Overview

Blundell Plant is a single unit geothermal power plant located in Beaver County, Utah. The facility is located nine miles East of State Highway 257 on the Roosevelt Hot Springs Road at the base of the Mineral Mountains; the turn off is 4 miles North of Milford, Utah. The permitted project consists of about 6 sections (approximately 2000 acres) of public Bureau of Land Management (BLM) ground at an elevation of 7000 feet above sea level. The nearest railroad access is the Union Pacific Railway Company located in Milford, Utah which is 14 miles from the plant by gravel road and highway.

Project design is based on a single flash process, in which steam and brine from production wells are separated in centrifugal, wellhead separators. Steam flows to the power plant where it is the working fluid for a single General Electric turbine-generator. Unused wellhead brine, as well as excess condensate, is returned to the reservoir through injection wells. The production/injection system uses three production wells and three injection wells. About 5 ½ miles of brine piping and 1 ½ miles of steam piping tie the system together.

The power consists of a turbine, condenser, cooling tower, and associated auxiliary equipment. The General Electric steam turbine is a hydrogen-cooled straight condensing single flow type.

Steam condensate provides more than sufficient water for cooling tower and plant processes. The excess condensate is re-injected with the brine. Turbine exhaust is collapsed to condensate as it passes through a cold water curtain in the single contact condenser. Hotwell water is pumped to the cooling tower and brought back to the condenser as the cold water curtain. Plant culinary and fire protection water is piped approximately 5 miles to the plant from year round Bulkhead Springs. A local bottled water company supplies drinking water. The plant does not require a water treating facility.

Blundell Plant is a zero discharge plant. All excess condensate is re-injected back into the reservoir. Brine that is spent as a consequence of the start up and shut down process is discharged to evaporation holding ponds. Plant sewage is collected in a septic tank that is cleaned by a commercial septic tank service.

Unit	Net Capability (MW)	Primary Fuel	Start-up Fuel	Current Duty	Commercial Date
1	23	Geothermal	NA	Base load	31 July 1984

Ownership

Production wells, steam separators, and brine re-injection wells are owned and operated by Intermountain Geothermal Co. (IGC), a wholly owned subsidiary of CalEnergy Co. Steam delivery piping, brine pumps and lines, re-injection pumps and lines are owned and operated by PacifiCorp. PacifiCorp leases the land on which the plant is located from the BLM. PacifiCorp owns 100% of Blundell Plant including structures and machinery; also, the company owns 100% of the steam delivery piping, brine pumps and piping, and re-injection pumps and piping. PacifiCorp owns 350 acres in the northern portion of the project; the company is in the process of trading this land with the BLM for a similar sized plot of land that would include the plant. The steam supplier, IGC, owns mineral and water rights in the project. Use of the land in the project is shared with a local livestock grazing association and the public. Through an agreement with the North Divide Grazing Association, PacifiCorp owns rights to Bulkhead Springs culinary water. The agreement requires the plant to maintain three stock watering tanks and keep them full of water.

Transmission

Blundell Plant Substation is connected to a 138 kV transmission line (energized at 46kV) to Milford substation. Milford substation is connected at 46 kV to Sevier substation northeast of Milford and at 46 kV to the Cameron substation east of Milford

Workforce

	1992	1993	1994	1995	1996	1997	1998	1999
Mgt. & Exempt	3	3	3	3	3	2	2	2
Union	15	15	15	15	15	15	14.5	14
Total	18	18	18	18	18	17	16.5	16

Fuel Procurement

Steam is purchased from Intermountain Geothermal Co. Thirty years of steam was pre-paid in 1991, and an additional steam delivery maintenance fee is paid monthly.

Station Operation	Unit 1
General Data	
Winter Dependable Max. Net Capability ,MW	23.5
Summer Dependable Max. Net Capability ,MW	21.5
Minimum Net Load ,MW	1
AGC Response Time, Normal/Emergency, MW/min	N/A
Start up time, Hot/Cold, Hours	3 /24

Major Plant Equipment	Unit 1
Turbine	
Manufacturer	General Electric
Type	Straight Condensing Single Flow
Inlet Steam Conditions, PSIG/SATURATED	108.3/ 340°F
Number of Extractions	NA
Last Stage Blade Size	16"
Generator	
Manufacturer	General Electric
Stator Cooling	Hydrogen
Rotor Cooling	Hydrogen
MVA	30.7
Power Factor	0.85

Carbon Plant

Appendix A

Overview

Carbon Plant is a two unit coal fired plant located in Carbon County, Utah. The Plant is situated approximately three miles north of Helper, Utah, near the intersection of Highways 6 & 191.

Both units have Combustion Engineering tangential fired boilers with Westinghouse compound turbines and are equipped with BELCO electrostatic precipitators. The units are not required to have scrubbers.

Unit #1 was commissioned in 1954. Unit #1 has a continuous rated steam flow of 710,000 lbs. per hour and is rated at 72 MW gross. This unit has no reheat.

Unit #2 was commissioned in 1956. Unit #2 has a continuous rated steam flow of 815,000 lbs. per hour and is rated at 110 MW gross.

Unit	Net Capability (MW)	Primary Fuel	Start-up Fuel	Current Duty	Commercial Date
1	67	Coal	No. 2 diesel	Base load	26 Nov 1954
2	103	Coal	No. 2 diesel	Base Load	11 Sep 1957

Ownership

PacifiCorp is the sole owner of the Carbon Plant facility.

Water Supply

The Price River flows adjacent to the west boundary of the plant and supplies 2.8 million gallons of water per day to the facility. The Company owns adequate water shares to meet 100% of the plant needs.

Transmission

The output voltage of the plant generators is 13,800 volts. The main transformers raise the voltage to 138,000 volts. The power is then connected to the 138 kV substation location 350 feet east of the plant. This substation has transmission ties via two 138 kV lines to Spanish Fork Substation, one to Helper Substation, one to Upalco Substation, and one to Helper/Columbia Substation.

Carbon Plant

Appendix A

Workforce

	1992	1993	1994	1995	1996	1997	1998	1999
Mgt. & Exempt	21	21	21	21	19	18	17	17
Union	73	73	71	62	61	59	59	59
Total	94	94	92	83	80	77	76	76

Bargaining Unit - International Brotherhood of Electrical Workers Local 57

Fuel Procurement

The plant currently burns 625,000 tons of sub-bituminous coal per year with an average heat content of 11,960 BTU/lb. and an ash content of 8%. Coal is delivered to the plant by truck. The plant currently receives coal from PacifiCorp owned Deer Creek Mine, and some spot market coal.

Water Supply

Water for plant operation is conveyed from Scofield Dam, located approximately 25 miles northwest of the plant, via the Price River. PacifiCorp owns sufficient water rights to meet 100% of plant requirements.

Carbon Plant

Appendix A

Station Operation	Unit 1	Unit 2
General Data		
Winter Dependable Max. Net Capability ,MW	72	110
Summer Dependable Max. Net Capability ,MW	68-72	110
Minimum Net Load ,MW	20	25-30
AGC Response Time, Normal/Emergency, MW/min	2.25/2.25	3.2/3.2
Start up time, Hot/Cold, Hours	1/8	1/8

Major Plant Equipment	Unit 1	Unit 2
Boilers		
Manufacturer	CE	CE
Type	Single Tangential	Single Tangential
Reheat Section	No	Yes
Nameplate Steam Flow, lbs./hour	710,000	815,000
Operating Pressure, PSIG	1,250	1,525
Operating Temperature	950° F	1005° F
Primary Fuel	Coal	Coal
Fuel Type	Sub-bituminous	Sub-bituminous
Turbines		
Manufacturer	Westinghouse	Westinghouse
Type	Tandem/Compound	Tandem/Compound
Steam Inlet Conditions, PSIG, SH, RH	1250/950	1450/1000/100
Number of Extractions	5	5
Generators		
Manufacturer	Westinghouse	Westinghouse
Stator Cooling	Hydrogen	Hydrogen
Rotor Cooling	Hydrogen	Hydrogen
MVA	81	123
Power Factor	.85	.85
MW	75	113
Output kV	13.8	13.8
Electrostatic Precipitators		
Manufacturer	BELCO	BELCO
Installed	1975	1975

Cholla Plant

Appendix A

Overview

Cholla Plant is a four-unit coal fired plant located in Navajo County, Arizona. The facility is located 2 miles southeast of Joseph City, Arizona along Interstate 40. The BNSF mainline railroad is directly south of the Plant. The site consists of approximately 2000 acres at 5000 feet elevation.

Cholla Unit 4 is equipped with both an electrostatic precipitator and an SO_2 scrubber that treats 36% of the flue gas. Though the air quality control system combinations vary from unit to unit at Cholla, all state and federal air quality standards are being met. Visitors to the plant, and travelers passing by the plant on Interstate Route 40, are struck by the cleanliness of the plant and its stacks. Cholla is a 'good neighbor' in northern Arizona.

Unit 4 steam generator is a tangentially fired, natural circulation boiler with steam flow of 2,800,000 lbs. per hour, manufactured by Combustion Engineering. The unit is designed to burn sub-bituminous coal from the local area. The General Electric steam turbine is a 17-stage, tandem compound, double flow condensing, single reheat turbine. Steam conditions are 1800 PSIG, 1000 °F superheat, and 1000 °F reheat. The General Electric generator has a water-cooled stator and hydrogen cooled rotor.

The primary coal is supplied to the plant by railroad from the Pittsburg-Midway Coal Mining Company, McKinley Mine near Gallup New Mexico, approximately 100 miles. Fuel Oil for start up is trucked to the plant site. Bottom ash is landfilled on the plant site. About 50% of the fly ash is sold for cement raw material. The remaining fly ash is landfilled on the plant site.

Water for cooling tower make-up and plant processes is drawn from a wellfield. Potable water is piped from the wellfield water supply. The well water is treated with chlorine for use as potable water.

Cholla Plant is a zero discharge plant. Cooling tower blow down and plant sewage are reused for bottom ash sluice water and fly ash/scrubber disposal.

Unit	Net Capability (MW)	Primary Fuel	Start-up Fuel	Current Duty	Commercial Date
4	380	Coal	No. 2 diesel	Mid-merit - AGC	June 1981

Cholla Plant — Appendix A

Ownership

Arizona Public Service Company owns Units 1, 2, & 3. PacifiCorp owns Unit 4 and 37% of the common facilities at the coal-fired Cholla Power Plant.

Transmission

Cholla is interconnected with Four Corners and the desert southwest with 345 kV and 500 kV transmission lines.

Workforce (Total Cholla)

	1993	1994	1995	1996	1997	1998	1999
Mgt. & Exempt	102	94	80	78	75	75	77
Union	213	205	196	191	175	175	176
Total	315	299	276	269	250	250	253

Water Supply

Water for cooling tower make-up and plant processes is drawn from a well-field. Potable water is piped from the wellfield water supply.

Station Operation Detail	Unit 4
General Data	
Winter Dependable Max. Net Capability, MW	380
Summer Dependable Max. Net Capability, MW	380
Minimum Net Load, MW	110
AGC Response Time, Normal/Emergency, MW/min	6/10
Start up time, Hot/Cold, Hours	8/12

Major Plant Equipment	Unit 4
Boiler	
Manufacturer	CE
Type	Tangential furnace, natural circulation
Nameplate Steam Flow, lbs./hour	2,800,000
Primary Fuel	Coal
Fuel Type	Sub-bituminous
Turbine	
Manufacturer	GE
Type	Tandem Compound
Inlet Steam Conditions, PSIG/SH/RH	1800/1000/1000
Number of Extractions	7
Last Stage Blade Size	33.5"
Generator	
Manufacturer	GE
Stator Cooling	Water
Rotor Cooling	Hydrogen
MVA	460
Power Factor	0.90
Electrostatic Precipitator	
Manufacturer	Universal Oil Products
Scrubber	
Manufacturer	Research Cottrell

Colstrip Plant

Appendix A

Overview

The Colstrip Project is a four unit coal-fired power plant located adjacent to the town of Colstrip, Montana. The facility is located on State Highway 39. PacifiCorp has a 10% interest in Units 3 and 4. The Unit 3 and 4 site consists of approximately 2,664 acres and shares a common facility with Units 1 and 2 that consists of 675 acres. The plant site is served by railroad.

Unit 3 and Unit 4 are twin 805 MW gross units. The steam generators are tangentially fired, double drum, controlled circulation boilers supplied by Combustion Engineering. The steam generators have dual furnaces separated by a division wall. The units are designed to burn sub-bituminous coal from the local area. The Westinghouse steam turbines are tandem compound, four flow condensing, single reheat turbines. Steam conditions are 2400 PSIG, 1000 °F superheat, and 1000 °F reheat. The Westinghouse generators have water cooled stator windings and hydrogen cooled rotors. The units have concrete mechanical draft cooling towers. The units are equipped with venturi scrubbers using high calcium lime to control particulate emissions and SO_2 emissions.

The primary source of coal is Western Energy Company's Rosebud mine located adjacent to the plant site. The plant can received fuel oil and lime by truck or by railroad. Most bottom ash and fly ash is sluiced to ash ponds.

Water for cooling tower make-up and plant processes is supplied from the Yellowstone River.

Unit	Net Capability (MW)	PacifiCorp Ownership (MW)	Primary Fuel	Start-up Fuel	Current Duty	Commercial Date
1	740	72	Coal	No. 2 diesel	Base load	1 June 1978
2	740	72	Coal	No. 2 diesel	Base load	4 June 1980

Ownership

Colstrip Units 3 and 4 are operated by PP&L Global, Inc. Ownership is as follows: PacifiCorp 10%; The Washington Water Power Company 15.0%; PP&L Global Inc. 75%. PP&L Global Inc. is a subsidiary of PP&L Resources, Inc. based in Allentown, Pennsylvania.

Transmission

Units 3 and 4 are connected to the Colstrip Switchyard by radial 0.4 mile 500 kV transmission lines. The switchyard is tied to the transmission grid by 500 kV and 230 kV transmission lines.

Workforce

	1996	1997	1998	1999
Total	234	232	232	213

Fuel Procurement

The primary source of coal is from Area C of the Western Energy Company's Rosebud mine. Coal is delivered to the project via a 4.25 mile long belt conveyor.

Water Supply

Water supply is from the Yellowstone River. The water rights associated with the operation of Units 3 and 4 are included in the Colstrip Project water rights. The water rights are owned in co-tenancy by all Colstrip Project owners, based on their ownership in all four units and are sufficient to met 100% of plant requirements.

Station Operation	Unit 1	Unit 2
General Data		
Winter Dependable Max. Net Capability, MW	740	740
Summer Dependable Max. Net Capability, MW	740	740

Major Plant Equipment	Unit 1	Unit 2
Boilers		
Manufacturer	CE	CE
Type	Two drum, twin tangential furnaces	Two drum, twin tangential furnaces
Nameplate Steam Flow, lbs./hour	5,800,000	5,800,000
Operating Pressure, psig	2400	2400
Primary Fuel	Coal	Coal
Fuel Type	Sub-bituminous	Sub-bituminous
Turbines		
Manufacturer	Westinghouse	Westinghouse
Type	Tandem Compound	Tandem Compound
Inlet Steam Conditions, PSIG/SH/RH	2400/1000/1000	2400/1000/1000
Number of Extractions	7	7
Last Stage Blade Size	32.4"	32.4"
Generators		
Manufacturer	Westinghouse	Westinghouse
Stator Cooling	Water	Water
Rotor Cooling	Hydrogen	Hydrogen
MVA	819	819
Power Factor	0.95	0.95
Scrubbers		
Manufacturer	Union Boiler	Union Boiler

Craig Station

Appendix A

Overview

Craig Station is a coal-fired power plant located in Moffat County, Colorado. The facility is located approximately five miles South of Craig, Colorado. The site consists of about 1,100 acres at an elevation of 6,200 feet above sea level. There is a rail spur connecting Craig Station to the Union Pacific Railroad.

The plant consists of two 428 net MW units with wet SO_2 scrubbers and one 408 net MW unit with a dry SO_2 scrubber. All three steam generators are front and rear wall fired, natural circulation boilers supplied by Babcock and Wilcox. All units are designed to burn sub-bituminous coal from mines located in Northwest Colorado. The three General Electric steam turbines are tandem compound, two casing, double flow condensing, single reheat turbines. Design steam conditions are 2,400 PSIG, 1,000°F superheat, and 1,000°F reheat. The General Electric generators have water-cooled stators and hydrogen cooled rotors. Units 1 and 2 are designed to continuously operate at 105% of design throttle pressure.

Coal is supplied to the station by 95 ton trucks from the adjacent Trapper Mine or by belly dump rail cars from the ColoWyo Mine located approximately twenty miles south of the Station. Natural gas is supplied via an underground pipeline to the station from the regional gas transportation grid. Fuel oil is supplied by truck to the plant site. Most of the bottom ash, fly ash and scrubber waste is landfilled in the Trapper Mine.

The plant is equipped with water cooled condensers. Potable water is supplied from an underground well owned by Trapper Mine.

Craig Station is a zero discharge plant. All plant waste streams discharge to the evaporation pond or the raw water pond.

Unit	Net Capability (MW	Primary Fuel	Start-up fuel	Current Duty	Commercial Date
1	428	Coal	Nat gas/ diesel	Base Load	September 1980
2	428	Coal	Nat gas/ diesel	Base Load	November 1979
3	408	Coal	Nat gas/ diesel	Base Load	22 October, 1984

Craig Station

Appendix A

Ownership

Craig Station, including land, structures and machinery, is owned by five utilities. Units 1 and 2 are owned by Salt River Project (29%), Tri-State Generation and Transmission (24%), PacifiCorp (19.29%), Platte River Power Authority (18%), and New Centuries Energy (9.71%). Unit 3 is leased solely by Tri-State Generation and Transmission. Craig Station is operated by Tri-State Generation and Transmission.

Transmission

Craig Station Substation is connected to 230KV and 345KV transmission lines to the Bears Ears, Rifle Substation, Hayden, and Ault Substations.

Workforce

	1993	1994	1995	1996	1997	1998	1999
Mgt. & Exempt	72	72	71	71	71	67	61
Union	292	292	287	283	275	256	244
Total	364	364	358	354	346	323	305

Fuel Procurement

The coal from Trapper Mine is transported to the plant site with 95-ton trucks. Coal is also received from other regional mines by belly dump rail cars. Trapper Mine is owned by Tri-State Generation and Transmission, Salt River Project, Platte River Power Authority, and PacifiCorp.

