\$ 26,410	8.85	67.04	79.80	\$ 33,207	(16.33)	(\$ 6,797)
2009	416,100	73.32	\$ 30,508	9.25	71.27	84.61	\$ 35,207	(11.29)	(\$ 4,699)
2010	416,100	74.49	\$ 30,995	9.67	75.68	89.62	\$ 37,292	(15.13)	(\$ 6,297)
2011	416,100	78.76	\$ 32,772	10.10	79.48	94.05	\$ 39,135	(15.29)	(\$ 6,363)
2012	416,100	82.76	\$ 34,438	10.56	83.48	98.70	\$ 41,069	(15.94)	(\$ 6,632)
2013	416,100	87.41	\$ 36,371	11.03	87.67	103.58	\$ 43,099	(16.17)	(\$ 6,727)
2014	416,100	96.76	\$ 40,262	11.53	92.07	108.70	\$ 45,229	(11.94)	(\$ 4,967)
2015	416,100	97.76	\$ 40,678	12.05	96.70	114.07	\$ 47,465	(16.31)	(\$ 6,787)
Net Present (1996) Value			\$ 208,943				\$ 219,894	(\$ 10,951)	
Levelized Total Payment		54.27 \$ / MWh					57.11 \$ / MWh	(2.84) \$ / MWh	
Percent of Avoided Cost		95%							

James River Cogeneration Project

Comparison
James River Costs vs PacifiCorp Avoided Cost

Assumptions:

Capital Cost: \$59,162,000

Discount Rate: 8.81%

Capacity: 50 MW

Capacity Factor: 95%

Year	PacifiCorp's Project Costs			Oregon (9/91) Avoided Cost				Difference (James River less Avoided Cost)		
	Production (MWh) (1)	Contract Price (\$/MWh) (2)	Estimated Cost (\$000) (3) = (1) x (2)	Capacity Cost (\$/kW/mo) (4)	Energy Cost (\$/MWh) (5)	Combined 95% CF (\$/MWh) (6)	Total Avoided Cost (\$000) (7) = (1) x (6)	Energy (\$/MWh) (8) = (2) - (6)	Total Cost (\$000) (9) = (3) - (7)	
1996	416,100	41.14	\$ 17,118	5.31	25.68	33.34	\$ 13,871	7.80	\$ 3,247	
1997	416,100	42.31	\$ 17,605	5.52	28.10	36.06	\$ 15,004	6.25	\$ 2,601	
1998	416,100	43.77	\$ 18,213	5.74	30.68	38.96	\$ 16,210	4.81	\$ 2,003	
1999	416,100	45.63	\$ 18,987	5.83	33.73	42.14	\$ 17,533	3.49	\$ 1,454	
2000	416,100	45.15	\$ 18,787	6.23	35.27	44.25	\$ 18,414	0.90	\$ 373	
2001	416,100	45.28	\$ 18,841	6.48	37.31	46.65	\$ 19,413	(1.37)	(\$ 572)	
2002	416,100	47.10	\$ 19,598	6.88	39.58	49.50	\$ 20,597	(2.40)	(\$ 999)	
2003	416,100	48.64	\$ 20,239	7.37	39.97	50.60	\$ 21,054	(1.96)	(\$ 814)	
2004	416,100	52.33	\$ 21,775	7.71	43.39	54.51	\$ 22,681	(2.18)	(\$ 906)	
2005	416,100	56.48	\$ 23,501	8.02	52.58	64.14	\$ 26,691	(7.66)	(\$ 3,189)	
2006	416,100	58.82	\$ 23,643	8.39	52.70	64.80	\$ 26,962	(7.98)	(\$ 3,320)	
2007	416,100	59.95	\$ 24,945	8.77	59.39	72.04	\$ 29,974	(12.09)	(\$ 5,029)	
2008	416,100	63.47	\$ 26,410	9.33	66.05	79.50	\$ 33,081	(16.03)	(\$ 6,672)	
2009	416,100	73.32	\$ 30,508	13.97	71.40	91.54	\$ 38,092	(18.22)	(\$ 7,583)	
2010	416,100	74.49	\$ 30,995	14.74	74.70	95.95	\$ 39,927	(21.46)	(\$ 8,931)	
2011	416,100	78.76	\$ 32,772	15.55	79.10	101.52	\$ 42,244	(22.76)	(\$ 9,471)	
2012	416,100	82.76	\$ 34,438	16.40	83.70	107.35	\$ 44,668	(24.59)	(\$ 10,231)	
2013	416,100	87.41	\$ 36,371	17.31	88.60	113.56	\$ 47,252	(26.15)	(\$ 10,881)	
2014	416,100	96.76	\$ 40,262	18.27	93.80	120.14	\$ 49,992	(23.38)	(\$ 9,730)	
2015	416,100	97.76	\$ 40,678	19.28	99.30	127.10	\$ 52,887	(29.34)	(\$ 12,209)	
Net Present (1996) Value			\$ 208,943					\$ 225,719	(\$ 16,776)	
Levelized Total Payment		54.27 \$ / MWh					58.62 \$ / MWh	(4.36) \$ / MWh		
Percent of Avoided Cost		93%								