Water Supply

An adequate water supply for Craig Station is provided by secure water rights in the Yampa River. There is a dedicated pumping station on the river channel. The pumping station pumps water to the on-site Raw Water Reservoir through underground piping. The water pumped from this reservoir provides water for process make-up.

Craig Station

Appendix A

Station Operation	Unit 1	Unit 2
General Data		
Winter Dependable Max. Net Capacity, MW	428	428
Summer Dependable Max. Net Capacity, MW	428	428
Minimum Net Load, MW	120	120
AGC Response Time, Normal/Emergency, MW/min	NA	NA
Start-up Time, Hot/Cold, Hours	2/10	2/10

Major Plant Equipment	Unit 1	Unit 2
Boilers		
Manufacturer	B&W	B&W
Type	Front & Rear Fired	Front & Rear Fired
Reheat Section	Yes	Yes
Nameplate Steam Flow, lbs./hour	3,034,500	3,034,500
Operating Pressure, PSIG	2400	2400
Operating Temperature	1005° F	1005° F
Primary Fuel	Coal	Coal
Fuel Type	Sub-bituminous	Sub-bituminous
Turbines		
Manufacturer	GE	GE
Type	Tandem/Compound	Tandem/Compound
Steam Inlet Conditions, PSIG, SH, RH	2520/1000/1000	2520/1000/1000
Number of Extractions	7	7
Last Stage Blade Length. Inches	33.5	33.5
Generators		
Manufacturer	GE	GE
Stator Cooling	Water	Water
Rotor Cooling	Hydrogen	Hydrogen
MVA	496	496
Power Factor	.90	.90
MW	446	446
Output Volts	22,000	22,000
Electrostatic Precipitators		
Manufacturer	BELCO	BELCO
Type	Weighted Wire, Hot Side	Weighted Wire, Hot Side
SO^2 Scrubbers		
Manufacturer	Peabody	Peabody
Type	Wet Limestone	Wet Limestone

Overview

Dave Johnston Plant is a four unit coal-fired power plant with a generating capacity of 772 net megawatts, located in Converse County, Wyoming. The facility is located approximately 5 miles east of the town of Glenrock. The site consists of about 2500 acres at an elevation of 4950 feet above sea level on the North Platte River which serves as the plant water source. Railroad access is via the Burlington Northern–Santa Fe Railway Company line adjacent to the plant and an attached rail spur access along with a unit train unloading loop for plant coal supply.

The plant consists of four units. Units 1 and 2 are 106 MW, Unit 3 is 230 MW, and Unit 3 is 330 MW. Units 1 & 2 are equipped with Babcock & Wilcox (B&W) front wall fired steam generators, Unit 3 is equipped with a B&W cell burner steam generator, and Unit 4 is equipped with a tangentially fired Combustion Engineering (CE) steam generator. All four units are designed to burn sub-bituminous coal from the local area. All four units are equipped with General Electric tandem compound, two casing, two flow condensing, single reheat turbines. Steam conditions for Units 1 & 2 are 1450 PSIG, 1000 °F superheat, and 1000 °F reheat and for Units 3 & 4 are 1800 PSIG, 1000 °F superheat, and 1000 °F reheat. The General Electric generators have a water-cooled stator and hydrogen cooled rotor. Units 1, 2 and 3 are once through cooled with a side-stream cooling tower for river temperature control, while Unit 4 has a closed loop cooling tower. All units are designed to operate continuously at 100% of design throttle pressure.

The main plant coal supply is from the Powder River Basin (various mines) and is received on the unit train unloading facility, which was put into service in October, 1999. Fuel oil for start up is trucked to the plant site. Most of the bottom ash and fly ash is landfilled on the plant site with some minor volume of flyash sales.

Water for condenser cooling, cooling tower make-up, and plant processes is drawn from the North Platte River. PacifiCorp owns 11,266 Acre-feet of water rights in the North Platte River. Potable water is obtained from the North Platte River through the circulating water system and treated onsite before use.

The Dave Johnston Plant has a NPDES permit for discharge into the North Platte River. Plant sewage is treated and discharged to the ash ponds which returns to the North Platte River.

Unit	Net Capability (MW)	Primary Fuel	Start-up Fuel	Current Duty	Commercial Date
1	106	Coal	No. 2 diesel	Base load	28 Feb. 1959
2	106	Coal	No. 2 diesel	Base load	15 Jan. 1960
3	230	Coal	No. 2 diesel	Base load	01 Dec. 1964
4	330	Coal	No. 2 diesel	Base load	01 July 1972

Ownership

PacifiCorp owns 100% of the Dave Johnston Plant including land, structures and machinery.

Transmission

The Dave Johnston Plant Substation is connected to a 47 kV transmission line to Glendo Substation, to two 69 kV lines to Casper and the Glenrock Coal Mine, to two 115 kV lines (North and South lines) to Western Area Power Authority (WAPA) at Glendo, and to six 230 kV lines to substations at Stegall, Laramie River, Difficulty, Casper, Reno and Spence.

Workforce

	1992	1993	1994	1995	1996	1997	1998	1999
Exempt	54	53	52	51	41	39	34	35
Non-union/ non-exempt	3	3	3	3	3	4	3	3
Union	202	202	198	191	164	173	159	158
Total	259	258	253	245	208	216	196	196

Fuel Procurement

The primary fuel supply is by unit train from various mines in the Powder River Basin.

Water Supply

Water for plant operation is extracted from the North Platte River and is sufficient to meet 100% of plant requirements.

Station Operation	Unit 1	Unit 2	Unit 3	Unit 4
General Data				
Winter Dependable Max. Net Capability, MW	107	107	225*	335
Summer Dependable Max. Net Capability, MW	107	107	225*	320
Minimum Net Load MW	25	25	70	120
AGC Response Time, Normal/Emergency, MW/min	1/1	1/1	1/1	2/2
Start up time, Hot/Cold, Hours	3/6	3/6	3/5	3/5**

* - Unit 3 limited by environmental heat input limitation imposed by Wyoming DEQ.

** - Coal-fired startup usually used on Unit 4.

Major Plant Equipment	Unit 1	Unit 2	Unit 3	Unit 4
Boilers				
Manufacturer	B&W	B&W	B&W	CE
Type	Reheat, Natural Circulation	Reheat, Natural Circulation	Reheat, Natural Circulation	Single tangential furnace
Nameplate Steam Flow, lbs./hour	750,000	750,000	1,600,000	2,450,000
Primary Fuel	Coal	Coal	Coal	Coal
Fuel Type	Sub-bituminous	Sub-bituminous	Sub-bituminous	Sub-bituminous
Turbines				
Manufacturer	GE	GE	GE	GE
Type	Tandem Compound	Tandem Compound	Tandem Compound	Tandem Compound
Inlet Steam Conditions, PSIG/SH/RH	1450/1000/1000	1450/1000/1000	1800/1000/1000	1800/1000/1000
Number of Extractions	5	5	6	6
Last Stage Blade Size	23"	23"	26"	33.5"
Generators				
Manufacturer	GE	GE	GE	GE
Stator Cooling	Water	Water	Water	Water
Rotor Cooling	Hydrogen	Hydrogen	Hydrogen	Hydrogen
MVA	134	134	255	400
Power Factor	0.85	0.85	0.90	0.90
Electrostatic Precipitators				
Manufacturer	Lodge-Cottrell	Lodge-Cottrell	Lodge-Cottrell	
Scrubbers				
Manufacturer				Chemico (GE)

Overview

Foote Creek I Wind Generating Station is located in close proximity to Interstate Highway I-80, at Arlington, Wyoming, approximately 70 miles east of Rawlins, Wyoming. The site is located at the Foote Creek rim, elevation approximately 7,000 ft. Expected capacity factor of the station is approximately 42% based upon average meteorological data.

The station consists of sixty-nine Mitsubishi Heavy Industry fully automatic wind turbine generators rated at 600 kW each. The total station output is 41.4 MW. A substation and 230 kV transmission line 29 miles in length ties into the Wyoming grid. The installed facilities will support up to 125 wind turbines and a total output of 75 MW.

The project was synchronized to the grid in October, 1998. The project is jointly owned by PacifiCorp (79%), and Eugene Water and Electric Board (21%) and is operated by SeaWest.

Technical Data:

Turbines	
Type	Blade-Pitch controlled upwind
Rated Output	600 kW
Rotor Diameter	138 ft
Rated rpm	24 rpm
Number of Blades	3(FRP material)
Rated wind speed	39.2 mph
Cut-in wind speed	10.7 mph
Cut-out wind speed	60.4 mph
Survival wind speed	134 mph
Generators	
Type	Induction Generator
Rated Output	600 kW
Voltage	600 V 3-phase
Frequency	60 Her
Towers	
Type	Monopole
Height	131.2 ft (to center of nacelle)
Control Systems	
Power Regulation	Pitch control
Yaw orientation	Yaw control
Safety Systems	Overspeed Low governor oil pressure Excessive nacelle vibration Yaw control disorder Generator over current Controller disorder

Overview

Gadsby Plant is a three unit natural gas-fired power plant located in Salt Lake City, Utah. The facility is located on North Temple Street west of the city center. The site is at an elevation of 4245 feet above sea level. The plant site is connected by rail siding to the Salt Lake Garfield and Western railroad.

Units 1 and 2 steam generators are front wall fired, natural circulation boilers supplied by Riley. Unit 1 has a Westinghouse tandem compound, two flow condensing, non-reheat turbine. Steam conditions are 1250 PSIG and 1000 °F superheat. Unit 2 has a Westinghouse tandem compound, two flow, condensing, single reheat turbine. Steam conditions are 1450 PSIG, 1000 °F superheat, and 1000 °F reheat. Both units have hydrogen cooled Westinghouse generators. Unit 3 steam generator is a tangentially fired, natural circulation boiler supplied by Combustion Engineering. The General Electric steam turbine is tandem compound, two flow, condensing, single reheat turbine. Steam conditions are 1450 PSIG, 1000 °F superheat, and 1000 °F reheat. The General Electric generator is hydrogen cooled.

Gas is transported to the plant by Mountain Fuel, a local distribution company, and by Questar pipeline.

The plant had originally been designed to burn natural gas, oil or coal. All coal handling equipment has been removed and salvaged. All oil burning equipment has been removed. The oil storage tanks are leased to an independent oil distributor.

Water for cooling tower make-up and plant processes is drawn from the Jordan River. The Salt Lake City municipal water system is used as back-up. Potable water is from the Salt Lake City municipal water system.

Gadsby plant cooling tower blowdown is treated and discharged to the Abatement Canal.

Unit	Net Capability (MW)	Primary Fuel	Start-up Fuel	Current Duty	Commercial Date
1	60	Gas	Gas	Peaking/Cycling	18 Sept 1951
2	75	Gas	Gas	Peaking/Cycling	26 Dec 1952
3	100	Gas	Gas	Peaking/Cycling	1 June 1955

Ownership

PacifiCorp owns 100% of Gadsby Plant including land, structures and machinery.

Transmission

Gadsby Plant Substation is connected to Terminal Substation by four 138 kV lines and to McClelland substation by one 138 kV line. There are a number of 46 kV transmission lines connected to local substations.

Workforce

	1992	1993	1994	1995	1996	1997	1998	1999
Mgt. & Exempt	16	17	20	20	12	11	7	6
Union	30	32	52	52	32	29	28	22
Total	46	49	72	72	44	40	35	28

Fuel Procurement

Natural gas is transported to the plant by Mountain Fuel, a local distribution company, and the Questar pipeline. Natural gas is purchased from a portfolio of gas producers.

Water Supply

The plant has rights to draw 2000 acre-feet of water per year from the Jordan River and 1000 acre-feet of water per year from the Salt Lake City Culinary system. Maximum plant demand is approximately 2000 acre-feet per year.

Station Operation	Unit 1	Unit 2	Unit 3
General Data			
Winter Dependable Max. Net Capability, MW	60	75	100
Summer Dependable Max. Net Capability, MW	60	75	100
Minimum Net Load, MW	17	20	25
AGC Response Time, Normal/Emergency, MW/min	2.0/3.0	2.5/3.0	3.0/3.8
Start up time, Hot/Cold, Hours	1/12	1/12	1/12

Major Plant Equipment	Unit 1	Unit 2	Unit 3
Boilers			
Manufacturer	Riley	Riley	CE
Type	Front wall fired, natural circulation	Front wall fired, natural circulation	Single tangential furnace, natural circulation
Nameplate Steam Flow, lbs./hour	620,000	575,000	800,000
Primary Fuel	Natural gas	Natural gas	Natural gas
Turbines			
Manufacturer	Westinghouse	Westinghouse	GE
Type	Tandem Compound, Two flow	Tandem Compound, Two flow	Tandem Compound, Two flow
Inlet Steam Conditions, PSIG/SH/RH	1250/950	1450/1000/1000	1450/1000/1000
Number of Extractions	5	6	5
Last Stage Blade Size	20"	20"	23"
Generators			
Manufacturer	Westinghouse	Westinghouse	GE
Stator Cooling	Hydrogen	Hydrogen	Hydrogen
Rotor Cooling	Hydrogen	Hydrogen	Hydrogen
MVA	81.2	86.3	123
Power Factor	0.85	0.85	0.85

Overview

Hayden Station is a coal-fired power plant located four miles east of Hayden, Colorado, along Highway 40 in Routt County, Colorado.

The station consists of two units with a total of 446 net megawatts. Unit 1 is 184 net megawatts and Unit 2 is 262 net megawatts.

Coal is supplied to the station by Peabody Coal Company's Seneca Mine, located six miles from the plant. Heat content of the fuel is approximately 10,600 BTUs per pound with a sulfur content of approximately 0.4%.

Environmental Control Equipment:

- Both units have new bag houses and scrubbers using lime spray dryer technology
- Low NOx burners were installed on Unit 1 in 1998 and on Unit 2 in 1999.
- Closed-cycle, zero discharge water cooling system
- Evaporation and holding ponds to eliminate waste water discharges into the Yampa River
- Coal and ash handling facilities are designed to control fugitive dust and runoff.

Unit	Net Capability (MW)	Primary Fuel	Start-up Fuel	Current duty	Commercial Date
1	184	Coal	Nat Gas/ Diesel	Base loaded	1965
2	262	Coal	#2 Diesel	Base loaded	1976

Ownership

Hayden Station Unit 1

Public Service Co. of CO	75.5%
PacifiCorp	24.5%

Hayden Station Unit 2

Salt River Project	50.0%
Public Service Co. of CO	37.4%
PacifiCorp	12.6%

The plant is operated by Public Service Company of Colorado an operating unit of Xcel Energy.

Transmission

Hayden Station is connected to the WAPA substation by a 230KV transmission line.

Workforce

	1993	1994	1995	1996	1997	1998	1999
Mgt. & Exempt				28	27	28	27
Union				98	90	85	78
Total	153	150	133	136	117	113	105

Water Supply

Water supply is from the Yampa River and is sufficient to meet 100% of plant requirements.

Station Operation (Hayden Total)	**Unit 1**	**Unit 2**
General Data		
Winter Dependable Max. Net Capability, MW	184	262
Summer Dependable Max. Net Capability, MW	184	260
Minimum Net Load, MW	71	93
AGC Response Time MW/min	N/A	N/A
Start up time, Hot, Cold, Hours	3/11	3/15

Major Plant Equipment	Unit 1	Unit 2
Steam Generator		
Manufacturer	B&W	CE
Type	Front fired, single drum	Single tangential furnace Natural circulation
Nameplate steam flow, lbs./hr	1,289,627	1,753,150
Primary Fuel	Coal	Coal
Fuel type	Sub-bituminous	Sub-bituminous
Turbines		
Manufacturer	Westinghouse	Westinghouse
Type	Tandem compound, single Reheat, condensing	Tandem compound, single Reheat, condensing
Inlet Steam Conditions PSIG/SH/RH	1815/1000/1000	1815/1000/1000
Number of extractions	6	6
Last stage blade size	26"	28½"
Generators		
Manufacturer	Westinghouse	Westinghouse
Stator cooling	Hydrogen	Hydrogen
Rotor cooling	Hydrogen	Hydrogen
MVA	202	306
Power Factor	.9	.9
Baghouses		
Manufacturer	Utility Engineering	
Scrubbers		
Manufacturer	B&W	B&W

Overview

The Hermiston generating project is a two unit natural gas fired cogeneration facility located near the Columbia river in northeast Oregon. The site is adjacent to the Lamb-Weston potato processing facility in an industrial area 3 miles southwest of Hermiston, Oregon. This location is near the Pacific Gas Transmission (PGT) natural gas pipeline serving the northwest, and the major BPA transmission terminal at McNary Dam.

The plant consists of two identical, combined cycle generating units. Each unit is comprised of a General Electric Frame 7FA combustion turbine generator, heat recovery steam generator and General Electric steam turbine generator. Station capability ranges from 440 MW at 100°F to 500 MW at 0°F. The average capability is 474 MW.

The plant consumes 85,000 decatherms per day when operating at full load with a net heat rate of 7100 Btu/KWh. Fuel from western Canada is delivered to the plant from the PGT line by the local gas distribution company, Cascade Natural Gas, which has constructed a pipeline connecting the plant to the PG&E GT pipeline.

Water for cooling tower makeup and other plant processes is purchased from the Port of Umatilla. Waste water is used for irrigation.

Unit	Net Capability (MW)	Primary Fuel	Start-up Fuel	Current Duty	Commercial Date
1	235	Natural Gas	Natural Gas	Base Load	1 July 1996
2	235	Natural Gas	Natural Gas	Base Load	1 July 1996

Ownership and Operation

The plant was built and is being operated by affiliates of U. S. Generating Company (USGen). Hermiston Generating Company (HGC, a USGen affiliate) owns 50% of the plant. PacifiCorp owns the other 50% and purchases the entire output of the HGC portion under the terms of a 20-year power purchase agreement.

Transmission

The Hermiston Plant is connected to the Bonneville Power Administration McNary Substation by 12 miles of 230 kV transmission line owned by Umatilla Electric Cooperative. PacifiCorp contracts with BPA for wheeling energy from McNary.

Workforce

	1996	1997	1998	1999
Mgt. & Exempt	6	7	7	7
Hourly	20	20	19	19
Total	26	27	26	26

Fuel Supply

Fuel supply for the plant is guaranteed through 20-year contracts with four suppliers. These contracts have yearly set price escalations for the first 15 years of their terms and include 80 percent minimum take provisions.

HGC currently has responsibility for fuel management and administration of fuel delivery activities. PacifiCorp will take over this responsibility early in the year 2001.

Water Supply

Water for cooling tower makeup and other plant processes is purchased from the Port of Umatilla. Potable water is supplied from the neighboring Lamb-Weston potato processing facility. Demineralized water is produced by leased, trailer-mounted deionizer trains.

Export Steam

Extraction steam (maximum of 50,000 pounds per hour) is exported to Lamb-Weston for potato processing. The plant is required to deliver process steam 60% of the time that one or more generating units are in service.

Station Operation	Unit 1	Unit 2	Plant
General Data			
Winter Dependable Max. Net Capability, MW	245	245	490
Summer Dependable Max. Net Capability, MW	230	230	460
Minimum Net Load, MW	140	140	280

Major Plant Equipment	Unit 1	Unit 2
Combustion Turbines		
Manufacturer	GE	GE
Type	Frame 7FA dry low NO_x	Frame 7FA dry low NO_x
Compressor Stages	18	18
Firing Temperature	2400°F	2400°F
Exhaust Temperature	1200°F	1200°F
Combustion Turbine Generators		
Manufacturer	GE	GE
Stator Cooling	Hydrogen	Hydrogen
Rotor Cooling	Hydrogen	Hydrogen
MVA	204.5	204.5
Heat Recovery Steam Generators		
Manufacturer	Vogt	Vogt
Type	Unfired, triple pressure, reheat, natural circulation	Unfired, triple pressure, reheat, natural circulation
Steam Turbines		
Manufacturer	GE	GE
Type	Single flow, reheat, condensing	Single flow, reheat, condensing
Inlet Steam Conditions, PSIG/SH/RH	1371/1000/1000	1371/1000/1000
Steam Turbine Generators		
Manufacturer	GE	GE
Stator Cooling	Air	Air
Rotor Cooling	Air	Air
MVA	106	106
Power Factor	0.90	0.90

Overview

Hunter Plant is a three unit coal-fired power plant located in Emery County, Utah. The facility is located on State Highway 10 approximately 3 miles south of Castledale, Utah. The site consists of about 1000 acres at an elevation of 5644 feet above sea level. The nearest railroad access is the Utah Railway Company that is 20 miles from the plant by paved road.

Units 1 and 2 are identical units. The steam generators are tangentially fired, controlled circulation boilers supplied by Combustion Engineering. The units are designed to burn sub-bituminous coal from the local area. The Westinghouse steam turbines are tandem compound, two casing, two flow condensing, single reheat turbines. Steam conditions are 2400 PSIG, 1000 °F superheat, and 1000 °F reheat. The Westinghouse generators have hydrogen cooled stators and rotors. Both units are designed to operate continuously at 105% of design throttle pressure. The units are equipped with electrostatic precipitators to control particulate emissions.

Unit 3 is identical in layout to Unit 1 and 2 except the boiler and turbines are from different manufacturers. The steam generator is a front and rear wall fired Babcock and Wilcox unit. The General Electric steam turbine is tandem compound, two casing, two flow condensing, single reheat turbines. Steam conditions are 2400 PSIG, 1000 °F superheat, and 1000 °F reheat. The General Electric generator has a water-cooled stator and hydrogen cooled rotor and is designed to operate continuously at 105% of design throttle pressure. Unit 3 is equipped with a bag house to control particulate emissions.

All three units are equipped with wet lime scrubbers to control SO_2 emissions.

Coal is supplied to the plant by truck from the Trail Mountain Mine. A coal washing facility is located adjacent to the plant site. The coal wash facility is designed to wash a portion of the coal delivered to the plant as needed. Fuel Oil for start up is trucked to the plant site. Most of the bottom ash and fly ash is landfilled on the plant site.

Water for cooling tower make-up and plant processes is conveyed to the plant by pipeline from Cotton Wood Creek. Sufficient water for plant use is released into the Cottonwood Creek from Joe's Valley reservoir. Potable water is piped from the city of Castledale.

Hunter Plant is a zero discharge plant. The balance of the water is evaporated from a pond or used for irrigation of hay crops. Plant sewage is treated and discharged to the evaporation pond.

Unit	Net Capability (MW)	Primary Fuel	Start-up Fuel	Current Duty	Commercial Date
1	415	Coal	No. 2 diesel	Base load	1 June 1978
2	430	Coal	No. 2 diesel	Base load	4 June 1980
3	460	Coal	No. 2 diesel	Base Load	1 June 1983

Ownership

Hunter Plant Unit 1 is jointly owned by PacifiCorp and Provo City with undivided interest of 93.75% and 6.25% respectively. Hunter Plant Unit 2 is owned by PacifiCorp, Deseret Generation & Transmission Cooperative, and Utah Associated Municipal Power Systems with undivided interests of 60.31%, 25.108%, 14.582%, respectively. Fuel Expense in the production of energy at Hunter Units 1 and 2 is shared on an energy usage basis while all other production expenses are shared on an ownership basis. Hunter Unit 3 is wholly owned by PacifiCorp.

Transmission

Emery (Hunter Plant) Substation is connected to 345 kV transmission lines to Camp Williams substation, Huntington substation, Sigurd Substation.

Workforce

	1992	1993	1994	1995	1996	1997	1998	1999
Mgt. & Exempt	59	58	57	57	48	46	47	37
Union	285	285	283	261	226	220	215	206
Total	346	345	342	328	282	282	257	246

Fuel Procurement

Coal is transported from the Trail Mountain Mine - Cottonwood Portal to the plant by truck. The Trail Mountain mine is owned by PacifiCorp and operated by the PacifiCorp subsidiary, Energy West Mining.

Water Supply

Water for plant operation is extracted from the Cottonwood Creek and is sufficient to meet 100% of plant requirements.

Station Operation	Unit 1	Unit 2	Unit 3
General Data			
Winter Dependable Max. Net Capability, MW	415	430	460
Summer Dependable Max. Net Capability, MW	415	430	460
Minimum Net Load, MW	200	200	200
AGC Response Time, Normal/Emergency, MW/min	4.5/8.5	4.5/8.5	5.5/8.5
Start up time, Hot/Cold, Hours	2/5	2/5	2/5

Major Plant Equipment	Unit 1	Unit 2	Unit 3
Boilers			
Manufacturer	CE	CE	B&W
Type	Single tangential furnace	Single tangential furnace	Front – Rear wall fired
Nameplate Steam Flow, lbs./hour	3,318,000	3,318,000	3,344,000
Primary Fuel	Coal	Coal	Coal
Fuel Type	Sub-bituminous	Sub-bituminous	Sub-bituminous
Turbines			
Manufacturer	Westinghouse	Westinghouse	GE
Type	Tandem Compound	Tandem Compound	Tandem Compound
Inlet Steam Conditions, PSIG/SH/RH	2400/1000/1000	2400/1000/1000	2400/1000/1000
Number of Extractions	7	7	7
Last Stage Blade Size	31"	31"	33.5"
Generators			
Manufacturer	Westinghouse	Westinghouse	GE
Stator Cooling	Hydrogen	Hydrogen	Water
Rotor Cooling	Hydrogen	Hydrogen	Hydrogen
MVA	496	496	496
Power Factor	0.90	0.90	0.90
Electrostatic Precipitator / Baghouses			
Manufacturer	Buell (GE)	Buell (GE)	Carborundum
Scrubbers			
Manufacturer	Chemico (GE)	Chemico (GE)	Chemico (GE)

Overview

Huntington Plant is a two unit coal-fired power plant located in Emery county, Utah. The facility is located on State Highway 31 approximately 10 miles west of Huntington City. The site consists of about 1000 acres at an elevation of 6500 feet above sea level. The nearest railroad access is the Utah Railway Company which is 18 miles from the plant by paved road.

The plant consists of two identical units with the exception that only Unit 1 has a SO_2 scrubber. The steam generators are tangentially fired, controlled circulation boilers supplied by Combustion Engineering. The units are designed to burn sub-bituminous coal from the local area. The General Electric steam turbines are tandem compound, two casing, two flow condensing, single reheat turbines. Steam conditions are 2400 PSIG, 1000 °F superheat, and 1000 °F reheat. The General Electric generators have water-cooled stator and hydrogen cooled rotor. Both units are designed to operate continuously at 105% of design throttle pressure.

Coal is supplied to the plant by conveyor from the Deer Creek Mine. Fuel Oil for start up is trucked to the plant site. Most of the bottom ash and fly ash is landfilled on the plant site.

Water for cooling tower make-up and plant processes is drawn from the Huntington River. Sufficient water for plant use is released into the Huntington River from the plant owned Electric Lake reservoir located 23 miles north of the plant site in Huntington Canyon. The reservoir is maintained and operated by plant personnel. Potable water is piped from a company owned well. The plant chlorinates its potable water supply.

Huntington Plant is a zero discharge plant. A portion of the cooling tower blow down is processed and used as makeup to the plant demineralizer. The balance of the water is evaporated from a pond or used for irrigation of hay crops. Plant sewage is treated and discharged to the evaporation pond.

Unit	Net Capability (MW)	Primary Fuel	Start-up Fuel	Current Duty	Commercial Date
1	440	Coal	No. 2 diesel	Base load	1 June 1977
2	455	Coal	No. 2 diesel	Base Load	17 July 1974

Ownership

PacifiCorp owns 100% of Huntington Plant including land, structures and machinery.
PacifiCorp owns 100% of Electric Lake Reservoir including land, structures and machinery.
PacifiCorp owns 52,830.87 shares of water in Huntington-Cleveland Canal Company

Transmission

Huntington Plant Substation is connected by 345 kV transmission lines to Camp Williams Substation, Spanish Fork Substation, Pinto Substation, and Hunter/Emery Substation. Huntington Plant Substation also supplies a local 138 KVA line to the McFadden Substation near Huntington City and a 25 KVA line to coal mines located in Huntington Canyon.

Workforce

	1992	1993	1994	1995	1996	1997	1998	1999
Mgt. & Exempt	47	47	47	47	33	33	29	29
Union	183	181	181	171	148	147	147	147
Total	230	228	228	218	181	180	176	176

Fuel Procurement

Coal is transported from the Deer Creek Mine to the plant by a 2.4 mile long conveyor. The Deer Creek Coal mine is owned by PacifiCorp and is operated by the PacifiCorp subsidiary, Energy West Mining.

Water Supply

Water for plant operation is extracted from the Huntington River and is sufficient to meet 100% of plant requirements.

Station Operation	Unit 1	Unit 2
General Data		
Winter Dependable Max. Net Capability, MW	440	455
Summer Dependable Max. Net Capability, MW	440	455
Minimum Net Load, MW	200	200
AGC Response Time, Normal/Emergency, MW/min	3.5/8.5	3.5/8.5
Start up time, Hot/Cold, Hours	2/5	2/5

Major Plant Equipment	Unit 1	Unit 2
Boilers		
Manufacturer	CE	CE
Type	Single tangential furnace	Single tangential furnace
Nameplate Steam Flow, lbs./hour	3,300,000	3,300,000
Primary Fuel	Coal	Coal
Fuel Type	Sub-bituminous	Sub-bituminous
Turbines		
Manufacturer	GE	GE
Type	Tandem Compound	Tandem Compound
Inlet Steam Conditions, PSIG/SH/RH	2400/1000/1000	2400/1000/1000
Number of Extractions	7	7
Last Stage Blade Size	33.5"	33.5"
Generators		
Manufacturer	GE	GE
Stator Cooling	Water	Water
Rotor Cooling	Hydrogen	Hydrogen
MVA	496	496
Power Factor	0.90	0.90
Electrostatic Precipitators		
Manufacturer	Buell (GE)	Buell (GE)
Scrubbers		
Manufacturer	Chemico (GE)	Chemico (GE)

Overview

The Jim Bridger Plant is a four unit coal-fired power plant located in Sweetwater County, Wyoming. The facility is located on Sweetwater County Road 4-15 approximately 8 miles north of Point of Rocks, approximately 24 miles east of the city of Rock Springs. The site consists of about 1000 acres at an elevation of 6500 feet above sea level. Rail access to the plant is from Union Pacific rail lines.

The plant consists of four almost identical units with the exception that Unit 4 has a SO_2 scrubber of a different design from Units 1-3, and vane-axial induced fans, rather than the centrifugal fans on Units 1-3. The steam generators are tangentially fired, controlled circulation boilers supplied by Combustion Engineering. The units are designed to burn sub-bituminous coal from the local area. The General Electric steam turbines are tandem compound, two casing, four flow condensing, single reheat turbines. Steam conditions are 2400 PSIG, 1000 °F superheat, and 1000 °F reheat. The General Electric generators have water-cooled stators and hydrogen cooled rotors. All units are designed to operate continuously at 105% of design throttle pressure.

Coal is supplied to the plant by overland conveyor from the Bridger mine. Fuel Oil for start up is trucked to the plant site. Fifty-five percent of the fly ash is sold as a pozzolan to the cement industry. The remaining bottom ash and fly ash is land filled on the plant site.

Water for cooling tower make-up and plant processes is drawn from the Green River. Sufficient water for plant use is pumped into the plant surge pond from the pumping station at Green River, located 42 miles west of the plant site. The pumping station is maintained and operated by plant personnel. Potable water is produced at the plant from surge pond water. The plant operates a potable water treatment plant.

The Jim Bridger Plant is a zero discharge plant. A portion of the cooling tower blow down is processed and used as makeup to the plant scrubber. The balance of the water is evaporated from a pond or used for irrigation of hay crops. Plant sewage is treated and discharged to the evaporation pond.

Unit	Net Capability (MW)	Primary Fuel	Start-up Fuel	Current Duty	Commercial Date
1	530	Coal	No. 2 diesel	Base load	6 Aug 1974
2	530	Coal	No. 2 diesel	Base load	10 Jul 1975
3	530	Coal	No. 2 diesel	Base load	10 Jun 1976
4	520	Coal	No. 2 diesel	Base load	31 Aug 1979

Ownership

PacifiCorp owns two-thirds of Bridger Plant including land, structures and machinery. Idaho Power Company owns the remaining one-third.

Transmission

The Bridger Plant Substation is connected by 3-345 kV transmission lines to the Borah, Goshen, and Kinport substations in southeast Idaho. The Jim Bridger Plant Substation also supplies a 230kV line that feeds into the Wyoming system.

Workforce

	1992	1993	1994	1995	1996	1997	1998	1999
Mgt. & Exempt	101	97	91	85	78	76	75	65
Union	396	395	394	374	324	334	333	318
Total	497	492	485	459	402	410	408	383

Fuel Procurement

Coal is transported from the Bridger Mine to the plant by a 2.4 mile long belt conveyor. The Bridger Coal mine is owned by PacifiCorp and operated by the PacifiCorp subsidiary, Bridger Coal Company. Secondary and supplemental fuel is acquired from Black Butte Coal Company. Approximately 6.5 million tons is received from Bridger Coal, and 2.5 millions ton from Black Butte Coal.

Water Supply

Water for plant operation is extracted from the Green River and is adequate to meet 100% of plant requirements. Water is supplied under the terms of a contract with Wyoming Water Development Commission.

Station Operation	Unit 1	Unit 2	Unit 3	Unit 4
General Data				
Winter Dependable Max. Net Capability, MW	530	530	530	530
Summer Dependable Max. Net Capability, MW	530	530	530	520
Minimum Net Load, MW	200	200	200	200
AGC Response Time, Normal/Emergency, MW/min	N/A	N/A	N/A	N/A
Start up time, Hot/Cold, Hours	5/12	5/12	5/12	5/12

Major Plant Equipment	Units 1-4
Boilers	
Manufacturer	CE
Type	Single tangential furnace
Nameplate Steam Flow, lbs./hour	3,980,000
Primary Fuel	Coal
Fuel Type	Sub-bituminous
Turbines	
Manufacturer	GE
Type	Tandem Compound
Inlet Steam Conditions, PSIG/SH/RH	2400/1000/1000
Number of Extractions	7
Last Stage Blade Size	36"
Generators	
Manufacturer	GE
Stator Cooling	Water
Rotor Cooling	Hydrogen
MVA	608 (U1-3); 590(U4)
Power Factor	0.95
Electrostatic Precipitators	
Manufacturer	ABB - Flakt
Scrubbers	
Manufacturer	B&W (U1-3); UOP(U4)

Overview

PacifiCorp owns and operates Little Mountain co-generation facility located near Ogden, Utah adjacent to the Great Salt Lake. The plant consists of one General Electric Frame 5 gas turbine which powers a GE 16 MW generator, and a GE heat recovery steam generator (HRSG) which captures hot turbine exhaust gases to produce steam for IMC's (formerly Great Salt Lake Minerals) processing operations. The HRSG is rated @ 225,000 LB/HR steam flow, and 85,000 LB/HR steam flow is produced with gas turbine waste heat. Fourteen natural gas fired duct burners produce the remaining steam. As a back-up, the plant has one Zurn Boiler rated @ 150,000 LB/HR. The back-up boiler can be fired with natural gas or with #2 fuel oil during periods of gas curtailment or equipment failure.

The plant was built in 1968 based on an agreement with IMC . Under the agreement, PacifiCorp owns the generating plant and the related substation and distribution system. IMC pays all plant operating and maintenance costs including fuel and labor. The agreement with IMC is scheduled to terminate in 2001. PacifiCorp is currently negotiating a 5-year contract extension.

The plant (Turbine/Generator) is in service only when IMC is processing Potash (typically from October to June each year). During Potash processing their demand is 6-9 MW, unit net peak output is 12-18 MW based on ambient temperatures. Under the terms of the agreement the remainder of the plant's electrical output is sold to PacifiCorp

Unit	Net Capability (MW)	Primary Fuel	Start-up Fuel	Current Duty	Commercial Date
1	12-18	Natural Gas	No. 2 diesel	Base load	15 March 1971

Ownership

PacifiCorp owns 100% of Little Mountain Plant including land, structures and machinery.

Transmission

Little Mountain is connected to the PacifiCorp grid via a 46 kV line.

Workforce

	1992	1993	1994	1995	1996	1997	1998	1999
Mgt. & Exempt	1	1	1	1	1	1	1	1
Union	6	6	6	6	6	5	5	5
Total	7	7	7	7	7	6	6	6

Fuel Procurement

IMC has a contract with Duke Energy to provide natural gas. Transportation is provided by Questar Gas Company. IMC is billed directly for fuel and transportation cost.

Water Supply

The Weber Basin Water Conservancy District provides water for plant operation. IMC is billed directly for water

Station Operation	Unit 1
General Data	
Winter Dependable Max. Net Capability, MW	18
Summer Dependable Max. Net Capability, MW	12.5
Minimum Net Load, MW	2
AGC Response Time, Normal/Emergency, MW/min	2
Start up time, Hot/Cold, Minutes	10

Major Plant Equipment	Unit 1
Boiler	
Manufacturer	GE
Type	Heat Recovery
Nameplate Steam Flow, lbs./hour	225,000
Primary Fuel	Natural Gas
Turbine	
Manufacturer	GE
Type	Frame 5 Combustion Turbine
Model	PG5211
Generator	
Manufacturer	GE
Stator Cooling	Air
Rotor Cooling	Air
MVA	18.8
Power Factor	0.85

Overview

The Naughton Plant is a three unit coal-fired power plant located in Lincoln County, Wyoming. The facility is located on U.S. Highway 189 at a point about 4 miles southwest of Kemmerer. The site consists of approximately 1120 acres at an elevation of 6900 feet above sea level. The nearest railroad access is the Union Pacific that is 2.5 miles from the plant by paved road.

The plant property is adjacent to coal deposits being mined by Pittsburg and Midway Coal Mining. Coal is delivered to the plant on a belt conveyor. Coal delivered to Unit 1 and 2 must meet a target of 1.15 or less pounds SO_2/MMBTU. Coal delivery to Unit three has no SO_2 limits.

The plant consists of three units. Unit 1 has a nominal capability of 160 MW and has a Combustion Engineering natural circulating boiler and a General Electric turbine installation with enclosed type construction for all principal components except the boiler and draft fans. The unit has a closed loop cooling system with a mechanical draft cooling tower. Steam conditions are 1800 psig and 1000 F at the throttle with reheat to 1000 F. The generator has a hydrogen cooled rotor and stator. A Lodge Cottrell electrostatic precipitator was installed on this unit in 1975.

Unit 2 has a nominal capability of 210 MW and has a Combustion Engineering natural circulating boiler and a General Electric turbine installation with enclosed type construction for all principal components except the boiler and draft fans. The unit has a closed loop cooling system with a mechanical draft cooling tower. Steam conditions are 1800 psig and 1000 F at the throttle with reheat to 1000 F. The generator has a water-cooled stator and hydrogen cooled rotor. A Lodge Cottrell electrostatic precipitator was installed on this unit in 1976.

Unit 3 has a nominal capability of 330 MW and has a Combustion Engineering forced circulating boiler and a Westinghouse turbine installation with enclosed type construction for all principal components except for the east side of the boiler and draft fans. The unit has a closed loop cooling system with a mechanical draft cooling tower. A UOP wet scrubber was installed in 1981. The unit has a Buell electrostatic precipitator. Steam conditions are 2400 psig and 1000 F at the throttle with reheat to 1000 F.

The Viva Naughton Dam is located on the Ham Fork River 15 miles upstream from the plant. The dam is an earthen embankment approximately 70 feet high and 3200 feet long. The drainage area above the dam contains 235 square miles and collects about 100,000 acre feet of water annually. The dam impounds 45,370 acre feet of water at the normal pool elevation of 7242 feet. Two hydro plants were installed at the toe of the dam in 1986. They are induction type generators rated at 567kw and 173kw. Both hydro plants are fully automatic. Water for the plant is released from the reservoir at a sufficient rate for the plant. A diversion dam and pump station is located on the river approximately eight miles north of the station. Water is conveyed to the plant site by pipeline. The reservoir, hydro-electric generators, and pump

stations are maintained and operated by plant personnel. The plant operates a potable water treatment plant.

Unit	Net Capability (MW)	Primary Fuel	Start-up Fuel	Current Duty	Commercial Date
1	160	Coal	Natural Gas	Base load	May 1963
2	210	Coal	Natural Gas	Base Load	October 1968
3	330	Coal	Natural Gas	Base Load / Spin Reserve	October 1971

Ownership

PacifiCorp owns 100% of Naughton Plant including land, structures and machinery. PacifiCorp owns 100% of Viva Naughton Lake Reservoir including land, structures and machinery.

Transmission

Naughton Plant Substation is connected to four main transmission lines. They are Cartier Creek 138 kV, Treasureton 230 kV, Ben Loman 230 kV, Lincoln 69 kV and Rock Springs 230kV.

Workforce

	1992	1993	1994	1995	1996	1997	1998	1999
Mgt. & Exempt	51	51	51	50	45	43	40	31
Union	160	160	160	159	150	144	139	138
Total	211	211	211	209	195	187	179	169

Fuel Procurement

Pittsburg and Midway Coal Mining delivers coal to the plant from its mine on a 4200 foot 54 inch belt conveyor which transports coal from the mine to the plant. The coal conveyor can be operated at 1100 tons per hour.

Water Supply

Water for plant operation is extracted from the Ham Fork River. This source provides 100% of plant requirements.

Station Operation	Unit 1	Unit 2	Unit 3
General Data			
Winter Dependable Max. Net Capability, MW	160	210	330
Summer Dependable Max. Net Capability, MW	160	210	330
Minimum Net Load, MW	80	105	200
AGC Response Time, Normal/Emergency, MW/min	3.5/5.5	3.5/5.5	3.5/6.0
Start up time, Hot/Cold, Hours	3/12	3/12	3/20

Major Plant Equipment	Unit 1	Unit 2	Unit 3
Boilers			
Manufacturer	CE	CE	CE
Type	Single tangential furnace – Natural Circulation	Single tangential furnace – Natural Circulation	Single tangential furnace – Forced Circulation
Nameplate Steam Flow, lbs./hour	1,2000,000	1,520,000	3,300,000
Primary Fuel	Coal	Coal	Coal
Fuel Type	Sub-bituminous	Sub-bituminous	Sub-bituminous
Turbines			
Manufacturer	GE	GE	Westinghouse
Type	Tandem Compound	Tandem Compound	Tandem Compound
Inlet Steam Conditions, PSIG/SH/RH	1800/1000/1000	1800/1000/100	2400/1000/1000
Number of Extractions	7	7	6
Last Stage Blade Size	23"	26"	28.5"
Generators			
Manufacturer	GE	GE	Westinghouse
Stator Cooling	Hydrogen	Water	Hydrogen
Rotor Cooling	Hydrogen	Hydrogen	Hydrogen
MVA			
Power Factor	0.85	.85	0.85
Electrostatic Precipitators			
Manufacturer	Lodge Cottrell	Lodge Cottrell	Buell (GE)
Scrubber			
Manufacturer	None	None	UOP

Overview

Wyodak Plant is a coal-fired power plant located in Campbell County, Wyoming. The facility is located along Interstate 90 approximately 5 miles east of Gillette. The site consists of about 36.08 acres at an elevation of 4400 feet above sea level. A railroad siding connects the plant site to the Burlington Northern railroad..

The plant consists of one 335 net MW unit with a dry SO_2 scrubber. The steam generator is a front and rear wall fired, natural circulation boiler supplied by Babcock and Wilcox. The unit is designed to burn sub-bituminous coal from the Powder River Basin. The General Electric steam turbine is a tandem compound, two casing, two flow condensing, single reheat turbine. Steam conditions are 1800 PSIG, 1000 °F superheat, and 1000 °F reheat. The General Electric generator has a water-cooled stator and hydrogen cooled rotor. The unit is designed to operate continuously at 105% of design throttle pressure.

Coal is supplied to the plant by conveyor from the Wyodak mine located adjacent to the plant. Fuel Oil for start up is trucked to the plant site. Most of the bottom ash, fly ash, and scrubber waste is land-filled in the Wyodak mine.

The plant is equipped with an air cooled condenser which significantly reduces the plant water makeup requirements. Discharge water from the Gillette sewage treatment plant is used for make-up to the demineralizer and plant processes. The plant site also has water wells for back up water supply. Potable water is supplied from the Wyodak reservoir that is supplied by Fort Union wells.

Wyodak Plant is essentially a zero discharge plant. All plant waste streams discharge to the bottom ash pond that serves as an evaporation pond. An NPDES permit is maintained to discharge to Donkey Creek in the event of high precipitation or other upset conditions.

Black Hills Power also operates an 80 MW unit near this site. Black Hills shares the sub-station facilities.

Unit	Net Capability (MW)	Primary Fuel	Start-up Fuel	Current Duty	Commercial Date
1	335	Coal	No. 2 diesel	Base load	10 June 1978

Ownership

PacifiCorp owns 80% of Wyodak Plant including land, structures and machinery. Black Hills Power owns the remaining 20%.

Transmission

Wyodak Plant Substation is connected by 230 kV transmission lines to Buffalo Substation, Hughs Substation, Reno Substation, and Osage Substation.

Workforce

	1993	1994	1995	1996	1997	1998	1999
Mgt. & Exempt	36	36	36	26	25	17	23
Union	92	89	84	79	76	74	60
Total	128	125	120	105	101	91	83

Fuel Procurement

Coal is transported from the Wyodak mine to the plant by an in-pit mine mouth conveyor system. The Wyodak mine is owned by Black Hills Power and operated by Wyodak Resources, a subsidiary of Black Hills Power. No active coal pile is maintained. Coal is delivered to a coal silo that feeds the plant conveyor system.

Water Supply

Discharge water from the Gillette sewage treatment plant is piped five miles to the plant for makeup to the demineralizer and plant processes. The plant has a contract with the City of Gillette for 3250 acre-feet of water per year. The plant also has wells for a back-up water supply. These sources provide 100% of plant requirements.

Station Operation	Unit 1
General Data	
Winter Dependable Max. Net Capability, MW	335
Summer Dependable Max. Net Capability, MW	335
Minimum Net Load, MW	180
AGC Response Time, Normal/Emergency, MW/min	NA
Start up time, Hot/Cold, Hours	2/8

Major Plant Equipment	Unit 1
Boiler	
Manufacturer	B&W
Type	Front/Rear fired, natural circulation
Nameplate Steam Flow, lbs./hour	2,622,000
Primary Fuel	Coal
Fuel Type	Sub-bituminous
Turbine	
Manufacturer	GE
Type	Tandem Compound
Inlet Steam Conditions, PSIG/SH/RH	1800/1000/1000
Number of Extractions	5
Last Stage Blade Size	20"
Generator	
Manufacturer	GE
Stator Cooling	Water
Rotor Cooling	Hydrogen
MVA	403
Power Factor	0.90
Electrostatic Precipitator	
Manufacturer	B&W Rothemuhle
Scrubber	
Manufacturer	Joy Niro

Overview

Like many utilities in the West, PacifiCorp began as a hydroelectric-based company from an energy supply perspective. Consequently, the company's portfolio of 53 hydro plants includes many old and small facilities. The average age of plants in the portfolio is 77 years, which is consistent with the average for most of the larger private utility producers in the country.

The hydro portfolio itself consists of 53 plants, which includes 87 generating units with a total capacity of nearly 1100 megawatts. Ninety-seven percent of installed capacity is regulated by the Federal Energy Regulatory Commission (FERC) through 20 individual licenses. FERC-licensed projects are located in six states and range in size from less than 1 megawatt (American Fork) to over 240 megawatts (Swift No. 1). PacifiCorp is one of the 5 most active private utilities in the licensing process, based on FERC-licenses held.

Workforce

Hydro Resources employs approximately 170 people to operate and maintain PacifiCorp's hydroelectric generating facilities over a six-state region. The operations are divided into three major areas: **Hydro East** encompasses all of the facilities in Utah and Idaho. **Hydro North** covers all of the facilities in Washington, central/northern Oregon and 1 small project in Montana. **Hydro South** covers the hydro facilities in southern Oregon and northern California. Each of the regions is lead by an Area Manager who oversees operations and maintenance activities. Approximately 70% of the employees are represented by IBEW collective bargaining units (locals 125, 659 and 57).

The Managing Director as well as the primary O&M, Licensing and Engineering support groups are located in Portland with some staff located at Salt Lake City, Merwin and Medford, the "hubs" for the three regions. A table of hydro-electric units and plants is included in Section 5.

Hydro East

Hydro East is comprised of the former Utah Power hydroelectric facilities. This region includes 22 small projects with a total installed capacity of about 140 MW. For plant valuation purposes, these plants are divided into two groups, the Bear River system and Small Hydro East. The Bear River hydroelectric projects form the backbone of PacifiCorp's eastern hydroelectric system; both in terms of total energy production and because these plants represent nearly all of the available company-owned, hydro-based, reserve requirement capability for this area. PacifiCorp's System Dispatch has continuous control of generator loading at both Oneida and Cutler to help meet system demands, subject to the constraints imposed by non-generation uses of the river system.

The Bear River projects are part of a multi-use water project that started on the river in the 1890s, and completed in the 1920s and constitutes a coordinated project to divert and store

spring runoff into nearby Bear Lake. Water is released from the lake, back to the river, via the Lifton pumping station, in a controlled manner to meet downstream seasonal irrigation demands. The five Bear River hydroelectric projects (Soda, Grace, Cove, Oneida, Cutler) were placed into service to capture the energy benefits as a combination of natural flow and storage water is conveyed down the Bear River to downstream irrigation projects. In 1984 a sixth, small hydroelectric plant was purchased from the Last Chance irrigation canal along the Bear River.

Hydro South

This region incorporates 20 projects located primarily on the Klamath, North Umpqua and Rogue rivers. The combined capacity of the facilities is about 383 MW (Klamath @ 151 MW, N. Umpqua @ 185 MW, and Rogue @ 47 MW).

Klamath Projects

The Klamath River flows through Klamath County in Oregon, and Siskyou, Humbolt, and Del Norte Counties in California. It drains approximately 13,000 square miles within Oregon and California before entering the Pacific Ocean near Klamath, California. The furthest downstream development owned by PacifiCorp on the Klamath River is Iron Gate Dam. The drainage area at Iron Gate is approximately 5,000 square miles.

The most upstream storage facility is the Upper Klamath Lake, with a drainage area of 3,310 square miles. Discharge from the lake is restricted by a rock reef at its outlet, and regulation of its usable storage of 524,000 acre-feet is provided by Link River Dam. The dam is owned by the United States, and is operated by PacifiCorp under a contract with the U.S. Bureau of Reclamation. Water is diverted by the dam to the Eastside and Westside hydroelectric developments (4MW total) located on Link River.

Discharge from the Link River Dam travels down the 5/8 mile long Link River to Lake Ewauna, which is the beginning of the Klamath River, and which is located at the upstream end of a 20 mile long reach of river controlled by Keno Dam (No generation). Other inflow into the Keno Reservoir consists of runoff from 103 square miles, tributaries to the Klamath River between Upper Klamath Lake and Keno Dam, plus inflow from the Lost River Diversion Canal and the Ady Canal, both controlled by the U.S. Bureau of Reclamation.

At Keno Dam, the river leaves the broad basin and enters a narrow, rugged canyon for the remaining 233 miles to the Pacific Ocean. The river flows a distance of about five miles through an undeveloped reach downstream of Keno Dam, and enters the upstream end of J.C. Boyle Reservoir. The reservoir is about three miles long, and is controlled by J.C. Boyle Dam. Water is discharged through the dam spillway or diverted through the J.C. Boyle Powerhouse (84 MW), located approximately 3 miles downstream. The river is undeveloped for approximately 11 miles from the J.C Boyle Powerhouse to the Oregon-California state line, and an additional 6 miles to the upstream end of Copco No. 1

Reservoir. Discharge from Copco No. 1 Dam and Powerhouse (20 MW) is diverted through Copco No. 2 Powerhouse (27MW) and into Iron Gate Reservoir. Downstream of Iron Gate Dam and Powerhouse (18 MW), the Klamath River is a free-flowing stream for 190 miles to the Pacific Ocean.

North Umpqua Projects

The North Umpqua River Basin is comprised of five sub-basins that drain 438 square miles above Soda Springs Dam. The North Umpqua River Project utilizes the runoff from three major streams within the basin: the North Umpqua River, the Clearwater River, and Fish Creek.

The most upstream storage facility is Lemolo Lake, which has a drainage area of 170 square miles, including the Diamond Lake sub-basin. Regulation of the lake's normal maximum contents of 13,560 acre-feet is provided by Lemolo No. 1 Dam, which controls the flow to the powerhouse located about three miles downstream.

Discharge from Lemolo No. 1 Powerhouse enters the forebay created by Lemolo No. 2 Dam, which is a low, gated diversion structure. The diverted water flows approximately 13 miles through a series of canals and flumes to a forebay and powerhouse. After passing through the Lemolo No. 2 Powerhouse, the flow re-enters the North Umpqua River at the upper end of Toketee Lake, which is the second significant impoundment on the river.

Toketee Dam creates a reservoir with a storage capacity of about 1100 acre-feet. The structure diverts the flow of the North Umpqua River and the Clearwater River, which enters the south side of the reservoir near the dam, into a wood stave pipeline, a tunnel, and a steel penstock leading to the Toketee Powerhouse about 2 miles downstream. The discharge from Toketee Powerhouse and from the adjacent Fish Creek Powerhouse enters the North Umpqua River again. Approximately 1000 feet downstream of the Toketee and Fish Creek Powerhouses, the flow is diverted into another series of flumes and canals by the Slide Creek Diversion Dam. This dam is a low, gated concrete structure which forms a small pond with no significant storage. The water passes through Slide Creek Powerhouse located 1.6 miles downstream and then re-enters the North Umpqua River.

The third impoundment is created by Soda Springs Dam, located 1.2 miles downstream of Slide Creek Powerhouse. The dam impounds 710 acre-feet of water at the normal maximum water level and diverts water into a 2300-foot long penstock terminating at Soda Springs Powerhouse, which is the furthest downstream facility on the North Umpqua Project. Below the powerhouse, the North Umpqua River is a free-flowing stream until it reaches the low, timber crib Winchester Dam, about five miles upstream of its confluence with the South Umpqua River. Below the confluence, the Umpqua River flows freely for 112 miles to the ocean.

Rogue Projects

Rogue River Hydro consists of five plants; Prospect 1, Prospect 2, Prospect 3, Prospect 4, and Eagle Point. The diversion development for Prospect 1, 2 & 4 was constructed in 1932 and has the following components:

1) A concrete gravity overflow dam on the Middle Fork of the Rogue River diverts water to the North Fork of the Rogue River through a conduit system 31,581 feet in length, consisting of concrete-lined canal and wood stave flumes with a capacity at the point of diversion of 150 cfs.

2) A combined wood stave and concrete pipe siphon 893 feet in length with a capacity of 150 cfs, conveys the water from Prospect 3 powerhouse to the main diversion canal at a point 4662 feet downstream from the Middle Fork diversion dam.

3) An earthfill diversion dam diverts 75 cfs from Red Blanket Creek a distance of 4426 feet through an unlined canal to the main diversion canal at a point midway between the Prospect 3 siphon and the North Fork of the Rogue River.

Prospect 2 operates under a head of 607 feet and has 2 units, each operating at 16 MW, with a capacity factor of 86%. The conduit system, which is also serves Prospect 1 and Prospect 4 developments, is designed for 1080 cfs, and consists of a concrete lined canal, forebay, and twin wood stave and steel penstocks approximately 11,000 feet in length, with an elevated steel surge tank. Prospect 1 is located near Prospect 2, and has a rating of 3.8 MW. Prospect 4 is located at the base of the surge tank and is connected to the surge tank by a short steel pipe. It operates under a normal head of 112 feet and contains a single unit rated at 1 MW, operating with a capacity factor of 71%.

Prospect 3 is located in the upper reaches of the Rogue River water shed and was placed in service on April 22, 1932. Water is diverted by a concrete gravity overflow type dam from the South Fork of the Rogue River. The conduit system, designed for 150 cfs, is 15876 feet in length and includes concrete lined canal, wood stave pipe, a tunnel and steel penstock. The plant has a normal head of 722 feet, and consists of a single unit rated at 7.2 MW, operating with a capacity factor of 74%.

Eagle Point is located approximately 14 miles NE of Medford and was placed in operation in 1957. Water for the Eagle Point Irrigation District is diverted from the South Fork of Big Butte Creek, a tributary of the Rogue River, near the town of Butte Falls, approximately 10 miles east of the power plant. The Irrigation District conduit is approximately 17.45 miles in length, and includes unlined, gunite-lined and concrete lined canals, as well as a siphon, flumes, drops and stilling basins. The District constructed this system about the time of World War I. To utilize the waters of the Eagle Point Irrigation District, Pacificorp constructed an extension of the canal system with a length of 1948 feet and a forebay. A single steel penstock 1934 feet in length and a capacity of 100 cfs, carries the water to the powerhouse. The single 2.8 MW rated unit operates under a head

of 434 feet. When the power plant is not operating, water is by-passed for the needs of the Irrigation District.

Hydro North

The Lewis River alone accounts for about one half of the Company's hydroelectric generation (PacifiCorp owns 510 MW of capacity and operates and maintains another 70 MW project). Including the several small projects located in Washington, Oregon and Montana, this region can generate up to 545 MW (PacifiCorp's share).

The Lewis River is 93 miles long and flows in a general southwesterly direction from it's primary source on the northwesterly slopes of Mt. Adams to the Columbia River 19 miles below Vancouver, Washington. Most of the 1050 square mile drainage basin is covered with a dense stand of coniferous trees, although approximately 30 square miles of the Swift drainage area was denuded by the May 18, 1980 eruption of Mt. St. Helens. Approximately 250 square miles of drainage area is located on Mount St. Helens.

Three of the four existing projects in the basin are storage projects, and are owned by PacifiCorp. The fourth project, Swift No. 2, is owned by the Cowlitz County Public Utility District. The Swift No. 2 project is operated by PacifiCorp as part of the entire Lewis River Projects. Each of PacifiCorp's storage projects provides some degree of regulation of the Lewis River flow. The four projects completely develop the stream potential from elevation 50 feet mean sea level at Merwin tailrace to elevation 1000 feet MSL at Swift Reservoir's normal maximum pool. The total storage at PacifiCorp's three projects is 1,580,000 acre-feet which helps to provide significant flood protection for the basin.

PacifiCorp Plant Energy and Revenue Requirement

GWhs by Plant

PacifiCorp $2.00/mmBTU Gas MCP Case with Early Environmental Plant Closures Included

	a	b	c	d	e	f	g	h	i	j	k	l	m	n
1	year	Blundell	Carbon	Cholla	Colstrip	Craig	Dave Johnston	Gadsby	Hayden	Hermiston	Hunter	Huntington	James River	Jim Bridger
2														
3	2003	170	1,318	2,446	1,022	1,341	5,671	422	549	1,722	8,242	6,507	361	10,403
4	2004	170	1,322	2,454	1,025	1,344	5,687	425	551	1,755	8,266	6,526	361	10,436
5	2005	170	1,318	2,449	1,022	1,341	5,671	430	549	1,663	8,242	6,507	361	10,402
6	2006	170	1,318	2,449	1,022	1,341	5,671	425	549	1,710	8,242	6,507	361	10,409
7	2007	170	1,318	2,469	1,022	1,341	5,671	429	549	1,698	8,242	6,507	361	10,408
8	2008	170	1,322	2,462	1,025	1,344	5,687	-	551	1,710	8,266	6,526	361	10,440
9	2009	170	1,318	-	1,022	1,340	-	-	549	1,704	8,242	6,507	361	10,409
10	2010	170	1,318	-	1,022	1,340	-	-	549	1,618	8,242	6,507	361	10,409
11	2011	170	-	-	1,022	1,340	-	-	549	1,360	8,242	6,507	361	10,409
12	2012	170	-	-	1,025	1,344	-	-	551	1,694	8,266	6,526	361	10,440
13	2013	170	-	-	1,022	1,340	-	-	549	1,685	8,242	6,507	361	10,409
14	2014	170	-	-	1,022	1,340	-	-	549	1,684	8,242	6,507	361	10,409
15	2015	170	-	-	1,022	1,340	-	-	549	1,692	8,242	6,507	361	10,409
16	2016	170	-	-	1,025	1,344	-	-	551	1,698	8,266	6,526	-	10,440
17	2017	170	-	-	1,022	1,340	-	-	549	1,697	8,242	6,507	-	10,409
18	2018	170	-	-	1,022	1,341	-	-	549	1,700	8,233	6,507	-	10,409
19	2019	170	-	-	1,022	1,341	-	-	549	1,700	8,233	6,507	-	10,409
20	2020	170	-	-	1,025	1,344	-	-	551	1,715	8,258	-	-	10,440
21	2021	170	-	-	1,009	1,341	-	-	549	1,708	8,219	-	-	-
22	2022	-	-	-	970	1,341	-	-	549	1,690	8,101	-	-	-
23	2023	-	-	-	970	1,341	-	-	549	1,690	8,101	-	-	-
24	2024	-	-	-	973	1,344	-	-	551	1,695	8,126	-	-	-
25	2025	-	-	-	970	-	-	-	-	1,690	8,101	-	-	-
26	2026	-	-	-	967	-	-	-	-	1,690	-	-	-	-
27	2027	-	-	-	967	-	-	-	-	1,690	-	-	-	-
28	2028	-	-	-	970	-	-	-	-	1,695	-	-	-	-
29	2029	-	-	-	967	-	-	-	-	1,690	-	-	-	-
30	2030	-	-	-	-	-	-	-	-	1,668	-	-	-	-
31	2031	-	-	-	-	-	-	-	-	1,668	-	-	-	-
32	2032	-	-	-	-	-	-	-	-	-	-	-	-	-
33														
34	Total	3,233	10,553	14,731	27,181	29,510	34,058	2,130	12,085	48,777	189,097	110,695	4,693	187,498

PacifiCorp Plant Energy and Revenue Requirement

GWhs by Plant

PacifiCorp $2.00/mmBTU Gas MCP Case with Early Environmental Plant Closures Included

	a	o	p	q	r	s	t	u	v	w	x	y	z
1	year	Naughton	Wyodak	Foote Creek Wind	Hydro Lewis	Hydro Small North	Hydro North Umpqua	Hydro Klamath	Hydro Rogue	Hydro Bear	Hydro East	Little Mountain	Other
2													
3	2003	5,293	2,239	122	1,882	222	855	805	356	408	161	83	-
4	2004	5,308	2,245	122	1,882	222	855	805	356	408	161	83	-
5	2005	5,311	2,239	122	1,882	222	855	805	356	408	161	83	-
6	2006	5,301	2,239	122	1,882	213	855	805	327	408	161	83	-
7	2007	5,337	2,239	122	1,760	85	855	656	327	408	161	83	-
8	2008	-	2,245	122	1,760	85	855	656	327	408	161	83	-
9	2009	-	2,239	122	1,760	85	855	656	327	408	161	83	-
10	2010	-	2,239	122	1,760	85	855	656	327	408	161	83	-
11	2011	-	2,239	122	1,760	71	855	656	327	408	160	83	-
12	2012	-	2,245	122	1,760	71	855	656	327	408	160	83	-
13	2013	-	2,239	122	1,760	71	855	656	327	408	160	83	-
14	2014	-	2,239	122	1,760	71	855	656	327	408	160	83	-
15	2015	-	2,239	122	1,760	71	855	656	327	408	160	83	-
16	2016	-	2,245	122	1,760	71	855	656	327	408	157	83	-
17	2017	-	2,239	122	1,760	66	855	656	327	408	112	83	-
18	2018	-	2,239	122	1,760	66	855	656	327	408	112	83	-
19	2019	-	2,239	122	1,760	34	855	656	327	408	112	83	-
20	2020	-	2,245	122	1,760	34	855	656	327	408	112	83	-
21	2021	-	2,239	122	1,760	34	855	656	327	408	86	-	-
22	2022	-	2,239	122	1,760	34	855	656	327	408	86	-	-
23	2023	-	-	122	1,760	34	855	656	327	408	86	-	-
24	2024	-	-	122	1,760	34	855	656	327	408	86	-	-
25	2025	-	-	-	1,760	34	855	656	327	408	86	-	-
26	2026	-	-	-	1,760	34	855	656	327	402	81	-	-
27	2027	-	-	-	1,760	34	855	656	327	402	81	-	-
28	2028	-	-	-	1,760	34	855	656	327	402	81	-	-
29	2029	-	-	-	1,760	34	855	656	327	402	81	-	-
30	2030	-	-	-	1,760	34	855	656	327	402	81	-	-
31	2031	-	-	-	1,760	34	855	656	327	402	43	-	-
32	2032	-	-	-	1,760	34	855	656	327	402	43	-	-
33													
34	Total	26,550	44,809	2,683	53,289	2,253	25,663	20,288	9,884	12,206	3,613	1,488	-

PacifiCorp Plant Energy and Revenue Requirement

Revenue Requirement ($1,000s)

PacifiCorp $2.00/mmBTU Gas MCP Case with Early Environmental Plant Closures Included

	a	b	c	d	e	f	g	h	i	j	k	l	m	n
1	year	Blundell	Carbon	Cholla	Colstrip	Craig	Dave Johnston	Gadsby	Hayden	Hermiston	Hunter	Huntington	James River	Jim Bridger
2														
3	2003	17,807	40,787	82,414	31,366	54,137	140,519	32,250	25,252	69,884	263,086	178,149	12,261	318,351
4	2004	17,861	43,934	84,796	31,620	53,819	145,325	27,858	25,052	72,580	265,553	181,030	13,190	325,883
5	2005	17,856	45,144	87,524	32,133	53,421	151,406	28,777	24,364	73,005	270,005	186,320	14,249	328,780
6	2006	17,666	45,957	90,325	33,591	53,101	153,982	29,739	23,772	75,940	270,786	190,418	13,905	332,317
7	2007	17,517	48,307	91,811	35,212	52,679	163,239	22,889	23,534	77,743	272,212	192,889	14,534	334,432
8	2008	17,412	50,781	261,421	36,491	52,581	296,597	-	23,361	80,069	273,973	195,171	15,250	338,111
9	2009	17,508	49,071	191	37,535	52,081	-	-	22,951	82,429	273,883	198,040	18,200	340,375
10	2010	17,219	38,725	638	38,882	51,806	-	-	22,822	82,913	274,597	203,098	18,006	343,128
11	2011	17,376	-	1,111	39,758	51,865	-	-	22,752	70,889	276,896	207,534	18,911	347,887
12	2012	17,288	-	1,616	40,209	49,112	-	-	21,430	69,130	276,662	206,862	17,386	347,657
13	2013	17,748	-	2,158	41,049	52,242	-	-	22,119	70,811	279,745	211,698	18,492	353,640
14	2014	18,229	-	2,743	41,909	52,741	-	-	22,297	72,168	282,826	216,874	21,268	359,914
15	2015	18,606	-	3,381	42,799	53,228	-	-	22,403	73,547	285,470	222,171	22,556	365,831
16	2016	19,069	-	4,081	43,761	53,791	-	-	22,549	77,064	289,955	228,162	-	373,359
17	2017	19,587	-	4,853	44,757	54,397	-	-	22,817	80,703	293,753	233,302	-	380,750
18	2018	20,060	-	5,711	45,775	55,041	-	-	23,296	82,339	298,460	238,138	-	387,671
19	2019	20,457	-	6,672	46,826	55,748	-	-	24,004	84,007	303,663	222,264	-	394,048
20	2020	20,537	-	7,753	47,802	56,309	-	-	24,484	85,571	304,975	-	-	341,887
21	2021	85	-	8,978	48,945	56,991	-	-	24,818	87,279	309,443	-	-	-
22	2022	-	-	10,372	50,230	57,700	-	-	25,136	89,117	315,140	-	-	-
23	2023	-	-	11,271	51,638	58,365	-	-	25,402	91,031	320,488	-	-	-
24	2024	-	-	-	53,215	91,019	-	-	34,057	93,028	325,487	-	-	-
25	2025	-	-	-	55,041	-	-	-	-	95,120	274,222	-	-	-
26	2026	-	-	-	56,692	-	-	-	-	97,321	-	-	-	-
27	2027	-	-	-	58,056	-	-	-	-	99,657	-	-	-	-
28	2028	-	-	-	59,125	-	-	-	-	102,007	-	-	-	-
29	2029	-	-	-	39,275	-	-	-	-	104,341	-	-	-	-
30	2030	-	-	-	-	-	-	-	-	102,570	-	-	-	-
31	2031	-	-	-	-	-	-	-	-	104,811	-	-	-	-
32	2032	-	-	-	-	-	-	-	-	-	-	-	-	-
33														
34	Total	329,887	362,706	769,819	1,183,689	1,222,174	1,051,068	141,512	528,672	2,447,071	6,601,278	3,512,120	218,209	6,314,022
35	NPV	178,255	271,822	557,521	460,322	582,884	822,629	119,109	256,557	935,035	3,069,052	1,926,665	132,868	3,398,050

PacifiCorp Plant Energy and Revenue Requirement

Revenue Requirement ($1,000s)

PacifiCorp $2.00/mmBTU Gas MCP Case with Early Environmental Plant Closures Included

	a	o	p	q	r	s	t	u	v	w	x	y	z
1	year	Naughton	Wyodak	Foote Creek Wind	Hydro Lewis	Hydro Small North	Hydro North Umpqua	Hydro Klamath	Hydro Rogue	Hydro Bear	Hydro East	Little Mountain	Other
2													
3	2003	166,893	85,812	2,693	39,277	8,377	25,349	28,018	6,107	14,395	10,140	2,491	17
4	2004	170,283	85,483	2,452	40,000	8,758	26,192	28,665	6,339	14,724	10,498	2,312	17
5	2005	172,240	86,217	2,358	40,716	8,886	26,934	29,182	6,441	15,190	10,633	2,363	17
6	2006	175,927	86,362	2,250	41,270	8,775	27,521	29,603	6,519	15,483	10,872	3,110	17
7	2007	222,990	86,895	2,143	41,595	6,113	27,918	22,532	6,562	15,626	10,912	2,530	17
8	2008	-	87,249	2,022	42,194	5,923	28,053	22,668	6,528	15,869	11,049	2,581	17
9	2009	-	87,190	4,164	41,536	5,804	28,786	22,881	6,615	15,894	11,023	2,631	17
10	2010	-	88,732	5,186	42,054	5,686	29,210	23,222	6,683	16,199	11,136	2,682	17
11	2011	-	89,371	5,091	42,758	5,263	29,821	23,680	6,763	16,586	11,242	3,422	17
12	2012	-	84,302	4,646	43,378	5,023	30,347	24,166	6,815	16,903	11,393	2,741	17
13	2013	-	87,569	4,584	44,284	4,991	31,126	24,707	6,950	17,473	11,651	2,805	17
14	2014	-	91,162	4,523	45,331	4,973	31,852	25,176	7,044	17,936	11,925	2,873	17
15	2015	-	92,637	4,458	46,150	4,932	32,568	25,652	7,145	18,366	12,153	2,934	17
16	2016	-	94,068	4,402	47,096	4,920	33,407	26,248	7,300	18,860	12,313	3,984	17
17	2017	-	95,594	4,347	48,126	4,761	34,272	26,866	7,464	19,366	10,278	3,204	17
18	2018	-	97,258	4,294	49,134	4,737	35,150	27,489	7,625	19,870	10,437	3,266	17
19	2019	-	98,883	4,244	50,097	2,107	36,037	28,111	7,783	20,373	10,583	3,328	17
20	2020	-	99,054	4,165	50,462	1,873	36,538	28,308	7,796	20,488	10,509	3,567	17
21	2021	-	100,163	4,110	51,389	1,925	37,406	28,887	7,938	20,921	9,160	-	17
22	2022	-	85,296	4,067	52,533	1,964	38,453	29,631	8,129	21,527	9,248	-	17
23	2023	-	-	3,439	53,746	2,008	39,563	30,415	8,330	22,166	9,348	-	17
24	2024	-	-	2,488	55,071	2,050	40,741	31,238	8,538	22,843	9,462	-	17
25	2025	-	-	-	56,475	2,105	42,022	32,130	8,766	23,569	9,593	-	17
26	2026	-	-	-	58,004	2,171	43,425	33,103	8,215	24,163	9,387	-	17
27	2027	-	-	-	59,709	2,247	44,994	34,182	8,555	25,011	9,536	-	17
28	2028	-	-	-	61,664	2,334	46,801	35,408	8,940	25,973	9,720	-	17
29	2029	-	-	-	63,467	2,418	48,450	36,555	9,310	26,872	9,889	-	17
30	2030	-	-	-	65,083	2,494	49,875	37,607	9,665	27,704	10,050	-	17
31	2031	-	-	-	66,459	2,558	51,042	38,527	10,001	28,442	7,336	-	17
32	2032	-	-	-	(303,562)	(2,078)	(97,588)	(37,729)	(68,071)	13,240	(4,184)	-	177
33													
34	Total	908,333	1,809,298	82,126	1,135,498	124,098	936,264	797,127	152,793	592,030	297,291	52,824	676
35	NPV	750,706	921,750	37,559	502,813	66,655	362,957	316,822	75,910	211,027	126,087	27,764	223

PacifiCorp Plant Energy and Revenue Requirement

GWhs by Plant

PacifiCorp $3.00/mmBTU Gas MCP Case

	a	b	c	d	e	f	g	h	i	j	k	l	m	n
1	year	Blundell	Carbon	Cholla	Colstrip	Craig	Dave Johnston	Gadsby	Hayden	Hermiston	Hunter	Huntington	James River	Jim Bridger
2														
3	2003	170	1,318	2,446	1,022	1,341	5,671	422	549	1,722	8,242	6,507	361	10,403
4	2004	170	1,322	2,454	1,025	1,344	5,687	425	551	1,755	8,266	6,526	361	10,436
5	2005	170	1,318	2,449	1,022	1,341	5,671	430	549	1,663	8,242	6,507	361	10,402
6	2006	170	1,318	2,449	1,022	1,341	5,671	425	549	1,710	8,242	6,507	361	10,409
7	2007	170	1,318	2,469	1,022	1,341	5,671	429	549	1,698	8,242	6,507	361	10,408
8	2008	170	1,322	2,462	1,025	1,344	5,687	-	551	1,710	8,266	6,526	361	10,440
9	2009	170	1,318	2,455	1,022	1,340	5,671	-	549	1,704	8,242	6,507	361	10,409
10	2010	170	1,318	2,455	1,022	1,340	5,671	-	549	1,618	8,242	6,507	361	10,409
11	2011	170	-	2,455	1,022	1,340	5,671	-	549	1,360	8,242	6,507	361	10,409
12	2012	170	-	2,459	1,025	1,344	5,687	-	551	1,694	8,266	6,526	361	10,440
13	2013	170	-	2,452	1,022	1,340	5,671	-	549	1,685	8,242	6,507	361	10,409
14	2014	170	-	2,453	1,022	1,340	5,671	-	549	1,684	8,242	6,507	361	10,409
15	2015	170	-	2,453	1,022	1,340	5,671	-	549	1,692	8,242	6,507	361	10,409
16	2016	170	-	2,462	1,025	1,344	5,687	-	551	1,698	8,266	6,526	-	10,440
17	2017	170	-	2,455	1,022	1,340	5,671	-	549	1,697	8,242	6,507	-	10,409
18	2018	170	-	2,455	1,022	1,341	5,671	-	549	1,700	8,233	6,507	-	10,409
19	2019	170	-	2,455	1,022	1,341	5,671	-	549	1,700	8,233	6,507	-	10,409
20	2020	170	-	2,465	1,025	1,344	5,687	-	551	1,715	8,258	-	-	10,440
21	2021	170	-	2,449	1,009	1,341	-	-	549	1,708	8,219	-	-	-
22	2022	-	-	2,406	970	1,341	-	-	549	1,690	8,101	-	-	-
23	2023	-	-	2,406	970	1,341	-	-	549	1,690	8,101	-	-	-
24	2024	-	-	2,414	973	1,344	-	-	551	1,695	8,126	-	-	-
25	2025	-	-	2,406	970	-	-	-	-	1,690	8,101	-	-	-
26	2026	-	-	-	967	-	-	-	-	1,690	-	-	-	-
27	2027	-	-	-	967	-	-	-	-	1,690	-	-	-	-
28	2028	-	-	-	970	-	-	-	-	1,695	-	-	-	-
29	2029	-	-	-	967	-	-	-	-	1,690	-	-	-	-
30	2030	-	-	-	-	-	-	-	-	1,668	-	-	-	-
31	2031	-	-	-	-	-	-	-	-	1,668	-	-	-	-
32	2032	-	-	-	-	-	-	-	-	-	-	-	-	-
33														
34	Total	3,233	10,553	56,286	27,181	29,510	102,157	2,130	12,085	48,777	189,097	110,695	4,693	187,498

PacifiCorp Plant Energy and Revenue Requirement

GWhs by Plant

PacifiCorp $3.00/mmBTU Gas MCP Case

	a	o	p	q	r	s	t	u	v	w	x	y	z
1	year	Naughton	Wyodak	Foote Creek Wind	Hydro Lewis	Hydro Small North	Hydro North Umpqua	Hydro Klamath	Hydro Rogue	Hydro Bear	Hydro East	Little Mountain	Other
2													
3	2003	5,293	2,239	122	1,882	222	855	805	356	408	161	83	-
4	2004	5,308	2,245	122	1,882	222	855	805	356	408	161	83	-
5	2005	5,311	2,239	122	1,882	222	855	805	356	408	161	83	-
6	2006	5,301	2,239	122	1,882	213	855	805	327	408	161	83	-
7	2007	5,337	2,239	122	1,760	85	855	656	327	408	161	83	-
8	2008	5,315	2,245	122	1,760	85	855	656	327	408	161	83	-
9	2009	5,300	2,239	122	1,760	85	855	656	327	408	161	83	-
10	2010	5,301	2,239	122	1,760	85	855	656	327	408	161	83	-
11	2011	5,300	2,239	122	1,760	71	855	656	327	408	160	83	-
12	2012	5,313	2,245	122	1,760	71	855	656	327	408	160	83	-
13	2013	5,310	2,239	122	1,760	71	855	656	327	408	160	83	-
14	2014	5,312	2,239	122	1,760	71	855	656	327	408	160	83	-
15	2015	5,301	2,239	122	1,760	71	855	656	327	408	160	83	-
16	2016	5,316	2,245	122	1,760	71	855	656	327	408	157	83	-
17	2017	5,300	2,239	122	1,760	66	855	656	327	408	112	83	-
18	2018	3,980	2,239	122	1,760	66	855	656	327	408	112	83	-
19	2019	3,981	2,239	122	1,760	34	855	656	327	408	112	83	-
20	2020	3,994	2,245	122	1,760	34	855	656	327	408	112	83	-
21	2021	2,310	2,239	122	1,760	34	855	656	327	408	86	-	-
22	2022	-	2,239	122	1,760	34	855	656	327	408	86	-	-
23	2023	-	-	122	1,760	34	855	656	327	408	86	-	-
24	2024	-	-	122	1,760	34	855	656	327	408	86	-	-
25	2025	-	-	-	1,760	34	855	656	327	408	86	-	-
26	2026	-	-	-	1,760	34	855	656	327	402	81	-	-
27	2027	-	-	-	1,760	34	855	656	327	402	81	-	-
28	2028	-	-	-	1,760	34	855	656	327	402	81	-	-
29	2029	-	-	-	1,760	34	855	656	327	402	81	-	-
30	2030	-	-	-	1,760	34	855	656	327	402	81	-	-
31	2031	-	-	-	1,760	34	855	656	327	402	43	-	-
32	2032	-	-	-	1,760	34	855	656	327	402	43	-	-
33													
34	Total	93,882	44,809	2,683	53,289	2,253	25,663	20,288	9,884	12,206	3,613	1,488	-

PacifiCorp Plant Energy and Revenue Requirement

Revenue Requirement ($1,000s)

PacifiCorp $3.00/mmBTU Gas MCP Case

	a	b	c	d	e	f	g	h	i	j	k	l	m	n
1	year	Blundell	Carbon	Cholla	Colstrip	Craig	Dave Johnston	Gadsby	Hayden	Hermiston	Hunter	Huntington	James River	Jim Bridger
2														
3	2003	17,807	40,787	97,059	31,366	54,137	183,472	32,250	25,252	69,884	263,086	178,149	12,261	318,351
4	2004	17,861	43,934	98,580	31,620	53,819	187,543	27,858	25,052	72,580	265,553	181,030	13,190	325,883
5	2005	17,856	45,144	101,224	32,133	53,421	191,632	28,777	24,364	73,005	270,005	186,320	14,249	328,780
6	2006	17,666	45,957	104,035	33,591	53,101	194,553	29,739	23,772	75,940	270,786	190,418	13,905	332,317
7	2007	17,517	48,307	105,618	35,212	52,679	202,908	22,889	23,534	77,743	272,212	192,889	14,534	334,432
8	2008	17,412	50,781	107,477	36,491	52,581	205,990	-	23,361	80,069	273,973	195,171	15,250	338,111
9	2009	17,508	49,071	108,168	37,535	52,081	207,336	-	22,951	82,429	273,883	198,040	18,200	340,375
10	2010	17,219	38,725	108,780	38,882	51,806	208,640	-	22,822	82,913	274,597	203,098	18,006	343,128
11	2011	17,376	-	110,159	39,758	51,865	211,928	-	22,752	70,889	276,896	207,534	18,911	347,887
12	2012	17,288	-	111,639	40,209	49,112	212,712	-	21,430	69,130	276,662	206,862	17,386	347,657
13	2013	17,748	-	113,346	41,049	52,242	218,186	-	22,119	70,811	279,745	211,698	18,492	353,640
14	2014	18,229	-	115,165	41,909	52,741	223,995	-	22,297	72,168	282,826	216,874	21,268	359,914
15	2015	18,606	-	117,043	42,799	53,228	229,684	-	22,403	73,547	285,470	222,171	22,556	365,831
16	2016	19,069	-	119,138	43,761	53,791	236,522	-	22,549	77,064	289,955	228,162	-	373,359
17	2017	19,587	-	121,404	44,757	54,397	243,022	-	22,817	80,703	293,753	233,302	-	380,750
18	2018	20,060	-	123,830	45,775	55,041	248,725	-	23,296	82,339	298,460	238,138	-	387,671
19	2019	20,457	-	126,440	46,826	55,748	254,042	-	24,004	84,007	303,663	222,264	-	394,048
20	2020	20,537	-	128,900	47,802	56,309	252,202	-	24,484	85,571	304,975	-	-	341,887
21	2021	85	-	131,945	48,945	56,991	-	-	24,818	87,279	309,443	-	-	-
22	2022	-	-	130,497	50,230	57,700	-	-	25,136	89,117	315,140	-	-	-
23	2023	-	-	126,174	51,638	58,365	-	-	25,402	91,031	320,488	-	-	-
24	2024	-	-	117,832	53,215	91,019	-	-	34,057	93,028	325,487	-	-	-
25	2025	-	-	134,919	55,041	-	-	-	-	95,120	274,222	-	-	-
26	2026	-	-	-	56,692	-	-	-	-	97,321	-	-	-	-
27	2027	-	-	-	58,056	-	-	-	-	99,657	-	-	-	-
28	2028	-	-	-	59,125	-	-	-	-	102,007	-	-	-	-
29	2029	-	-	-	39,275	-	-	-	-	104,341	-	-	-	-
30	2030	-	-	-	-	-	-	-	-	102,570	-	-	-	-
31	2031	-	-	-	-	-	-	-	-	104,811	-	-	-	-
32	2032	-	-	-	-	-	-	-	-	-	-	-	-	-
33														
34	Total	329,887	362,706	2,659,372	1,183,689	1,222,174	3,913,091	141,512	528,672	2,447,071	6,601,278	3,512,120	218,209	6,314,022
35	NPV	178,255	271,822	1,213,607	460,322	582,884	2,069,334	119,109	256,557	935,035	3,069,052	1,926,665	132,868	3,398,050

PacifiCorp Plant Energy and Revenue Requirement

Revenue Requirement ($1,000s)

PacifiCorp $3.00/mmBTU Gas MCP Case

	a	o	p	q	r	s	t	u	v	w	x	y	z
1	year	Naughton	Wyodak	Foote Creek Wind	Hydro Lewis	Hydro Small North	Hydro North Umpqua	Hydro Klamath	Hydro Rogue	Hydro Bear	Hydro East	Little Mountain	Other
2													
3	2003	185,667	85,812	2,693	39,277	8,377	25,349	28,018	6,107	14,395	10,140	2,491	17
4	2004	188,842	85,483	2,452	40,000	8,758	26,192	28,665	6,339	14,724	10,498	2,312	17
5	2005	190,679	86,217	2,358	40,716	8,886	26,934	29,182	6,441	15,190	10,633	2,363	17
6	2006	193,728	86,362	2,250	41,270	8,775	27,521	29,603	6,519	15,483	10,872	3,110	17
7	2007	198,998	86,895	2,143	41,595	6,113	27,918	22,532	6,562	15,626	10,912	2,530	17
8	2008	201,643	87,249	2,022	42,194	5,923	28,053	22,668	6,528	15,869	11,049	2,581	17
9	2009	203,216	87,190	4,164	41,536	5,804	28,786	22,881	6,615	15,894	11,023	2,631	17
10	2010	205,636	88,732	5,186	42,054	5,686	29,210	23,222	6,683	16,199	11,136	2,682	17
11	2011	208,505	89,371	5,091	42,758	5,263	29,821	23,680	6,763	16,586	11,242	3,422	17
12	2012	209,230	84,302	4,646	43,378	5,023	30,347	24,166	6,815	16,903	11,393	2,741	17
13	2013	214,145	87,569	4,584	44,284	4,991	31,126	24,707	6,950	17,473	11,651	2,805	17
14	2014	219,537	91,162	4,523	45,331	4,973	31,852	25,176	7,044	17,936	11,925	2,873	17
15	2015	224,631	92,637	4,458	46,150	4,932	32,568	25,652	7,145	18,366	12,153	2,934	17
16	2016	228,795	94,068	4,402	47,096	4,920	33,407	26,248	7,300	18,860	12,313	3,984	17
17	2017	214,448	95,594	4,347	48,126	4,761	34,272	26,866	7,464	19,366	10,278	3,204	17
18	2018	222,352	97,258	4,294	49,134	4,737	35,150	27,489	7,625	19,870	10,437	3,266	17
19	2019	229,914	98,883	4,244	50,097	2,107	36,037	28,111	7,783	20,373	10,583	3,328	17
20	2020	233,779	99,054	4,165	50,462	1,873	36,538	28,308	7,796	20,488	10,509	3,567	17
21	2021	149,685	100,163	4,110	51,389	1,925	37,406	28,887	7,938	20,921	9,160	-	17
22	2022	-	85,296	4,067	52,533	1,964	38,453	29,631	8,129	21,527	9,248	-	17
23	2023	-	-	3,439	53,746	2,008	39,563	30,415	8,330	22,166	9,348	-	17
24	2024	-	-	2,488	55,071	2,050	40,741	31,238	8,538	22,843	9,462	-	17
25	2025	-	-	-	56,475	2,105	42,022	32,130	8,766	23,569	9,593	-	17
26	2026	-	-	-	58,004	2,171	43,425	33,103	8,215	24,163	9,387	-	17
27	2027	-	-	-	59,709	2,247	44,994	34,182	8,555	25,011	9,536	-	17
28	2028	-	-	-	61,664	2,334	46,801	35,408	8,940	25,973	9,720	-	17
29	2029	-	-	-	63,467	2,418	48,450	36,555	9,310	26,872	9,889	-	17
30	2030	-	-	-	65,083	2,494	49,875	37,607	9,665	27,704	10,050	-	17
31	2031	-	-	-	66,459	2,558	51,042	38,527	10,001	28,442	7,336	-	17
32	2032	-	-	-	(717,082)	(8,700)	(310,180)	(192,982)	(145,498)	(71,973)	(5,163)	-	177
33													
34	Total	3,923,430	1,809,298	82,126	721,978	117,476	723,673	641,873	75,366	506,817	296,312	52,824	676
35	NPV	2,056,783	921,750	37,559	457,497	65,929	339,660	299,809	67,425	201,689	125,979	27,764	223

PacifiCorp Plant Energy and Revenue Requirement

GWhs by Plant

Northwest Power Planning Council MCP Case

	a	b	c	d	e	f	g	h	i	j	k	l	m	n
1	year	Blundell	Carbon	Cholla	Colstrip	Craig	Dave Johnston	Gadsby	Hayden	Hermiston	Hunter	Huntington	James River	Jim Bridger
2														
3	2003	170	1,318	2,446	1,022	1,341	5,671	422	549	1,722	8,242	6,507	361	10,403
4	2004	170	1,322	2,454	1,025	1,344	5,687	425	551	1,755	8,266	6,526	361	10,436
5	2005	170	1,318	2,449	1,022	1,341	5,671	430	549	1,663	8,242	6,507	361	10,402
6	2006	170	1,318	2,449	1,022	1,341	5,671	425	549	1,710	8,242	6,507	361	10,409
7	2007	170	1,318	2,469	1,022	1,341	5,671	429	549	1,698	8,242	6,507	361	10,408
8	2008	170	1,322	2,462	1,025	1,344	5,687	-	551	1,710	8,266	6,526	361	10,440
9	2009	170	1,318	2,455	1,022	1,340	5,671	-	549	1,704	8,242	6,507	361	10,409
10	2010	170	1,318	2,455	1,022	1,340	5,671	-	549	1,618	8,242	6,507	361	10,409
11	2011	170	-	2,455	1,022	1,340	5,671	-	549	1,360	8,242	6,507	361	10,409
12	2012	170	-	2,459	1,025	1,344	5,687	-	551	1,694	8,266	6,526	361	10,440
13	2013	170	-	2,452	1,022	1,340	5,671	-	549	1,685	8,242	6,507	361	10,409
14	2014	170	-	2,453	1,022	1,340	5,671	-	549	1,684	8,242	6,507	361	10,409
15	2015	170	-	2,453	1,022	1,340	5,671	-	549	1,692	8,242	6,507	361	10,409
16	2016	170	-	2,462	1,025	1,344	5,687	-	551	1,698	8,266	6,526	-	10,440
17	2017	170	-	2,455	1,022	1,340	5,671	-	549	1,697	8,242	6,507	-	10,409
18	2018	170	-	2,455	1,022	1,341	5,671	-	549	1,700	8,233	6,507	-	10,409
19	2019	170	-	2,455	1,022	1,341	5,671	-	549	1,700	8,233	6,507	-	10,409
20	2020	170	-	2,465	1,025	1,344	5,687	-	551	1,715	8,258	-	-	10,440
21	2021	170	-	2,449	1,009	1,341	-	-	549	1,708	8,219	-	-	-
22	2022	-	-	2,406	970	1,341	-	-	549	1,690	8,101	-	-	-
23	2023	-	-	2,406	970	1,341	-	-	549	1,690	8,101	-	-	-
24	2024	-	-	2,414	973	1,344	-	-	551	1,695	8,126	-	-	-
25	2025	-	-	2,406	970	-	-	-	-	1,690	8,101	-	-	-
26	2026	-	-	-	967	-	-	-	-	1,690	-	-	-	-
27	2027	-	-	-	967	-	-	-	-	1,690	-	-	-	-
28	2028	-	-	-	970	-	-	-	-	1,695	-	-	-	-
29	2029	-	-	-	967	-	-	-	-	1,690	-	-	-	-
30	2030	-	-	-	-	-	-	-	-	1,668	-	-	-	-
31	2031	-	-	-	-	-	-	-	-	1,668	-	-	-	-
32	2032	-	-	-	-	-	-	-	-	-	-	-	-	-
33														
34	Total	3,233	10,553	56,286	27,181	29,510	102,157	2,130	12,085	48,777	189,097	110,695	4,693	187,498

PacifiCorp Plant Energy and Revenue Requirement

GWhs by Plant

Northwest Power Planning Council MCP Case

	a	o	p	q	r	s	t	u	v	w	x	y	z
1	year	Naughton	Wyodak	Foote Creek Wind	Hydro Lewis	Hydro Small North	Hydro North Umpqua	Hydro Klamath	Hydro Rogue	Hydro Bear	Hydro East	Little Mountain	Other
2													
3	2003	5,293	2,239	122	1,882	222	855	805	356	408	161	83	-
4	2004	5,308	2,245	122	1,882	222	855	805	356	408	161	83	-
5	2005	5,311	2,239	122	1,882	222	855	805	356	408	161	83	-
6	2006	5,301	2,239	122	1,882	213	855	805	327	408	161	83	-
7	2007	5,337	2,239	122	1,760	85	855	656	327	408	161	83	-
8	2008	5,315	2,245	122	1,760	85	855	656	327	408	161	83	-
9	2009	5,300	2,239	122	1,760	85	855	656	327	408	161	83	-
10	2010	5,301	2,239	122	1,760	85	855	656	327	408	161	83	-
11	2011	5,300	2,239	122	1,760	71	855	656	327	408	160	83	-
12	2012	5,313	2,245	122	1,760	71	855	656	327	408	160	83	-
13	2013	5,310	2,239	122	1,760	71	855	656	327	408	160	83	-
14	2014	5,312	2,239	122	1,760	71	855	656	327	408	160	83	-
15	2015	5,301	2,239	122	1,760	71	855	656	327	408	160	83	-
16	2016	5,316	2,245	122	1,760	71	855	656	327	408	157	83	-
17	2017	5,300	2,239	122	1,760	66	855	656	327	408	112	83	-
18	2018	3,980	2,239	122	1,760	66	855	656	327	408	112	83	-
19	2019	3,981	2,239	122	1,760	34	855	656	327	408	112	83	-
20	2020	3,994	2,245	122	1,760	34	855	656	327	408	112	83	-
21	2021	2,310	2,239	122	1,760	34	855	656	327	408	86	-	-
22	2022	-	2,239	122	1,760	34	855	656	327	408	86	-	-
23	2023	-	-	122	1,760	34	855	656	327	408	86	-	-
24	2024	-	-	122	1,760	34	855	656	327	408	86	-	-
25	2025	-	-	-	1,760	34	855	656	327	408	86	-	-
26	2026	-	-	-	1,760	34	855	656	327	402	81	-	-
27	2027	-	-	-	1,760	34	855	656	327	402	81	-	-
28	2028	-	-	-	1,760	34	855	656	327	402	81	-	-
29	2029	-	-	-	1,760	34	855	656	327	402	81	-	-
30	2030	-	-	-	1,760	34	855	656	327	402	81	-	-
31	2031	-	-	-	1,760	34	855	656	327	402	43	-	-
32	2032	-	-	-	1,760	34	855	656	327	402	43	-	-
33													
34	Total	93,882	44,809	2,683	53,289	2,253	25,663	20,288	9,884	12,206	3,613	1,488	-

PacifiCorp Plant Energy and Revenue Requirement

Revenue Requirement ($1,000s)

Northwest Power Planning Council MCP Case

	a	b	c	d	e	f	g	h	i	j	k	l	m	n
1	year	Blundell	Carbon	Cholla	Colstrip	Craig	Dave Johnston	Gadsby	Hayden	Hermiston	Hunter	Huntington	James River	Jim Bridger
2														
3	2003	17,807	40,787	97,059	31,366	54,137	183,472	32,250	25,252	69,884	263,086	178,149	12,261	318,351
4	2004	17,861	43,934	98,580	31,620	53,819	187,543	27,858	25,052	72,580	265,553	181,030	13,190	325,883
5	2005	17,856	45,144	101,224	32,133	53,421	191,632	28,777	24,364	73,005	270,005	186,320	14,249	328,780
6	2006	17,666	45,957	104,035	33,591	53,101	194,553	29,739	23,772	75,940	270,786	190,418	13,905	332,317
7	2007	17,517	48,307	105,618	35,212	52,679	202,908	22,889	23,534	77,743	272,212	192,889	14,534	334,432
8	2008	17,412	50,781	107,477	36,491	52,581	205,990	-	23,361	80,069	273,973	195,171	15,250	338,111
9	2009	17,508	49,071	108,168	37,535	52,081	207,336	-	22,951	82,429	273,883	198,040	18,200	340,375
10	2010	17,219	38,725	108,780	38,882	51,806	208,640	-	22,822	82,913	274,597	203,098	18,006	343,128
11	2011	17,376	-	110,159	39,758	51,865	211,928	-	22,752	70,889	276,896	207,534	18,911	347,887
12	2012	17,288	-	111,639	40,209	49,112	212,712	-	21,430	69,130	276,662	206,862	17,386	347,657
13	2013	17,748	-	113,346	41,049	52,242	218,186	-	22,119	70,811	279,745	211,698	18,492	353,640
14	2014	18,229	-	115,165	41,909	52,741	223,995	-	22,297	72,168	282,826	216,874	21,268	359,914
15	2015	18,606	-	117,043	42,799	53,228	229,684	-	22,403	73,547	285,470	222,171	22,556	365,831
16	2016	19,069	-	119,138	43,761	53,791	236,522	-	22,549	77,064	289,955	228,162	-	373,359
17	2017	19,587	-	121,404	44,757	54,397	243,022	-	22,817	80,703	293,753	233,302	-	380,750
18	2018	20,060	-	123,830	45,775	55,041	248,725	-	23,296	82,339	298,460	238,138	-	387,671
19	2019	20,457	-	126,440	46,826	55,748	254,042	-	24,004	84,007	303,663	222,264	-	394,048
20	2020	20,537	-	128,900	47,802	56,309	252,202	-	24,484	85,571	304,975	-	-	341,887
21	2021	85	-	131,945	48,945	56,991	-	-	24,818	87,279	309,443	-	-	-
22	2022	-	-	130,497	50,230	57,700	-	-	25,136	89,117	315,140	-	-	-
23	2023	-	-	126,174	51,638	58,365	-	-	25,402	91,031	320,488	-	-	-
24	2024	-	-	117,832	53,215	91,019	-	-	34,057	93,028	325,487	-	-	-
25	2025	-	-	134,919	55,041	-	-	-	-	95,120	274,222	-	-	-
26	2026	-	-	-	56,692	-	-	-	-	97,321	-	-	-	-
27	2027	-	-	-	58,056	-	-	-	-	99,657	-	-	-	-
28	2028	-	-	-	59,125	-	-	-	-	102,007	-	-	-	-
29	2029	-	-	-	39,275	-	-	-	-	104,341	-	-	-	-
30	2030	-	-	-	-	-	-	-	-	102,570	-	-	-	-
31	2031	-	-	-	-	-	-	-	-	104,811	-	-	-	-
32	2032	-	-	-	-	-	-	-	-	-	-	-	-	-
33														
34	Total	329,887	362,706	2,659,372	1,183,689	1,222,174	3,913,091	141,512	528,672	2,447,071	6,601,278	3,512,120	218,209	6,314,022
35	NPV	178,255	271,822	1,213,607	460,322	582,884	2,069,334	119,109	256,557	935,035	3,069,052	1,926,665	132,868	3,398,050

PacifiCorp Plant Energy and Revenue Requirement

Revenue Requirement ($1,000s)

Northwest Power Planning Council MCP Case

	a	o	p	q	r	s	t	u	v	w	x	y	z
1	year	Naughton	Wyodak	Foote Creek Wind	Hydro Lewis	Hydro Small North	Hydro North Umpqua	Hydro Klamath	Hydro Rogue	Hydro Bear	Hydro East	Little Mountain	Other
2													
3	2003	185,667	85,812	2,693	39,277	8,377	25,349	28,018	6,107	14,395	10,140	2,491	17
4	2004	188,842	85,483	2,452	40,000	8,758	26,192	28,665	6,339	14,724	10,498	2,312	17
5	2005	190,679	86,217	2,358	40,716	8,886	26,934	29,182	6,441	15,190	10,633	2,363	17
6	2006	193,728	86,362	2,250	41,270	8,775	27,521	29,603	6,519	15,483	10,872	3,110	17
7	2007	198,998	86,895	2,143	41,595	6,113	27,918	22,532	6,562	15,626	10,912	2,530	17
8	2008	201,643	87,249	2,022	42,194	5,923	28,053	22,668	6,528	15,869	11,049	2,581	17
9	2009	203,216	87,190	4,164	41,536	5,804	28,786	22,881	6,615	15,894	11,023	2,631	17
10	2010	205,636	88,732	5,186	42,054	5,686	29,210	23,222	6,683	16,199	11,136	2,682	17
11	2011	208,505	89,371	5,091	42,758	5,263	29,821	23,680	6,763	16,586	11,242	3,422	17
12	2012	209,230	84,302	4,646	43,378	5,023	30,347	24,166	6,815	16,903	11,393	2,741	17
13	2013	214,145	87,569	4,584	44,284	4,991	31,126	24,707	6,950	17,473	11,651	2,805	17
14	2014	219,537	91,162	4,523	45,331	4,973	31,852	25,176	7,044	17,936	11,925	2,873	17
15	2015	224,631	92,637	4,458	46,150	4,932	32,568	25,652	7,145	18,366	12,153	2,934	17
16	2016	228,795	94,068	4,402	47,096	4,920	33,407	26,248	7,300	18,860	12,313	3,984	17
17	2017	214,448	95,594	4,347	48,126	4,761	34,272	26,866	7,464	19,366	10,278	3,204	17
18	2018	222,352	97,258	4,294	49,134	4,737	35,150	27,489	7,625	19,870	10,437	3,266	17
19	2019	229,914	98,883	4,244	50,097	2,107	36,037	28,111	7,783	20,373	10,583	3,328	17
20	2020	233,779	99,054	4,165	50,462	1,873	36,538	28,308	7,796	20,488	10,509	3,567	17
21	2021	149,685	100,163	4,110	51,389	1,925	37,406	28,887	7,938	20,921	9,160	-	17
22	2022	-	85,296	4,067	52,533	1,964	38,453	29,631	8,129	21,527	9,248	-	17
23	2023	-	-	3,439	53,746	2,008	39,563	30,415	8,330	22,166	9,348	-	17
24	2024	-	-	2,488	55,071	2,050	40,741	31,238	8,538	22,843	9,462	-	17
25	2025	-	-	-	56,475	2,105	42,022	32,130	8,766	23,569	9,593	-	17
26	2026	-	-	-	58,004	2,171	43,425	33,103	8,215	24,163	9,387	-	17
27	2027	-	-	-	59,709	2,247	44,994	34,182	8,555	25,011	9,536	-	17
28	2028	-	-	-	61,664	2,334	46,801	35,408	8,940	25,973	9,720	-	17
29	2029	-	-	-	63,467	2,418	48,450	36,555	9,310	26,872	9,889	-	17
30	2030	-	-	-	65,083	2,494	49,875	37,607	9,665	27,704	10,050	-	17
31	2031	-	-	-	66,459	2,558	51,042	38,527	10,001	28,442	7,336	-	17
32	2032	-	-	-	(594,416)	(6,174)	(244,353)	(138,301)	(118,407)	(63,999)	(4,742)	-	177
33													
34	Total	3,923,430	1,809,298	82,126	844,643	120,002	789,499	696,555	102,458	514,791	296,733	52,824	676
35	NPV	2,056,783	921,750	37,559	470,940	66,206	346,873	305,801	70,394	202,563	126,026	27,764	223

PacifiCorp Power Sales / Purchase Contracts

(Revenue Requirement dollar amounts are $1,000's)

WHOLESALE SALES CONTRACTS

MWH's	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1 Black Hills	401,508	366,002	365,001	365,001	365,001	366,001	365,001	365,001	365,001	366,001	365,001	365,001	365,001	366,001	365,001
2 So Cal Edison (P)	580,714	614,880	613,304	451,416	-	-	-	-	-	-	-	-	-	-	-
3 So Cal Edison (U)	580,714	614,880	613,304	451,416	-	-	-	-	-	-	-	-	-	-	-
4 SMUD	350,153	350,400	350,153	350,153	350,153	350,400	350,153	350,153	350,153	350,400	350,153	350,153	-	-	-
5 IPP Sale	504,578	505,960	504,578	504,578	504,578	505,960	504,578	504,578	504,578	505,960	504,578	504,578	504,578	505,960	504,578
6 Puget Power II	875,520	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Sierra Pacific II	459,900	461,160	459,972	460,278	460,278	461,677	83,808	-	-	-	-	-	-	-	-
8 UMPA Sale	45,153	44,173	21,112	-	-	-	-	-	-	-	-	-	-	-	-
9 CDWR Sale	613,200	614,880	-	-	-	-	-	-	-	-	-	-	-	-	-
10 WAPA Sale	525,600	527,040	-	-	-	-	-	-	-	-	-	-	-	-	-
11 WAPA II Sale	558,450	559,980	-	-	-	-	-	-	-	-	-	-	-	-	-
12 PSCo Sale	1,143,498	1,160,219	1,157,057	1,156,320	1,113,006	899,193	622,482	347,804	280,555	-	-	-	-	-	-
13 Clark Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Black Hills Capacity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Springfield	79,717	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16 PNGC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Deseret Supplemental	173,381	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 Okanogan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 UMPA II Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Springfield II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 Cowlitz-BHP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 Clark-WT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23 Hurricane Sales	6,499	6,612	6,693	6,718	4,481	-	-	-	-	-	-	-	-	-	-
24 APPA-AEPCO	26,040	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25 Citizens Power	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Green Mountains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Flathead Sale	613,200	614,880	613,200	458,640	-	-	-	-	-	-	-	-	-	-	-
TOTAL	7,537,825	6,441,066	4,704,374	4,204,520	2,797,497	2,583,231	1,926,022	1,567,536	1,500,287	1,222,361	1,219,732	1,219,732	869,579	871,961	869,579

PacifiCorp Power Sales / Purchase Contracts

(Revenue Requirement dollar amounts are $1,000's)

WHOLESALE SALES CONTRACTS

MWH's	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1 Black Hills	365,001	365,001	366,001	365,001	365,001	365,001	-	-	-	-	-	-	-	-
2 So Cal Edison (P)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 So Cal Edison (U)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 SMUD	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 IPP Sale	504,578	504,578	505,960	504,578	504,578	504,578	505,960	504,578	504,578	504,578	505,960	504,578	504,578	504,578
6 Puget Power II	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Sierra Pacific II	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 UMPA Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 CDWR Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 WAPA Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 WAPA II Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 PSCo Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Clark Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Black Hills Capacity	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Springfield	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16 PNGC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Deseret Supplemental	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 Okanogan	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 UMPA II Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Springfield II	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 Cowlitz-BHP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 Clark-WT	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23 Hurricane Sales	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24 APPA-AEPCO	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25 Citizens Power	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Green Mountains	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Flathead Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	869,579	869,579	871,961	869,579	869,579	869,579	505,960	504,578	504,578	504,578	505,960	504,578	504,578	504,578

PacifiCorp Power Sales / Purchase Contracts

(Revenue Requirement dollar amounts are $1,000's)

WHOLESALE SALES CONTRACTS

Revenue Requirement	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1 Black Hills	$ (10,040)	$ (8,701)	$ (8,734)	$ (8,844)	$ (8,904)	$ (8,913)	$ (9,916)	$ (11,191)	$ (12,560)	$ (12,558)	$ (12,556)	$ (12,553)	$ (12,551)	$ (12,549)	$ (12,546)
2 So Cal Edison (P)	(33,737)	(32,461)	(32,720)	(25,330)	-	-	-	-	-	-	-	-	-	-	-
3 So Cal Edison (U)	(33,737)	(32,461)	(32,720)	(25,330)	-	-	-	-	-	-	-	-	-	-	-
4 SMUD	(5,436)	(5,555)	(5,670)	(5,781)	(5,926)	(6,040)	(6,180)	(6,287)	(6,642)	(6,811)	(6,984)	(7,162)	-	-	-
5 IPP Sale	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)
6 Puget Power II	(45,752)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Sierra Pacific II	(21,439)	(21,598)	(21,734)	(21,874)	(22,030)	(22,183)	(3,750)	-	-	-	-	-	-	-	-
8 UMPA Sale	(2,709)	(2,750)	(1,352)	-	-	-	-	-	-	-	-	-	-	-	-
9 CDWR Sale	(30,968)	(31,207)	-	-	-	-	-	-	-	-	-	-	-	-	-
10 WAPA Sale	(17,104)	(17,171)	-	-	-	-	-	-	-	-	-	-	-	-	-
11 WAPA II Sale	(20,671)	(20,907)	-	-	-	-	-	-	-	-	-	-	-	-	-
12 PSCo Sale	(47,171)	(47,770)	(48,050)	(48,370)	(48,051)	(40,373)	(30,149)	(19,682)	(12,516)	-	-	-	-	-	-
13 Clark Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Black Hills Capacity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Springfield	(4,108)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16 PNGC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Deseret Supplemental	(1,808)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 Okanogan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 UMPA II Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Springfield II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 Cowlitz-BHP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 Clark-WT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23 Hurricane Sales	(181)	(184)	(186)	(187)	(124)	-	-	-	-	-	-	-	-	-	-
24 APPA-AEPCO	(1,316)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25 Citizens Power	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Green Mountains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Flathead Sale	(17,893)	(18,228)	(18,567)	(14,525)	-	-	-	-	-	-	-	-	-	-	-
TOTAL	$ (320,280)	$ (265,205)	$ (195,945)	$ (176,451)	$ (111,247)	$ (103,719)	$ (76,207)	$ (63,372)	$ (57,930)	$ (45,580)	$ (45,751)	$ (45,926)	$ (38,762)	$ (38,760)	$ (38,757)

PacifiCorp Power Sales / Purchase Contracts

(Revenue Requirement dollar amounts are $1,000's)

WHOLESALE SALES CONTRACTS

Revenue Requirement	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1 Black Hills	$ (12,543)	$ (12,541)	$ (12,538)	$ (12,535)	$ (12,532)	$ (12,529)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2 So Cal Edison (P)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 So Cal Edison (U)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 SMUD	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 IPP Sale	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)	(26,211)
6 Puget Power II	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Sierra Pacific II	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8 UMPA Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9 CDWR Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 WAPA Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11 WAPA II Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12 PSCo Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 Clark Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Black Hills Capacity	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 Springfield	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16 PNGC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17 Deseret Supplemental	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 Okanogan	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 UMPA II Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Springfield II	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 Cowlitz-BHP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 Clark-WT	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23 Hurricane Sales	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24 APPA-AEPCO	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25 Citizens Power	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Green Mountains	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Flathead Sale	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	$ (38,755)	$ (38,752)	$ (38,749)	$ (38,746)	$ (38,743)	$ (38,740)	$ (26,211)	$ (26,211)	$ (26,211)	$ (26,211)	$ (26,211)	$ (26,211)	$ (26,211)	$ (26,211)

PacifiCorp Power Sales / Purchase Contracts

(Revenue Requirement dollar amounts are $1,000's)

PURCHASED POWER CONTRACTS

MWh's	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1 BPA Peaking Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2 BPA Entitlement Capacity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 BPA Supplemental Capacity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 Black Hills Capacity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 Mid Columbia	1,911,059	1,917,933	1,911,033	1,347,207	1,346,963	1,351,914	1,347,061	576,411	576,415	264,087	263,164	263,160	263,161	264,099	263,152
6 Colockum	(85,002)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Grant_County	87,428	87,600	87,428	87,428	87,428	87,600	87,428	87,428	87,428	87,600	87,428	87,428	87,428	87,600	87,428
8 PGE_Cove	12,000	12,034	12,000	12,000	12,000	12,034	12,000	12,000	12,000	12,034	12,000	12,000	12,000	12,034	12,000
9 IPC_Return	(93,500)	(93,727)	(93,500)	(93,500)	(93,500)	(93,727)	(93,500)	(93,500)	(93,500)	(93,727)	(93,500)	(93,500)	(93,500)	(93,727)	(93,500)
10 Q.F. Contracts - PP&L	446,334	445,375	406,249	379,049	312,565	313,595	312,565	312,565	291,765	148,765	134,321	129,343	119,051	119,587	119,051
11 TriState Purchase	284,700	285,480	284,828	284,828	284,828	285,644	284,828	284,828	284,828	285,644	284,828	284,828	284,828	285,644	284,828
12 S. Idaho / Utah to Goshen	(617,833)	(642,957)	(668,456)	(693,881)	(722,543)	(751,789)	(781,520)	(812,466)	(823,593)	(826,769)	(823,593)	(823,593)	(823,593)	(826,769)	(823,593)
13 S. Idaho / BPA to Pacific	617,833	642,957	668,456	693,881	722,543	751,789	781,520	812,466	823,593	826,769	823,593	823,593	823,593	826,769	823,593
14 S. Idaho / Storage	21,726	19,818	17,882	16,134	14,598	13,171	11,884	10,723	10,723	10,723	10,723	10,723	10,723	10,723	10,723
15 S. Idaho / Return of Storage	(22,479)	(20,581)	(18,656)	(16,832)	(15,211)	(13,742)	(12,399)	(11,188)	(10,722)	(10,780)	(10,722)	(10,722)	(10,722)	(10,780)	(10,722)
16 APS Purchase	5,775	5,838	5,571	5,728	5,728	5,751	5,728	5,728	5,728	5,751	5,728	5,728	5,728	5,751	5,728
17 Tri State Exchange	(770)	70	(770)	(770)	(770)	-	-	-	-	-	-	-	-	-	-
18 SCE Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 BPA Exchange	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Avista Summer Purchase	82,800	-	-	-	-	-	-	-	-	-	-	(1)	(1)	(1)	(1)
21 Avista Exchange	5,528	(2,016)	1,360	-	-	(103)	(13,872)	-	-	-	-	-	-	-	-
22 Gem State	65,895	65,895	65,895	65,895	65,895	65,895	65,895	65,895	65,895	65,895	65,895	65,895	65,895	65,895	65,895
23 QF Contracts - UP&L	484,990	486,355	485,200	485,200	485,200	486,565	485,200	485,200	485,200	482,366	482,033	481,995	481,995	480,239	478,348
24 IPP Purchase	504,578	505,960	504,578	504,578	504,578	505,960	504,578	504,578	504,578	505,960	504,578	504,578	504,578	505,960	504,578
25 CoGen/Hermiston	1,681,001	1,686,530	1,681,001	1,681,001	1,681,001	1,686,530	1,681,001	1,681,001	1,681,001	1,686,530	1,681,001	1,681,001	1,681,001	663,323	-
26 Deseret Annual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Deseret Monthly	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Deseret Expansion	132,323	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29 Deseret NF Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30 APS Exchange	-	-	-	-	-	2,469	-	-	-	2,469	-	-	-	2,469	-
31 Hurricane Purchase	840	840	840	840	560	-	-	-	-	-	-	-	-	-	-
32 Redding Exchange	(20,242)	(416)	(167)	(740)	717	(33)	(1,104)	175	(140)	219	(140)	(140)	(12,802)	-	-
33 TransAlta Purchase	3,451,440	3,460,896	3,451,440	3,451,440	1,708,393	-	-	-	-	-	-	-	-	-	-
34 Enron Purchase	122,800	123,600	-	-	-	-	-	-	-	-	-	-	-	-	-
35 Canadian Entitlement	(112,244)	(124,466)	(117,900)	(85,176)	(85,176)	(85,176)	(76,738)	(34,687)	(31,539)	(15,850)	(15,850)	(15,850)	(15,850)	(15,850)	(15,850)
36 CSPE	20,877	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	8,987,857	8,863,018	8,684,312	8,124,310	6,315,797	4,624,347	4,600,555	3,887,157	3,869,660	3,437,686	3,411,487	3,406,466	3,383,513	2,382,966	1,711,658

PacifiCorp Power Sales / Purchase Contracts

(Revenue Requirement dollar amounts are $1,000's)

PURCHASED POWER CONTRACTS

MWh's	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1 BPA Peaking Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2 BPA Entitlement Capacity	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 BPA Supplemental Capacity	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 Black Hills Capacity	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 Mid Columbia	263,158	-	-	-	-	-	-	-	-	-	-	-	-	-
6 Colockum	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Grant_County	87,428	87,428	87,600	87,428	87,600	87,600	87,778	87,600	87,600	87,600	87,778	87,600	87,600	87,600
8 PGE_Cove	12,000	12,000	12,034	12,000	12,000	12,000	12,034	12,000	12,000	12,000	12,034	12,000	12,000	12,000
9 IPC_Return	(93,500)	(93,500)	(93,727)	(93,500)	15,066	11,752	8,970	8,934	8,934	8,934	8,970	8,934	8,934	8,934
10 Q.F. Contracts - PP&L	119,051	107,332	90,307	15,066	(823,593)	(823,593)	(826,769)	(823,593)	(823,593)	(823,593)	(826,769)	(823,593)	(823,593)	(823,593)
11 TriState Purchase	284,828	284,828	285,644	-	823,593	823,593	826,769	823,593	823,593	823,593	826,769	823,593	823,593	823,593
12 S. Idaho / Utah to Goshen	(823,593)	(823,593)	(826,769)	(823,593)	10,723	10,723	10,723	10,723	10,723	10,723	10,723	10,723	10,723	10,723
13 S. Idaho / BPA to Pacific	823,593	823,593	826,769	823,593	(10,722)	(10,722)	(10,780)	(10,722)	(10,722)	(10,722)	(10,780)	(10,722)	(10,722)	(10,722)
14 S. Idaho / Storage	10,723	10,723	10,723	10,723	65,895	65,895	-	-	-	-	-	-	-	-
15 S. Idaho / Return of Storage	(10,722)	(10,722)	(10,780)	(10,722)	11,664	11,664	11,712	11,664	11,664	11,664	11,712	11,664	11,664	11,664
16 APS Purchase	5,728	5,728	4,343	-	49,964	45,464	44,037	43,903	43,903	43,903	44,037	43,903	43,903	43,903
17 Tri State Exchange	-	-	-	-	504,578	504,578	505,960	504,578	504,578	504,578	505,960	504,578	504,578	504,578
18 SCE Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 BPA Exchange	(1)	(1)	(1)	(1)	-	-	-	-	-	-	-	-	-	-
20 Avista Summer Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 Avista Exchange	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 Gem State	65,895	65,895	65,895	65,895	-	-	-	-	-	-	-	-	-	-
23 QF Contracts - UP&L	98,355	98,355	94,364	49,964	-	-	-	-	-	-	-	-	-	-
24 IPP Purchase	504,578	504,578	505,960	504,578	-	-	-	-	-	-	-	-	-	-
25 CoGen/Hermiston	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Deseret Annual	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Deseret Monthly	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Deseret Expansion	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29 Deseret NF Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30 APS Exchange	-	-	(281,088)	-	-	-	-	-	-	-	-	-	-	-
31 Hurricane Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32 Redding Exchange	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33 TransAlta Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34 Enron Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35 Canadian Entitlement	(10,550)	-	-	-	-	-	-	-	-	-	-	-	-	-
36 CSPE	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	1,336,971	1,072,644	771,274	641,431	746,768	738,954	670,434	668,680	668,680	668,680	670,434	668,680	668,680	668,680

PacifiCorp Power Sales / Purchase Contracts

(Revenue Requirement dollar amounts are $1,000's)

PURCHASED POWER CONTRACTS

Revenue Requirement	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1 BPA Peaking Purchase	$ 53,572	$ 42,274	$ 36,758	$ 37,449	$ 38,551	$ 38,785	$ 38,806	$ 38,821	$ 26,065	$ -	$ -	$ -	$ -	$ -	$ -
2 BPA Entitlement Capacity	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 BPA Supplemental Capacity	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 Black Hills Capacity	1,498	1,528	1,559	1,596	1,622	1,654	1,687	1,721	1,755	-	-	-	-	-	-
5 Mid Columbia	17,642	18,437	18,529	15,243	15,799	16,571	14,015	7,695	5,509	3,721	3,892	4,072	4,260	4,458	4,665
6 Colockum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Grant_County	3,082	3,082	3,083	3,083	3,083	3,084	3,085	3,085	3,085	3,086	3,086	3,087	3,087	3,088	3,088
8 PGE_Cove	119	119	119	119	119	119	119	119	119	119	119	119	119	119	119
9 IPC_Return	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Q.F. Contracts - PP&L	45,933	53,438	51,870	50,041	43,723	44,637	45,575	46,535	44,988	17,895	16,113	15,780	15,664	15,999	16,342
11 TriState Purchase	10,998	11,072	11,136	11,281	11,313	11,375	11,446	11,524	11,603	11,713	11,825	11,937	12,051	12,166	12,282
12 S. Idaho / Utah to Goshen	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 S. Idaho / BPA to Pacific	115	115	117	119	123	126	131	135	137	140	144	147	151	154	158
14 S. Idaho / Storage	(170)	(155)	(139)	(285)	(280)	(268)	(258)	(248)	(240)	(538)	(538)	(538)	(538)	(538)	(538)
15 S. Idaho / Return of Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16 APS Purchase	85	86	84	85	85	85	85	85	85	85	85	85	85	85	85
17 Tri State Exchange	(869)	26	(5)	132	(731)	-	-	-	-	-	-	-	-	-	-
18 SCE Purchase	3,505	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 BPA Exchange	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Avista Summer Purchase	5,864	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 Avista Exchange	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-
22 Gem State	2,279	2,279	2,280	2,280	2,280	2,280	2,281	2,281	2,282	2,282	2,282	2,283	2,283	2,284	2,284
23 QF Contracts - UP&L	33,517	26,989	27,406	27,777	28,089	28,366	28,607	28,850	29,093	29,204	29,461	29,712	29,966	30,102	30,235
24 IPP Purchase	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211
25 CoGen/Hermiston	75,307	77,536	79,704	82,093	84,654	87,462	90,195	93,189	96,341	96,976	89,484	91,725	94,061	49,651	-
26 Deseret Annual	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Deseret Monthly	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Deseret Expansion	2,386	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29 Deseret NF Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30 APS Exchange	107	107	109	111	114	117	122	125	127	131	134	137	140	144	147
31 Hurricane Purchase	27	27	27	27	18	-	-	-	-	-	-	-	-	-	-
32 Redding Exchange	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33 TransAlta Purchase	107,054	109,137	114,003	119,810	67,462	-	-	-	-	-	-	-	-	-	-
34 Enron Purchase	5,119	5,152	-	-	-	-	-	-	-	-	-	-	-	-	-
35 Canadian Entitlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36 CSPE	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	$ 393,401	$ 377,461	$ 372,850	$ 377,173	$ 322,238	$ 260,605	$ 262,108	$ 260,129	$ 247,161	$ 191,024	$ 182,298	$ 184,757	$ 187,542	$ 143,924	$ 95,081

PacifiCorp Power Sales / Purchase Contracts

(Revenue Requirement dollar amounts are $1,000's)

PURCHASED POWER CONTRACTS

Revenue Requirement	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1 BPA Peaking Purchase	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2 BPA Entitlement Capacity	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3 BPA Supplemental Capacity	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4 Black Hills Capacity	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 Mid Columbia	4,882	-	-	-	-	-	-	-	-	-	-	-	-	-
6 Colockum	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Grant_County	3,089	3,090	3,090	3,091	3,091	3,092	3,093	3,093	3,094	3,095	3,096	3,096	3,097	3,098
8 PGE_Cove	120	120	120	120	120	120	120	120	120	120	120	121	121	121
9 IPC_Return	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 Q.F. Contracts - PP&L	16,692	15,295	13,099	2,018	2,061	1,904	1,514	1,547	1,581	1,615	1,650	1,686	1,724	1,763
11 TriState Purchase	12,399	12,517	12,637	-	-	-	-	-	-	-	-	-	-	-
12 S. Idaho / Utah to Goshen	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13 S. Idaho / BPA to Pacific	162	166	171	175	179	184	189	194	199	204	209	214	221	229
14 S. Idaho / Storage	(538)	(538)	(537)	(537)	(79)	(79)	(79)	(79)	(79)	(79)	(78)	(78)	(78)	(78)
15 S. Idaho / Return of Storage	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16 APS Purchase	85	85	73	-	-	-	-	-	-	-	-	-	-	-
17 Tri State Exchange	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18 SCE Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19 BPA Exchange	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20 Avista Summer Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21 Avista Exchange	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22 Gem State	2,284	2,285	2,285	2,286	2,286	1,890	-	-	-	-	-	-	-	-
23 QF Contracts - UP&L	4,997	5,000	4,795	2,363	2,366	2,370	2,071	2,075	2,078	2,082	2,035	2,039	2,044	2,050
24 IPP Purchase	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211	26,211
25 CoGen/Hermiston	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26 Deseret Annual	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27 Deseret Monthly	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28 Deseret Expansion	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29 Deseret NF Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30 APS Exchange	151	155	159	-	-	-	-	-	-	-	-	-	-	-
31 Hurricane Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-
32 Redding Exchange	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33 TransAlta Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34 Enron Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35 Canadian Entitlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36 CSPE	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	$ 70,535	$ 64,386	$ 62,103	$ 35,726	$ 36,236	$ 35,691	$ 33,118	$ 33,161	$ 33,204	$ 33,248	$ 33,243	$ 33,289	$ 33,341	$ 33,395

Generating Resource Tax Information

1/1/2003 Balances

Thousands of $

	Excess Deferred Taxes	Other Deferred Taxes	Total Deferred Taxes	Deferred ITC Balance	FASB 109 Asset
Blundell	312	4,983	5,296	715	(6,095)
Carbon	384	7,041	7,425	946	(14,100)
Cholla	(45)	(4,374)	(4,419)		26,309
Colstrip	3,781	44,009	47,790	5,726	(11,909)
Craig	(101)	15,751	15,650		6,445
Dave Johnston	289	15,043	15,332	958	17,192
Gadsby	355	7,515	7,870	868	(21,362)
Hayden	(24)	5,305	5,281		6,846
Hermiston	(14)	8,333	8,319		2,500
Hunter	7,141	96,378	103,519	16,817	87,542
Huntington	2,653	42,872	45,525	6,623	6,925
James River	(4)	2,976	2,972		(1,637)
Jim Bridger	847	27,731	28,578	2,361	106,053
Naughton	1,610	32,648	34,258	3,961	(17,197)
Wyodak	(113)	23,769	23,657	865	1,805
Foote Creek Wind	(25)	10,876	10,851		(1,899)
Hydro Lewis	43	9,977	10,021	162	17,600
Hydro Small North	217	5,429	5,646	228	(6,099)
Hydro North Umpqua	594	7,158	7,752	238	8,319
Hydro Klamath	(2)	4,175	4,174	87	7,320
Hydro Rogue	(13)	2,027	2,014	48	(586)
Hydro Bear	122	6,215	6,337	966	2,198
Hydro East	4	4,384	4,388	334	(324)
Little Mountain	1	889	890	10	(1,512)
Other	1	(1)	0	-	42
Total	18,013	381,111	399,124	41,912	214,375